

Common Core Standards Initiative – drafts  
for mathematics and English-language arts  
standards (as of 1/13/2010)

**APPENDIX TABLE OF CONTENTS**

- Mathematics K–12 Standards
- English Language Arts K–12 Standards
- Exemplars of Reading Text Complexity and Quality, K–5
- Exemplars of Reading Text Complexity and Quality, ELA 6–12
- Samples of Student Writing
- Exemplars of Reading Text Complexity and Quality,  
History/Science 6–12
- Literacy in History and Science Standards 6–12 Literacy in  
History and Science 6–12

## The Common Core K–12 Mathematics Standards

This document provides grade level standards for mathematics in grades K–8, and high school standards organized under the headings of the *College and Career Readiness Standards in Mathematics*. Students reaching the readiness level described in that document (adjusted in response to feedback) will be prepared for non-remedial college mathematics courses and for training programs for career-level jobs. Recognizing that most students and parents have higher aspirations, and that ready for college is not the same as ready for mathematics-intensive majors and careers, we have included in this document standards going beyond the readiness level. Most students will cover these additional standards. Students who want the option of entering STEM fields will reach the readiness level by grade 10 or 11 and take precalculus or calculus before graduating from high school. Other students will go beyond readiness through statistics to college. Other pathways can be designed and available as long as they include the readiness level. The final draft of the K–12 standards will indicate which concepts and skills are needed to reach the readiness level and which go beyond. We welcome feedback from states on where that line should be drawn.

### English Language Learners in Mathematics Classrooms

English language learners (ELLs) must be held to the same high standards expected of students who are already proficient in English. However, because these students are acquiring English language proficiency and content area knowledge concurrently, some students will require additional time and all will require appropriate instructional support and aligned assessments.

ELLs are a heterogeneous group with differences in ethnic background, first language, socio-economic status, quality of prior schooling, and levels of English language proficiency. Effectively educating these students requires adjusting instruction and assessment in ways that consider these factors. For example ELLs who are literate in a first language that shares cognates with English can apply first-language vocabulary knowledge when reading in English; likewise ELLs with high levels of schooling can bring to bear conceptual knowledge developed in their first language when reading in a second language. On the other hand, ELLs with limited or interrupted schooling will need to acquire background knowledge prerequisite to educational tasks at hand. As they become acculturated to US schools, ELLs who are newcomers will need sufficiently scaffolded instruction and assessments to make sense of content delivered in a second language and display this content knowledge.

While some ELLs are economically and educationally advantaged, this is not the case for many of these students. Moreover, once in the U.S., the majority of ELLs attend high poverty schools with high percentages of other ELLs. These schools often lack the resources and capacity needed to help ELLs reach high academic standards. However, schools and districts can be assisted in providing a positive learning environment that capitalizes on the linguistic and cultural diversity of the student body.

Language proficiency is a complex construct that can reflect proficiency in multiple contexts, modes, and academic disciplines. Current measures of language proficiency may not give an accurate picture of an individual's language competence. In particular, we do not have measures or assessments for language proficiency related to competence in mathematics for different ages or mathematical topics. These two facts can confuse discussions of mathematics instruction for ELLs. In particular, because of the complexity of language proficiency and the limitations of the label "English Language Learner" as currently implemented, instructional decisions should not be made solely based on that label. However, research on language and mathematics education for this student population does provide a few clear results to guide practices for teaching ELLs mathematics:

- English learners can participate in mathematical discussions as they learn English (Moschkovich, 1999a, 2002, 2007a, 2007b, 2007d).

- Mathematics instruction for students who are learning English should draw on multiple resources and modes available in classrooms—such as objects, drawings, inscriptions, and gestures—as well as home languages and mathematical experiences outside of school.
- While mathematics instruction for ELLs should address mathematical discourse and academic language, this involves much more than vocabulary instruction.

### Basic principles for improving the mathematics achievement of ELLs

Language is a resource for learning mathematics, it is not only a tool for communicating, but also a tool for thinking and reasoning mathematically. All languages (English, Spanish, Tagalog, etc.) and language varieties (different dialects, home or everyday ways of talking, vernacular, slang, etc.) provide resources for mathematical thinking, reasoning, and communicating.

Regular and active participation in the classroom—not only reading and listening but also discussing, explaining, writing, representing, and presenting—is crucial to ELLs’ success in mathematics, and that ELLs can produce explanations, presentations, etc. and participate in classroom discussions *as they are learning English* (Moschkovich, 1999 and 2007).

- ELLs, like English-speaking students, require regular access to teaching practices that are most effective for improving student achievement. These practices include: a) Keeping mathematical tasks at high-cognitive demand (Henningesen & Stein, 1997; Silver & Stein, 1996); b) teachers and students attend explicitly to concepts (Hiebert & Grouws, 2007), and c) students wrestle with important mathematics (Hiebert & Grouws, 2007).
- See the evidence of ELLs’ mathematical thinking, hear how ELLs use language to communicate about mathematics, understand the competence that ELLs bring to the classroom, build on this competence, and provide access to opportunities for advancing their mathematics learning.

Overall, research suggests that:

- Classroom instruction should allow bilingual students to choose the language they prefer for arithmetic computation. Language switching can be swift, highly automatic, and facilitate rather than inhibit solving word problems in the second language, as long as the student’s language proficiency is sufficient for understanding the text of the word problem.
- Instruction should ensure that students understand the text of word problems before they attempt to solve them.
- Instruction should include a focus on “mathematical discourse” and “academic language” because these are important for English learners. Although it is crucial that students who are learning English have opportunities to communicate mathematically, this is not primarily a matter of learning vocabulary. Students learn to participate in mathematical reasoning, not by learning vocabulary, but by making conjectures, presenting explanations, and/or constructing arguments.
- While vocabulary instruction is important, it is not sufficient for supporting mathematical communication. Furthermore, vocabulary drill and practice are not the most effective instructional practices for learning vocabulary. Instead, research has demonstrated that vocabulary learning occurs most successfully through instructional environments that are language-rich, actively involve students in using language, require that students both understand spoken or written words and also express that understanding orally and in writing, and require students to use words in multiple ways over extended periods of time (Blachowicz, Camille, and Peter Fisher, 2000). To develop written and oral communication skills, students need to participate in negotiating meaning for mathematical situations and in mathematical practices that require output from students (Moschkovich, 2009).

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## Access for Students with Disabilities

The Common Core Standards articulate rigorous expectations in the areas of mathematics, reading, writing, and speaking and listening in order to prepare students to be college- and career-ready. These standards identify the knowledge and skills students must acquire in order to be successful. Research shows that students with disabilities are capable of high levels of learning and should not be limited by low expectations and watered down curriculum. It is imperative that these highly capable students—regardless of their disability—are held to the same expectations articulated in the Core Standards as other students.<sup>1</sup>

However, *how* these high standards are taught is of the utmost importance in reaching students with special needs. When learning the knowledge and skills represented in the Core Standards, students with disabilities may need accommodations or—in exceptional cases—modified goals, incorporated in an individualized education program (IEP),<sup>2</sup> to help them access information or demonstrate their knowledge. Students might be precluded from reaching particular standards given the nature of the standard itself. In instances when a standard asks students to perform actions they are physically incapable of, students will need to be presented with alternative options to demonstrate similar knowledge and skills within the range of their abilities. Accommodations based on individual needs allow students of all disability levels to learn within the framework of the Core.

### Meeting English Language Arts (ELA) Standards

Reading, writing, speaking, and listening standards often require accommodations for students with disabilities. In the case of students who are deaf, a standard that calls for "listening" should be interpreted to include reading sign language. In a similar vein, "speaking" as it occurs in standards for certain students with speech impairments should be read broadly to include "communication" or "self-expression." Students who are blind or have low vision should be able to read via Braille, screen reader technology, or other assistive technology to demonstrate their comprehension

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<sup>1</sup> Research suggests that the vast majority of the population of students with intellectual impairments *can* achieve proficiency when they receive high quality instruction in the grade-level content and appropriate accommodations.

<sup>2</sup> According to the Individuals with Disabilities Act (IDEA), an IEP includes appropriate accommodations that are necessary to measure the individual achievement and functional performance of a child.

skills. “Writing” should not preclude the use of a scribe, computer, or speech-to-text technology for students with disabilities that interfere with putting pen to paper. In the case of students with intellectual impairments—less than 2 percent of the total population of all students and less than 20 percent of students with disabilities—accommodations should allow them to demonstrate their knowledge and skills through alternative modes like text to speech software or reading aloud. For these students, writing may involve the use of pictures to assist in illustrating plot or argument, or offering them the opportunity to “choose words and phrases” by selecting from options rather than generating direct answers. With appropriate accommodations and support, students with all levels of disabilities can participate in the general education curriculum and achieve grade-level proficiency with regard to the ELA content and skills articulated in the Core.

## Meeting Mathematics Standards

In curriculum for students with disabilities, ELA skills often take precedence over mathematics understanding. However, most of these students can master mathematical concepts with accommodations in instructional delivery and the use of specialized technology, including computers and calculators. For example, students with visual disabilities might require enhanced verbal descriptions from teachers and the use of large-print to demonstrate subsequent knowledge. Students who are deaf might require visual aids such as charts, diagrams, and mental images and increased reliance on computers and calculators. Manipulatives can enable students with intellectual impairments to grasp abstract concepts and continue learning. Evidence suggests that students with disabilities, even those with full intellectual abilities, tend to lag behind their peers in mathematics achievement; strong curriculum that gives equal priority to mathematics and ELA will help these students succeed.

In short, while the standards remain and retain high expectations of students, they may need to be translated and occasionally modified to appropriately apply to students with disabilities, including all levels of intellectual impairment. Every student deserves to be treated with respect, and every student deserves an outstanding education. Promoting a culture of high expectations for all students is a fundamental goal of the Core Standards. Reaching students with disabilities requires broadening our understanding of what the standards say and being ready to make appropriate accommodations and/or modifications to meet individual students’ needs.

## How to read this document

The K–8 standards are organized by grade level. Within each grade level there are several headings, each one the title of a single progression having significant presence in the grade in question. Under each of these progression headings, there appear **core standards**, divided into standards describing concepts students should understand and standards describing skills students should acquire. A typical progression spans a number of grades, but does not span all of K–8. The progressions and their grade spans are listed at the end of the document.

The high school standards are not organized by grade level or by course, but rather are organized under headings of the *College and Career Ready Standards for Mathematics*: Expressions, Equations, Functions, Coordinates, Modeling, Statistics, Probability, and Geometry.<sup>3</sup> Subheadings under each heading refer either to mathematical practices or to principle topics, and core standards are listed under each subheading, as in the K–8 standards. The subheadings are not necessarily curricular units, but rather can describe concepts and skills that are revisited throughout a student’s high school career. This design necessitates a future effort to develop course sequences (either traditional or integrated).

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<sup>3</sup> Number and Quantity are not included, since they are principally the domain of K–8. In response to feedback, the headings have been reordered and Shape has been renamed to Geometry.

## Mathematical Practice<sup>4</sup>

Proficient students expect mathematics to make sense. They take an active stance in solving mathematical problems. When faced with a non-routine problem, they have the courage to plunge in and try something, and they have the procedural and conceptual tools to carry through. They are experimenters and inventors, and can adapt known strategies to new problems. They think strategically.

Students who engage in these practices discover ideas and gain insights that spur them to pursue mathematics beyond the classroom walls. They learn that effort counts in mathematical achievement.<sup>a</sup> These are practices that expert mathematical thinkers encourage in apprentices. Encouraging these practices in our students should be as much a goal of the mathematics curriculum as is teaching specific content topics and procedures.<sup>b</sup> Taken together with the Standards for Mathematical Content, they support productive entry into college courses or career pathways.

### Core Standards · Students can and do:

#### 1 Attend to precision.

Mathematically proficient students organize their own ideas in a way that can be communicated precisely to others, and they analyze and evaluate others' mathematical thinking and strategies noting the assumptions made. They clarify definitions. They state the meaning of the symbols they choose, are careful about specifying units of measure and labeling axes, and express their answers with an appropriate degree of precision. Rather than saying, "let  $v$  be speed and let  $t$  be time," they would say "let  $v$  be the speed in meters per second and let  $t$  be the elapsed time in seconds from a given starting time." They recognize that when someone says the population of the United States in June 2008 was 304,059,724, the last few digits indicate unwarranted precision.

#### 2 Construct viable arguments.

Mathematically proficient students understand and use stated assumptions, definitions and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They break things down into cases and can recognize and use counterexamples. They use logic to justify their conclusions, communicate them to others and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose.

#### 3 Make sense of complex problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They consider analogous problems, try special cases and work on simpler forms. They evaluate their progress and change course if necessary. They try putting algebraic expressions into different forms or try changing the viewing window on their calculator to get the information they need. They look for correspondences between equations, verbal descriptions, tables, and graphs. They draw diagrams of relationships, graph data, search for regularity and trends, and construct mathematical models. They check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?"

#### 4 Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern. For example, in  $x^2 + 5x + 6$  they can see the 5 as  $2 + 3$  and the 6 as  $2 \times 3$ . They recognize the significance of an existing line in a geometric figure and can add an auxiliary line to make the solution of a problem clear. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects. For example, by seeing  $5 - 3(x$

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<sup>4</sup> Slated for review and editing, based on feedback to the College and Career Readiness Standards, and in order to apply more naturally to elementary school as well.

$-y)^2$  as 5 minus a positive number times a square, they see that it cannot be more than 5 for any real numbers  $x$  and  $y$ .

## 5 Look for and express regularity in repeated reasoning.

Mathematically proficient students pay attention to repeated calculations as they carry them out, and look both for general algorithms and for shortcuts. For example, by paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, they might abstract the equation  $(y - 2)/(x - 1) = 3$ . Noticing the regularity in the way terms cancel in the expansions of  $(x - 1)(x + 1)$ ,  $(x - 1)(x^2 + x + 1)$ , and  $(x - 1)(x^3 + x^2 + x + 1)$  leads to the general formula for the sum of a geometric series. As they work through the solution to a problem, proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.<sup>b</sup>

## 6 Reason quantitatively.

Quantitative reasoning is a way of thinking by which one reasons with quantities and about relations among quantities. It entails habits of creating a coherent image of the problem at hand; considering the units involved; continually attending to the meaning of quantities, not just how to compute them; and having multiple images of a concept and being flexible in transitioning among them. In problems dealing with quantitative relationships, students exercise two inseparable abilities: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referential meanings for the symbols involved in the manipulation.

## 7 Make strategic decisions about the use of technological tools.

Mathematically proficient students consider the available tools when solving a mathematical problem, whether pencil and paper, ruler, protractor, graphing calculator, spreadsheet, computer algebra system, statistical package, or dynamic geometry software. They are familiar enough with all of these tools to make sound decisions about when each might be helpful. They use mathematical understanding and estimation strategically, attending to levels of precision, to ensure appropriate levels of approximation and to detect possible errors. They are able to use these tools to explore and deepen their understanding of concepts.

## Mathematics: Kindergarten<sup>5</sup>

### Developing Coherent Understanding

[Temporarily removed for editing.]

#### Counting and Cardinality

##### Core Standards · Students understand that:

1. The number words have a standard order.
2. In counting, each object receives one and only one number word.
3. The last number word tells the number of objects.
4. Numbers said later in the count refer to larger quantities.
5. Counting on 1 more is the same as adding 1. That is, one more than a number is the next number in the count.

##### Core Standards · Students can and do:

- a. Count by ones from 1 to 100; count by tens to 100.<sup>6</sup>
- b. Count forward from a given number within the known sequence (instead of always counting forward from 1).<sup>7</sup>
- c. See collections of up to 10 objects as being composed of subgroups.
- d. Count to answer “how many?” questions with up to 10 things in various arrangements (e.g., array, circular, scattered), or up to 25 things if in a row.
- e. Write numerals from 1 to at least 30.

#### Base Ten Computation

##### Core Standards · Students understand that:

1. Ten ones make a tens unit (ten things can be thought of as bundled into a single unit).
2. Decade words refer to groups of tens units. For example, thirty refers to a group of three tens units.
3. A teen number<sup>8</sup> is a ten and some ones. The number 10 can be thought of as a ten and no ones.
4. Any teen number is larger than any single digit number. Teen numbers are ordered according to their ones digits.
5. A two-digit number is some tens and some ones. For example, 29 is two tens and nine ones.

##### Core Standards · Students can and do:

- a. Make 10 with each number from 1 to 9 (i.e., know the number that makes 10 with the given number).
- b. Show each teen number as a ten and some ones.

#### Early Relations and Operations

##### Core Standards · Students understand that:

<sup>5</sup> Some material is used verbatim from National Research Council. (2009). *Mathematics Learning in Early Childhood: Paths Toward Excellence and Equity*. Committee on Early Childhood Mathematics, Christopher T. Cross, Taniesha A. Woods, and Heidi Schweingruber, Editors. Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

<sup>6</sup> To “count” here means only to say the number words, not to determine how many objects are in a collection.

<sup>7</sup> To “count” here means only to say the number words, not to determine how many objects are in a collection.

<sup>8</sup> Glossary: Teen number. A whole number that is greater than or equal to 11 and less than or equal to 19.

1. Adding is putting two groups together or putting some more with a group, and subtracting is taking some from a group.
2. Addition and subtraction can be represented with physical or mental objects (including fingers), pictures, drawings, sounds (e.g. number words), motions, or equations.
3. Adding can be recorded by an expression, as when “three more than six” is recorded as  $6 + 3$ , or by an equation that also shows the answer ( $6 + 3 = 9$ ). Likewise, subtracting can be recorded by an expression, as when “how much more than 9 is 5” is recorded as  $9 - 5$ , or by an equation that also shows the answer ( $9 - 5 = 4$ ).
4. Breaking apart a group can be recorded in an equation such as  $8 = 5 + 3$ . Breaking apart a group in more than one way can be recorded in an equation such as  $7 + 6 = 10 + 3$ .
5. In all equations, the equals sign indicates that the values on either side are the same.

#### Core Standards · Students can and do:

- a. Use matching and counting strategies to decide whether one set is more than, less than, or equal to another set in number of objects (less than or equal to 10).
- b. Compare and order numbers less than or equal to 10.
- c. Use concrete objects to determine the answer to addition and subtraction word problems and additions and subtractions with totals less than or equal to 10.
- d. Experience enough problem situations so that additions to five and the corresponding subtractions and some additions and subtractions within ten become well known.

### Quantity and Measurement

#### Core Standards · Students understand that:

1. Things have attributes—such as length, weight, capacity, loudness, softness, and so on. A single thing might have several attributes of interest (as when we focus on a child’s height and gender).

#### Core Standards · Students can and do:

- a. Directly compare two objects to see which one has “more of” a shared attribute.
- b. Rank three objects by a shared attribute (especially length), and use transitivity<sup>9</sup> to compare two objects indirectly.
- c. ♦ Classify objects or people into predetermined categories, and count the numbers in each category. List the categories and counts in order by count. (Each category count less than or equal to 10.)<sup>10</sup>

### Shapes

#### Core Standards · Students understand that:

1. Names refer to shapes regardless of orientation or overall size.<sup>11</sup>

#### Core Standards · Students can and do:

- a. Study a range of 2D and 3D shapes, in different sizes and orientations, and discuss their properties, similarities, and differences using informal language.

<sup>9</sup> Glossary: Transitive property of measurement order: If one object is bigger than a second, and the second object is bigger than a third object, then the first object is bigger than the third object.

<sup>10</sup> The symbol ♦ indicates material in data analysis and statistics that appears under another progression heading in order to make an important connection.

<sup>11</sup> For example, a square rotated to form a “diamond” is still a square, even though it is rotated. Students at this grade might need to physically rotate a shape until it is “level” before they can correctly name it.

- b. Move shapes using translations, reflections and rotations.<sup>12</sup>

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<sup>12</sup> This is not meant to be assessed by showing students a picture of a shape and asking them to draw or select a translated, reflected or rotated version of it.

## Mathematics: First Grade<sup>13</sup>

### Developing Coherent Understanding

[Temporarily removed for editing.]

#### Early Relations and Operations

##### Core Standards · Students understand that:

1. Counting on is an efficient method of counting all, in which the initial count of the first addend is omitted.
2. Addition and subtraction apply to situations of joining, separating, part-part-whole, and comparing quantities to one another.<sup>14</sup> These situations can be represented by addition and subtraction equations such as  $7 + 5 = 12$ ,  $10 = 5 + 5$ , and so on.
3. Addition and subtraction are inverse operations; that is  $10 - 8$  can be found by thinking  $8 + 2 = 10$ .
4. When any two of the numbers in an addition or subtraction equation are known, the unknown number can be found.
5. One-to-one dealing of objects in a collection (e.g., “One for you, one for me, one for him, ...”) creates fair shares.

##### Core Standards · Students can and do:

- a. Use counting on strategies or decomposing strategies for additions and subtractions within 20.
- b. Solve addition problems containing three addends.
- c. Use objects, pictures and story contexts to explain what happens when the order of addends in a sum is changed, when 0 is added to a number, and when one addend in a sum is increased by 1 and another decreased by 1.
- d. Experience enough problem situations so that many or all sums and differences within 20 become well known.
- e. Use drawings and equations to represent and solve word problems involving addition and subtraction.<sup>15</sup>
- f. ♦ Organize, represent and interpret data with several categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another
- g. Create  $n$  fair shares from a collection of objects. Identify the size of one share, and recognize the original collection as  $n$  copies of a single share.

#### Quantity and Measurement

##### Core Standards · Students understand that:

1. Lengths can be added by placing long objects, rods, or unit cubes end to end in a straight line. The total length is the same in whatever order the rods are placed.

<sup>13</sup> Some material is used verbatim from National Research Council. (2009, op. cit.)

<sup>14</sup> In join and separate problems, there is change over time. In part-part-whole problems, two quantities make up a whole in a static situation. Compare problems involve two quantities and the difference between them. Compare problems add specificity to the notions of greater than and less than.

<sup>15</sup> Include join, separate, part-part-whole, and compare problems, with unknowns in all positions. Represent these situations with equations that use a small square or a ? for the unknown.

- Lengths can be compared by placing rods side by side, with one end lined up. The difference in length is how far the longer extends beyond the end of the shorter.
- Lengths are measured (assigned numerical values) by comparing them to other lengths—that is, by using another object as a length unit. The length of an object can be expressed numerically by counting the number of length units that span it with no gaps or overlaps.
- When an object or figure is decomposed into several pieces, the length of the whole can be found by placing the pieces end to end in any order.
- A sum of two whole numbers represents a total length; a difference of two whole numbers represents a difference in length.
- Durations of time are measured by comparing them to other durations of time, such as the earth’s rotation period, or the time a minute hand takes to complete a circle around a clock face.

#### Core Standards · Students can and do:

- Using an object as a length unit, measure, compare and estimate length.<sup>16</sup>
- Using an object as a length unit, determine total length by adding lengths of two parts.<sup>17</sup> Compare lengths using addition and subtraction.
- Decompose circles and rectangles into 2 and 4 equal parts. Describe the parts using the words “halves” and “quarters,” and using the phrases “half of” and “quarter of.” Describe the wholes as twice or four times as large as the parts.
- Tell time in hours from clocks; subtract to find whole-hour durations on a clock (within AM or within PM).

### Base Ten Computation

#### Core Standards · Students understand that:

- In comparing two-digit numbers, the number with more tens units is larger; if the number of tens units is the same in each, the number of ones units decides.
- In adding or subtracting 2-digit numbers, one adds or subtract like units (tens units and tens units, or ones units and ones units).

#### Core Standards · Students can and do:

- Count to 100 or beyond, switching appropriately to the new decade after a 9 has been said in the ones place.
- Compare and order numbers to 100 based on meanings of the tens and ones places.
- Easily write numerals to 20; write numerals to 100.
- Use break-apart and make-a-ten strategies to add and subtract with teen totals as in  $7 + 6 = 10 + 3$  and  $17 - 9 = 17 - 7 - 2$ .
- Find 10 more or 10 less than a number without having to count.
- Add one-digit numbers to two-digit numbers, and add multiples of 10 to one-digit and two-digit numbers.
- Represent addition of two-digit numbers using 10-rods and unit cubes,<sup>18</sup> including rearranging rods and cubes to show regrouping when needed.
- Add two-digit numbers to two-digit numbers using strategies based on place value, Properties of Arithmetic, or the inverse relationship between addition and subtraction.

### Shapes

<sup>16</sup> Select and iterate units, partition into equal parts, and compare lengths indirectly by using a reference length.

<sup>17</sup> Restrict to whole-unit lengths.

<sup>18</sup> Any concrete model that can show individual units and ten connected units will do.

**Core Standards · Students understand that:**

1. Several shapes can be joined together to form a larger shape. A single shape can also be visualized as a collection of smaller shapes joined together.
2. Decomposing larger shapes into equal-sized parts creates fair shares.
3. When an identical figure is decomposed into more fair shares, the shares are smaller than in the first instance.

**Core Standards · Students can and do:**

- a. Form different 2D figures with cutouts of rectangles, squares, triangles, semicircles, and quarter-circles.<sup>19</sup>
- b. Form different 3D figures with concrete models of cubes, rectangular prisms, cones, and cylinders.<sup>20</sup>
- c. Decompose 2D shapes into rectangles, squares, triangles, semicircles, and quarter-circles, including decomposing into fair shares.

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<sup>19</sup> From Singapore Primary 2

<sup>20</sup> From Singapore Primary 2

## Mathematics: Second Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Operations and the Problems They Solve

#### Core Standards · Students understand that:

1. Addition and subtraction apply to situations of joining, separating, part-part-whole, and comparing quantities to one another.<sup>21</sup> These situations can be represented by addition and subtraction equations such as  $17 + 5 = 22$ ,  $36 = 56 - 26$ , and so on.
2. Addition and subtraction are inverse operations; that is  $100 - 98$  can be found by thinking  $98 + 2 = 100$ .
3. Numbers can be added and subtracted only when they refer to the same underlying unit.

#### Core Standards · Students can and do:

- a. Use representations (objects, pictures, story contexts) to describe and justify properties of addition and subtraction.<sup>22</sup>
- b. Produce full sets of related equations for addition and subtraction, as in the set  $5 + 3 = 8$ ,  $3 + 5 = 8$ ,  $8 = 5 + 3$ ,  $8 = 3 + 5$ ,  $8 - 5 = 3$ ,  $8 - 3 = 5$ ,  $3 = 8 - 5$ ,  $5 = 8 - 3$ .
- c. Solve up to two-step addition/subtraction word problems with whole numbers and whole number quantities within 100.<sup>23</sup>

### Base Ten Computation

#### Core Standards · Students understand that:

1. A three-digit number is made up of hundreds, tens and ones units. Digits in each place are worth ten times as much as digits in the place to the right.
2. Comparison of numbers is decided by the leftmost digit, with subsequent digits breaking ties.
3. Three-digit numbers can be expanded into sums of hundreds, tens and ones units. In adding or subtracting, one adds or subtracts the units of each size; regrouping might be needed to write a total in standard form if there are too many of a unit, or to get enough of a unit to subtract from it.
4. The scheme for regrouping is the same at each place, because each unit is composed of ten of the smaller unit.

#### Core Standards · Students can and do:

- a. Compare and order numbers to 1,000.

<sup>21</sup> In join and separate problems, there is change over time. In part-part-whole problems, two quantities make up a whole in a static situation. Compare problems involve two quantities and the difference between them. Compare problems add specificity to the notions of greater than and less than.

<sup>22</sup> Include properties such as that the sum is the same when multiple addends are added in a different order; if adding two numbers gives a certain sum, then subtracting one of the addends from the sum results in the other addend; that if more is subtracted from a number, the difference is decreased and if less is subtracted the difference is increased; that in an addition problem, each addend can be taken apart and the parts can be recombined in any order without changing the sum.

<sup>23</sup> Include join, separate, part-part-whole, and compare problems, with unknowns in all positions. Represent these situations with equations that use a small square or a ? for the unknown.

- b. Given a three-digit number, quickly find 10 more or 10 less than the number, and quickly find 100 more or 100 less than the number.
- c. Rapidly add and subtract within 20.<sup>24</sup>
- d. Add and subtract three-digit numbers to three-digit numbers using strategies based on place value, Properties of Arithmetic, or the inverse relationship between addition and subtraction.
- e. Add and subtract three-digit numbers using an algorithm<sup>25</sup> based on place value and regrouping, such as the standard algorithm.
- f. Explain why addition and subtraction strategies and algorithms work, using place value and the Properties of Arithmetic (including explanations supported by drawings or objects).

## Quantity and Measurement

### Core Standards · Students understand that:

1. 1 inch, 1 foot, 1 centimeter and 1 meter are conventionally defined lengths that allow standardized length measurements.
2. When measuring a length, if a smaller unit is chosen, more units must be iterated to measure the length in those units. But the length of an object itself does not depend on the choice of unit.
3. Units can be decomposed into smaller units, e.g. a foot contains 12 inches and a meter contains 100 centimeters. A small number of long units might form a greater total length than a large number of small units.
4. Sharing a circle or rectangle fairly among 2-6 shares creates equal parts, each of which is a single unit. Copying one unit by the number of pieces measures the whole in terms of the units.
5. A half, a third, or a quarter of a given rectangle encloses the same amount of space regardless of its shape.

### Core Standards · Students can and do:

- a. Measure, compare and estimate whole-unit lengths in units of inches, feet centimeters and meters.
- b. Construct a number line with an origin (0) and a unit (1), marking off whole numbers one unit distance apart. Use a number line to represent sums and differences; determine lengths of intervals on the number line.
- c. Decompose circles and rectangles into 2-6 equal parts. Describe the parts using the words “halves,” “thirds,” “half of,” “a third of,” etc. Describe the wholes as 2-6 times as large as the parts.
- d. Construct a number line to 100 using tens-unit lengths, showing ones-unit lengths within a decade of interest. Explain regrouping by composing and decomposing concrete lengths.
- e. ♦ Draw a bar graph (with single-unit scale) to represent a data set with several categories. Solve simple part-part-whole and compare problems using information presented in a bar graph.<sup>26</sup>
- f. ♦ Identify correspondences in different representations of a data set with several categories.
- g. Solve word problems involving dollar bills, quarters, dimes, nickels and pennies.

## Shapes

### Core Standards · Students understand that:

<sup>24</sup> Acceptable strategies include: mental strategies such as making a ten, use of fingers to assist in rapid counting-on, and producing sums or differences from memory.

<sup>25</sup> Glossary: Algorithm. A step by step routine that always gives some answer, rather than ever giving no answer; that always gives the right answer, and never gives a wrong answer; that can always be completed in a finite number of steps, rather than in an infinite number of steps; and that applies to all problems of a given type (e.g., adding any two multidigit whole numbers, or bisecting any angle). Cf. Wikipedia’s “effective procedure,” from which this definition is adapted.

<sup>26</sup> For part-part-whole problems, only sum-unknown problems are required to meet this standard. For compare problems, only difference-unknown problems are required to meet the standard.

1. A given category of shapes (e.g., triangles) can be divided into subcategories (e.g., isosceles triangles) on the basis of special properties. Conversely, different classes of shapes (e.g., squares and rectangles) can be united into a larger category (e.g., quadrilaterals) on the basis of shared properties.

**Core Standards · Students can and do:**

- a. Draw and identify equilateral triangles, isosceles triangles,<sup>27</sup> squares and rectangles.<sup>28</sup>
- b. Recognize squares and rectangles as examples of quadrilaterals; draw examples of quadrilaterals that are neither squares nor rectangles.
- c. Draw and identify radii and diameters of a circle.
- d. Recognize objects that resemble spheres, cylinders and rectangular prisms.

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<sup>27</sup> Students at this grade need not understand that equilateral triangles are isosceles.

<sup>28</sup> Students at this grade need not understand that squares are rectangles.

## Mathematics: Third Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Operations and the Problems They Solve

#### Core Standards · Students understand that:

- Multiplication and division apply to situations of equal grouping, fair sharing, measuring, and comparing (“times as much”).
  - An equation of the form  $a \times b = n$  applies to a situation in which  $a$  groups of  $b$  things each make  $n$  things in all, or in which  $a$  copies of a continuous quantity of size  $b$  form a continuous quantity of size  $n$ . (See table for examples.)
  - An equation of the form  $n \div a = b$  tells how many things,  $b$ , are in each group when  $n$  things are divided equally into  $a$  groups, or tells how large a quantity  $b$  results when a continuous quantity of size  $n$  is shared fairly into  $a$  shares. (See table for examples.)
  - An equation of the form  $n \div b = a$  tells how many groups,  $a$ , result when  $n$  things are divided into equal groups of  $b$  things each, or tells how many fair shares,  $a$ , a quantity of size  $n$  yields when each share has size  $b$ . (See table for examples.)
  - Two quantities can be compared by multiplication or division. An equation of the form  $a \times b = n$  means  $n$  is  $a$  times as much as  $b$  and  $b$  times as much as  $a$ .
- Multiplication is commutative: The total number of things in  $a$  groups of  $b$  things each is the same as the total number of things in  $b$  groups of  $a$  things each, that is,  $a \times b = b \times a$ . Likewise,  $a$  copies of a continuous quantity of size  $b$  are equal in size to  $b$  copies of a continuous quantity of size  $a$ .
- The area of a rectangle with whole number side lengths can be calculated by multiplying because the rectangle can be decomposed into equal rows (or columns) of unit squares.
- Multiplication and division are inverse operations; that is  $35 \div 7$  can be found by thinking  $5 \times 7 = 35$ . When any two of the numbers in a multiplication or division equation are known, the unknown number can be found.

|                       | $3 \times 6 = 18$  | $18 \div 3 = 6$   | $18 \div 6 = 3$  |
|-----------------------|--|---|--|
| Collections           | 3 rows of apples with 6 apples in each row are 18 apples.                                | If 18 apples are arranged into 3 equal rows, each row will have 6 apples in it.   | If 18 apples are arranged into equal rows of 3 apples, there will be 6 rows.                           |
| Continuous Quantities | If you have enough ribbon to make 6 bows, then 3 times as much ribbon will make 18 bows. | If you have enough ribbon to make 18 bows and share the ribbon fairly among 3 kids, then each kid has enough ribbon to make 6 bows. | If each kid wants to make 6 bows and there's enough ribbon to make 18 bows, then 3 kids can make bows. |

#### Core Standards · Students can and do:

- a. Use representations (objects, pictures, story contexts) to describe and justify properties of multiplication and division.<sup>29</sup>
- b. Solve simple multiplication and division word problems involving equal groups, length and area.
- c. Solve up to two-step word problems involving the four operations with whole numbers and whole number quantities. (Whole number quotients only)
- d. Solve multiplicative comparison problems with whole numbers (problems involving the notion of “times as much”).
- e. ♦ Draw a scaled bar graph to represent a data set with several categories. Solve “how many more” / “how many less” problems (two-step problems) using information presented in scaled bar graphs.<sup>30</sup>

## Base Ten Computation

### Core Standards · Students understand that:

1. Patterns in the multiplication table can be explained by the Properties of Arithmetic. For example, the distributive property explains why, for any row, the entries in the 7 column are the sums of the entries in the 5 and 2 columns.
2. The Properties of Arithmetic can be used to derive new multiplications and divisions from known ones.

### Core Standards · Students can and do:

- a. Explain strategies for multiplying and dividing that use the Properties of Arithmetic and properties of the base ten system.
- b. Rapidly multiply and divide within 100.<sup>31</sup>
- c. Produce full sets of fact families for multiplication and division, as in the set  $6 \times 7 = 42$ ,  $7 \times 6 = 42$ ,  $42 = 7 \times 6$ ,  $42 = 6 \times 7$ ,  $42 \div 7 = 6$ ,  $42 \div 6 = 7$ ,  $6 = 42 \div 7$ ,  $7 = 42 \div 6$ .
- d. Find the factor pairs for a given number, as in the factor pairs for the number 42:  $\{42, 1\}$ ,  $\{21, 2\}$ ,  $\{14, 3\}$ ,  $\{7, 6\}$ .

## Fractions

### Core Standards · Students understand that:

1. When a whole, 1, is divided into  $b$  equal parts, the size of the parts is written  $1/b$ . To show  $1/b$  of something, divide the thing into  $b$  equal parts.
2. For a whole number  $a$  and a positive whole number  $b$ ,  $a/b$  is defined as  $a$  copies of  $1/b$ .<sup>32</sup> This can be thought of as the sum  $1/b + 1/b + \dots + 1/b$  (with  $a$  summands).
3. Whole numbers can be written as fractions, as in  $b/b = 1$ ,  $n/1 = n$ , and cases such as  $(4 \times 7)/4 = 7$ .
4. Fractions are numbers and can be seen as lengths on a number line.<sup>33</sup>

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<sup>29</sup> Include properties such as that the product is the same when the order of the factors is changed; that multiplication problems involving 1-digit numbers can be solved by breaking one factor apart additively and multiplying each part by the other factor; and that multiplying a quantity by a number, then dividing by the same number, leaves the original quantity unchanged.

<sup>30</sup> Include single-unit scales and multiple-unit scales. For multiple-unit scales, all counts should be evenly divisible by the scale factor. No count should represent more than ten of the scale unit, and no scale unit should represent more than ten counts.

<sup>31</sup> A variety of mental strategies are acceptable, including derived fact strategies and producing products or quotients from memory.

<sup>32</sup> This includes fractions greater than 1. For example,  $17/5$  is 17 copies of  $1/5$ .

<sup>33</sup> For example,  $17/5$  is 17 copies of the subinterval  $1/5$  laid end to end.

- Two fractions are equal when they represent the same portion of a whole, or when they have the same length on a number line. One fraction is greater than another when it represents a greater portion of the whole than the other, or lies to the right of the other on the number line.
- Given two unit fractions, the fraction with the larger denominator is smaller, because dividing a whole into a larger number of parts leads to smaller parts.
- Fractions with the same denominator can be added or subtracted by adding or subtracting the units indicated by the unit fraction. For example,  $\frac{2}{3} + \frac{4}{3}$  is 2 copies of  $\frac{1}{3}$  plus 4 copies of  $\frac{1}{3}$ , or 6 copies of  $\frac{1}{3}$  in all, that is  $\frac{6}{3}$ .
- The decimal 0.1 denotes the fraction  $\frac{1}{10}$ , 0.2 denotes  $\frac{2}{10}$ , and so on through 0.9, which denotes  $\frac{9}{10}$ .

#### Core Standards · Students can and do:

- Use fractions to describe quantities and parts of wholes.
- Compare and order fractions with equal numerators or equal denominators, including in contextual situations, using the fractions themselves, bar strip drawings, number line representations, and area models.
- Reason about fractions to establish equivalences between fractions with unlike denominators 2, 3, 4 and 6 (e.g.  $\frac{1}{2} = \frac{2}{4}$ ,  $\frac{4}{6} = \frac{2}{3}$ ).
- Add and subtract fractions with like denominators.
- Solve word problems that involve adding, subtracting, ordering and comparing fractions.
- Represent fractions of the form  $\frac{a}{10}$  in decimal notation; compare and order to tenths in decimal notation.

### Quantity and Measurement

#### Core Standards · Students understand that:

- A unit of measure can be partitioned into equal-sized parts, whose sizes can be represented as fractions of the unit.
- The area of a closed plane figure is a measure of how much space it encloses. A square with side length 1 unit is said to enclose “one square unit” of area.
- The area of a closed plane figure can be measured (expressed numerically) by the number of square units that fit inside it with no gaps or overlaps.
- Area is a model for multiplication because tiling a rectangle with unit squares shows that a rectangle  $a$  units long by  $b$  units wide encloses an area of  $a \times b$  square units.

#### Core Standards · Students can and do:

- Measure lengths using rulers marked with halves and fourths of inches. Make a dot plot to show repeated measurements.
- Convert compound units to a smaller or a larger unit, and solve problems involving mixed units (feet and inches, yards and feet).
- Using customary units, demonstrate and justify correct processes for measuring, comparing, and estimating length, mass, capacity, and durations of time, including unit selection, partitioning and iterating units, and transitivity.
- Compute perimeters of polygons by adding given side lengths, and find an unknown length in a polygon given the perimeter and all other side lengths. Represent these problems with equations involving a symbol for the unknown quantity.
- Determine and compare areas by counting square units (improvised units,  $\text{cm}^2$ ,  $\text{m}^2$ ,  $\text{in}^2$ ,  $\text{ft}^2$ ).
- Compute elapsed time and solve problems involving elapsed time (to the nearest minute).

## Mathematics: Fourth Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Operations and the Problems They Solve

#### Core Standards · Students understand that:

1. Quantities in a problem might be described with whole numbers, fractions or decimals; the operations used to solve the problem depend on the relationships between the quantities whatever numbers are involved.
2. The distributive property (of multiplication over addition) relates addition and multiplication. The distributive property can be shown numerically and visually, using arrays and area models.

#### Core Standards · Students can and do:

- a. Solve multistep word problems involving the four operations with whole numbers.<sup>34</sup>
- b. Estimate answers to computations and compute mentally to assess reasonableness of results.
- c. Solve problems that involve comparing, ordering, adding and subtracting fractions with like denominators. Compare fractions to benchmark fractions.
- d. Solve problems that involve comparing and ordering decimal numbers to hundredths. Compare decimals to benchmark decimals.
- e. ♦Make a table from given data, ask and answer questions about data in a table, solve multi-step problems using information presented in tables, and find patterns in tables.<sup>35</sup>

### Fractions

#### Core Standards · Students understand that:

1. The fraction  $a/b$  can be written as  $a \times 1/b$  because  $a/b$  is  $a$  copies of  $1/b$ .
2. When  $a$  identical things are divided into  $b$  equal parts, each of  $a$  things contributes  $1/b$ . So  $a \div b = a/b$ .<sup>36</sup>
3. A fraction can be multiplied by a whole number as  $n \times a/b = n \times a/b$ . For example,  $3 \times 2/5$  can be seen as 3 groups of 2 unit fractions  $1/5$ .<sup>37</sup>
4. A decimal of two digits stands for a sum of fractions whose denominators are 10 and 100. For example, 0.34 stands for  $3/10 + 4/100$ .

#### Core Standards · Students can and do:

- a. Reason about fractions to establish equivalences between related fractions<sup>38</sup> (e.g.  $3/10 = 30/100$ ,  $9/12 = 3/4$ ).

<sup>34</sup> Use the properties of multiplication (commutative, associative, identity) or the inverse relationship between multiplication and division (multiplying a number by  $b$  then dividing by  $b$ , and vice versa, leaves the number unchanged) to make sense of single digit multiplication and division situations and solve problems.

<sup>35</sup> Include tables with data from proportional relationships.

<sup>36</sup> This definition agrees with previous understandings of division in cases like  $28 \div 7$  (i.e., when  $a$  is a multiple of  $b$ ), but also gives meaning to quotients such as  $3 \div 4$  or  $7 \div 2$ .

<sup>37</sup> Using the Properties of Arithmetic,  $n \times a/b = n \times (a \times 1/b) = (n \times a) \times 1/b = (n \times a)/b$ .

- b. Add and subtract related fractions in simple cases within one whole (e.g.  $\frac{1}{2} + \frac{1}{4}$ ,  $\frac{3}{10} + \frac{4}{100}$ ).
- c. Solve word problems posed with whole numbers that have fractional answers.
- d. Represent multiplication of whole numbers by fractions and fractions by whole numbers, using length and area models.
- e. Solve word problems involving multiplying fractions by whole numbers and multiplying whole numbers by fractions.<sup>39</sup>
- f. Use decimals to hundredths to describe quantities and parts of wholes, compare and order decimals to hundredths, and write fractions of the form  $\frac{a}{10}$  or  $\frac{a}{100}$  in decimal notation.
- g. Round decimals (to hundredths) to the nearest whole number.
- h. Solve addition and subtraction story problems involving fractions with related denominators (situations familiar from whole number work).

## Base Ten Computation

### Core Standards · Students understand that:

1. The product of a one-digit number times a multidigit number is the sum of the products of the one-digit number times each place value component. This is an instance of the distributive property.
2. Multi-digit multiplication algorithms can be derived and explained by decomposing numbers into their place value components and applying the distributive property.
3. Digits in each place are worth ten times as much as digits in the place to the right and a tenth as much as digits to the left; comparison of numbers is decided by the leftmost digit, with subsequent digits breaking ties.
4. Given whole numbers  $a$  and  $b$ , find whole numbers  $Q$  and  $R$  so that  $a = Q \times b + R$ . For example, given 325 and 7, express 325 in the form  $325 = 46 \times 7 + 3$ .

### Core Standards · Students can and do:

- a. Demonstrate place value understanding for whole numbers to 1,000,000 and compare numbers within this range.
- b. Round whole numbers to the nearest 10 or 100 and use rounding to estimate computations.
- c. Multiply single place numbers (to 9000) by single digit numbers.<sup>40</sup>
- d. Multiply two-, three- and four-digit numbers by single-digit whole numbers, and multiply two-digit numbers by two-digit numbers, using strategies based on place value, Properties of Arithmetic, or the inverse relationship between multiplication and division.
- e. Multiply two-digit numbers by two-digit numbers using an algorithm based on place value and regrouping, such as the standard algorithm.
- f. Divide two-, three- and four-digit numbers by single-digit numbers, with or without remainder. In the case of remainders, express results in the form of an equation, as in  $325 = 46 \times 7 + 3$ .
- g. Explain why multiplication and division strategies and algorithms work, using place value and the Properties of Arithmetic (including explanations supported by drawings or objects).

## Quantity and Measurement

### Core Standards · Students understand that:

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<sup>38</sup> Glossary: Related fractions. Two fractions are *related* if one denominator is a factor of the other. (See Ginsburg, Leinwand and Decker (2009), *Informing Grades 1-6 Mathematics Standards Development: What Can Be Learned from High-Performing Hong Kong, Korea, and Singapore?*, Table A1, p. A-5, grades 3 and 4.)

<sup>39</sup> Include sharing multiple continuous wholes  $a$  fairly among  $b$  people, naming an individual share as  $\frac{a}{b}$ . For example 5 meters of pink ribbon shared among 3 people results in  $\frac{5}{3}$  meters each.

<sup>40</sup> Glossary: Single-place number. The numbers that result when a whole number between 1 and 9 (inclusive) is multiplied by the numbers 10, 100, 1000, etc.

1. Area is additive: If a figure is decomposed into several pieces, then the area of the whole figure can be found by adding the areas of the pieces (expressed in common units).
2. An angle is two rays with a common endpoint, and is measured by the relative amount of a circle that you trace when turning from one ray to the other.
3. A one-degree angle turns through  $1/360$  of a circle, where the circle is centered at the origin of the rays; the measure of an angle is the number of one-degree angle turned with no gaps or overlaps.

#### Core Standards · Students can and do:

- a. Apply the formula for area of squares and rectangles. Measure and compute whole-square-unit areas of objects and geometric figures decomposable into rectangles.<sup>41</sup>
- b. ♦ Make a dot plot to show repeated measurements in common fractions of a unit ( $1/2$ ,  $1/4$ ,  $1/8$ ). Solve problems involving addition and subtraction of fractions by using information presented in dot plots (e.g., finding the difference in length between the longest and shortest specimens in an insect collection).
- c. Draw scales (number line representations) of problem situations involving length, height and distance including fractional units or decimal numbers.
- d. Find one dimension of a rectangle given the other dimension and its area or perimeter; find the length of one side of a square given its area or perimeter. Represent these problems with equations involving a symbol for the unknown quantity.
- e. Measure angles in whole-number degrees using a protractor; sketch angles of specified measure. Find the measure of a missing part of an angle, given the measure of the angle and the measure of a part of it; represent these problems with equations involving a symbol for the unknown quantity.

### Shapes

#### Core Standards · Students understand that:

1. Shapes can be analyzed and classified using concepts of parallelism, perpendicularity and angle measure.

#### Core Standards · Students can and do:

- a. Draw points, lines, line segments, rays and angles; identify these in geometric figures.
- b. Associate angles of a quarter turn (subtending  $1/4$  of a circle) with angle measure  $90^\circ$ , a half turn ( $1/2$  of a circle) with angle measure  $180^\circ$ ,  $3/4$  turn ( $3/4$  of a circle) with angle measure  $270^\circ$ , and a full turn (complete circle) with angle measure  $360^\circ$ .<sup>42</sup>
- c. Draw perpendicular and parallel lines; identify these in geometric figures.
- d. Identify right angles and angles smaller than/greater than a right angle in geometric figures; recognize right triangles.
- e. Given a quadrilateral, say whether it is a square, whether it is a rectangle, and whether it is a parallelogram (with an understanding that a given shape may fit more than one category).

<sup>41</sup> using one-digit or two-digit numbers times two-digit numbers

<sup>42</sup> From Singapore Primary 4

## Mathematics: Fifth Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Fractions

#### Core Standards · Students understand that:

1. Fractions  $\frac{a}{b}$  and  $\frac{(n \times a)}{(n \times b)}$  are equal: for  $\frac{1}{b}$  is  $n$  copies of  $\frac{1}{(n \times b)}$ , so  $\frac{a}{b}$  is  $n \times a$  copies of  $\frac{1}{(n \times b)}$ . Example:  $\frac{1}{3}$  is 4 copies of  $\frac{1}{12}$ , so  $\frac{2}{3}$  is 8 copies of  $\frac{1}{12}$ ; thus  $\frac{2}{3} = \frac{8}{12}$ .
2. Fractions can be added or subtracted by replacing each with an equal fraction so that the resulting fractions have the same denominator. Example:  $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ .
3. Multiplying unit fractions gives a new unit fraction with denominator equal to the product of the initial denominators. For example,  $\frac{1}{3} \times \frac{1}{2} = \frac{1}{(3 \times 2)}$ . The product  $\frac{1}{3} \times \frac{1}{2}$  is 1 part when a whole of size  $\frac{1}{2}$  is divided into 3 parts, i.e. it is " $\frac{1}{3}$  of  $\frac{1}{2}$ ."<sup>43</sup>
4. Multiplying unit fractions can be extended to multiplying fractions in general. For example,  $\frac{2}{3} \times \frac{4}{5}$  can be seen as 2 groups of 4 unit fractions  $\frac{1}{15}$ , hence the product is  $\frac{8}{15}$ .<sup>44</sup> The product  $\frac{2}{3} \times \frac{4}{5}$  is 2 parts when a whole of size  $\frac{4}{5}$  is divided into 3 parts, i.e. it is " $\frac{2}{3}$  of  $\frac{4}{5}$ ."<sup>45</sup>
5. Dividing a unit fraction  $\frac{1}{b}$  by a whole number  $n$  gives a unit fraction with denominator  $n \times b$ , because when  $\frac{1}{b}$  is divided into  $n$  equal parts, the size of each part is  $\frac{1}{(n \times b)}$ . For example,  $\frac{1}{3} \div 2 = \frac{1}{6}$ .
6. Dividing a whole number  $n$  by a unit fraction  $\frac{1}{b}$  gives a whole number  $n \times b$ , because, as there are  $b$  units of  $\frac{1}{b}$  in 1, there are  $n \times b$  units of  $\frac{1}{b}$  in  $n$ . For example,  $2 \div \frac{1}{3} = 6$ .
7. A mixed number stands for the sum of its whole number part and a fractional part less than 1. A mixed number can be written as a fraction greater than 1, such as  $\frac{17}{5}$ . This equivalence can be shown using area, length, and number line models.
8. The ratio of two whole number quantities  $a$  and  $b$ , written  $a:b$  or  $\frac{a}{b}$ , is a multiplicative comparison telling how much of one quantity there is for a given amount of the other, or how many times as much one is than the other.<sup>46</sup>

#### Core Standards · Students can and do:

- a. Use area models and length models (such as strip drawings or the number line) to represent multiplication of fractions, division of unit fractions by whole numbers, and division of whole numbers by unit fractions.
- b. Multiply fractions, divide unit fractions by whole numbers, and divide whole numbers by unit fractions, and solve word problems involving these operations.
- c. Divide whole numbers by single digit decimals by seeing that they are fractions with denominator 10 or 100.
- d. Rename fractions and mixed numbers to equivalent forms and identify equivalent fractions.
- e. Compare and order fractions and mixed numbers with like or unlike denominators, including in contextual situations, using the fractions themselves, strip drawings or number line representations, and area models. Describe the size of fractional quantities with reference to the problem situation.
- f. Make tables of equal ratios relating whole number quantities, and find missing values in the tables. Plot pairs of values on the coordinate plane. Example

<sup>43</sup> On the number line,  $\frac{1}{n} \times \frac{1}{d}$  is 1 part when the interval from 0 to  $\frac{1}{d}$  is divided into  $n$  parts. This is the same as 1 part when the interval from 0 to 1 is divided into  $n \times d$  parts, and thus  $\frac{1}{n} \times \frac{1}{d} = \frac{1}{n \times d}$ .

<sup>44</sup> Using the Properties of Arithmetic,  $\frac{2}{3} \times \frac{4}{5} = (2 \times \frac{1}{3}) \times (4 \times \frac{1}{5}) = (2 \times 4) \times (\frac{1}{3} \times \frac{1}{5}) = (2 \times 4) \times \frac{1}{3 \times 5} = \frac{2 \times 4}{3 \times 5}$ .

<sup>45</sup> On a number line,  $\frac{m}{n} \times \frac{c}{d}$  means  $m$  parts when the interval from 0 to  $\frac{c}{d}$  is divided into  $n$  parts.

<sup>46</sup> For example, in a mixture of 5 cups of flour and 2 cups of sugar, the ratio is 5 cups flour to 2 cups sugar. There is  $\frac{5}{2}$  times as much flour as sugar (equivalently,  $2 \frac{1}{2}$  times as much or 2.5 times as much).

|                                |       |        |   |        |
|--------------------------------|-------|--------|---|--------|
| Cups of Flour                  | 5     | 10     | ? | 20     |
| Cups of Sugar                  | 2     | ?      | 6 | 8      |
| Flour:Sugar<br>(fraction form) | $5/2$ | $10/4$ | ? | $20/8$ |
| Flour:Sugar<br>(decimal form)  | ?     | ?      | ? | ?      |

|                                 |       |        |   |        |
|---------------------------------|-------|--------|---|--------|
| Hours of Snowfall               | 5     | 10     | ? | 20     |
| Inches of Snow                  | 2     | ?      | 6 | 8      |
| Inches:Hours<br>(fraction form) | $2/5$ | $4/10$ | ? | $8/20$ |
| Inches:Hours<br>(decimal form)  | ?     | ?      | ? | ?      |

## Base Ten Computation

### Core Standards · Students understand that:

1. The standard division algorithm is based on successively finding the largest single digit multiple of the divisor that is less than the dividend, regrouping to the next lower unit if necessary, and then subtracting the multiple and repeating to find the next digit in the quotient.
2. The division algorithm can be used to express a fraction in decimal form by carrying the division into the decimal places.
3. The features of the place value system for whole numbers extend to the decimal positions and the combined system is symmetric around the ones place.
4. In adding or subtracting decimal numbers, one operates separately with the units of each size, except when regrouping is needed; the scheme for regrouping is the same at each place, because each unit is composed of ten of the next smaller unit.
5. Numbers in decimal notation can be shown on the number line by dividing and sub-dividing the unit intervals as many times as needed to locate the number. This process can be visualized as zooming in on the number line.

### Core Standards · Students can and do:

- a. Divide two, three and four digit numbers by two digit numbers, with remainder, using an algorithm based on place value and regrouping, such as the standard algorithm. In the case of remainders, express results in the form of an equation, as in  $145 = 11 \times 13 + 2$ .
- b. Understand very large and very small numbers (from millionths to hundreds of millions); round very large numbers.
- c. Quickly find 0.1 more than a number and less than a number; 0.01 more than a number and less than a number; and 0.001 more than a number and less than a number.
- d. Add and subtract decimals using an algorithm based on place value and regrouping, such as the standard algorithm, and solve problems involving these operations.
- e. Write fractions in decimal notation for denominators 2, 3, 4, 5, 6, 8, 10 and 100.
- f. Explain why strategies and algorithms for decimals work, using place value and the Properties of Arithmetic (including explanations supported by drawings or objects).

## Quantity and Measurement

### Core Standards · Students understand that:

1. The volume of a solid figure is a measure of how much space it encloses. A cube with side length 1 unit is said to contain “one cubic unit” of volume. The volume of a solid figure can be measured (expressed numerically) by the number of cubic units that fit inside it with no gaps or overlaps.
2. Packing a rectangular prism with unit cubes and decomposing the prism into layers shows that a rectangular

prism  $\ell$  units long by  $w$  units wide by  $h$  units tall contains a volume  $V = \ell \times w \times h$  cubic units. The base of the

prism has area  $A = \ell \times w$  square units, and the prism can be viewed as  $h$  layers, each containing  $\ell \times w$  cubic units,

so the volume of the prism can also be expressed as  $V = A \times h$  cubic units.

3. Volume is additive: If a solid figure is decomposed into several pieces, then the volume of the whole figure can be found by adding the volumes of the pieces (expressed in common units).
4. Quantities with like units can be added or subtracted giving a sum or difference with the same unit; quantities with unlike units can be multiplied or divided giving products or quotients with derived units.
5. The ratio of a length, area or amount to another length, area or amount is the same regardless of the size of the unit used for measurement.
6. The number line is a scale that can be used to show units such as pounds, liters, etc.

#### Core Standards · Students can and do:

- a. Measure and compute whole-cubic-unit volumes for rectangular prisms and for objects well described as rectangular prisms.
- b. Convert among different-sized standard measurement units within a given measurement system (e.g. feet to yards, centimeters to meters) and use conversion to solve story problems.
- c. Form ratios of lengths, areas, and other quantities, including when quantities being compared are measured in different units.
- d. Solve word problems involving addition, subtraction, multiplication and/or division using quantities expressed as whole numbers, fractions, or decimals with measurement units.
- e. Solve multi-step problems involving units of weight, capacity, money, volume and area.

### Coordinate Geometry

#### Core Standards · Students understand that:

1. A pair of perpendicular number lines (“axes”) defines a coordinate system. A given point in the plane has a separate position along each of the two axes; the two positions of the point are called its coordinates.
2. Graphs on coordinate axes can be used to make sense of relationships among quantities in complex problems.

#### Core Standards · Students can and do:

- a. Graph points in the first quadrant the coordinate plane, and read off the coordinates of graphed points.<sup>47</sup>
- b. Determine the lengths of horizontal and vertical segments in the plane, given the coordinates of their endpoints.
- c. <sup>♦</sup> Collect data on continuous covarying quantities and display the data in a line graph with broken lines; distinguish bar graphs from line graphs; ask and answer questions from line graphs, including comparisons of ratios.

### Statistics

#### Core Standards · Students understand that:

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<sup>47</sup> The axes should sometimes represent dimensioned quantities, and the units of measure should not always be the same for both axes. Coordinates may be whole numbers, fractions or decimals.

1. Data are collected purposefully to answer a predefined question (e.g., “How tall are the fifth graders in our school?”)
2. A set of data typically shows variability—not all of the values are the same—and yet the values also typically show some tendency to cluster. Identifying a “center” for a data set is a way to describe its many values using a single number.
3. The median is a measure of center in the sense that approximately half the data values are less than median, while approximately half are greater.
4. Variation in a data set can be measured by the range and by typical deviations from the center.

**Core Standards · Students can and do:**

- a. Collect data to answer a predefined question about a measurement quantity. Make a dot plot to display the data, and describe the data using the median and typical deviations from the it.

## Mathematics: Sixth Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Ratios and Proportional Relationships

#### Core Standards · Students understand that:

1. Multiplicative comparisons can be extended from whole numbers to fractions and decimals. When the ratio  $q/m$  is formed, or when  $q$  is  $r$  times as much as  $m$ , the numbers  $q$ ,  $r$  and  $m$  can be fractions or decimals.
2.  $p\%$  of a quantity means  $p/100$  times as much as the quantity. The number  $p$  can be a fraction or decimal, as in  $3.75\%$ .
3. A unit rate is the multiplicative factor relating the two quantities in a ratio. Two quantities  $q$  and  $m$  can be compared by  $q = r \times m$ , where the unit rate  $r$  tells how much  $q$  per  $m$ .
4. Given two quantities in a ratio (e.g. distance and time), finding the unit rate produces a new type of quantity (e.g. speed).

#### Core Standards · Students can and do:

- a. Solve for an unknown quantity in a problem involving two equal ratios.
- b. Find a percentage of a quantity; solve problems involving finding the whole given a part and the percentage.
- c. Solve unit rate problems including unit pricing and constant speed. (See table.)

| $D = s \times T$   | $D \div T = s$  | $D \div s = T$   |
|--|---|--|
| A car driving at a speed of 30 miles per hour for 6 hours travels a distance of 180 miles. | If a car drives 180 miles for 6 hours at a constant speed, that speed is 30 miles per hour. | When a car drives 180 miles at a speed of 30 miles per hour, the trip takes 6 hours. |

- d. Represent unit rate problems on a coordinate plane where each axis represents one of the two quantities involved, and find unit rates from a graph. Explain what a point  $(x, y)$  means in terms of the situation, with special attention to the points  $(0, 0)$  and  $(1, r)$  where  $r$  is the unit rate.

### The Number System

#### Core Standards · Students understand that:

1. The Properties of Arithmetic govern operations on all numbers.
2. Division of fractions follows the “invert and multiply” rule because multiplication and division are inverse operations. For example,  $(2/3) \div (5/7) = 14/15$  because  $(14/15) \times (5/7) = 2/3$ .
3. Every nonzero fraction has a unique multiplicative inverse,<sup>48</sup> namely its reciprocal. Division can be defined as “multiplying by the multiplicative inverse.” Then  $(2/3) \div (5/7) = 14/15$  because the division symbol indicates multiplication by the multiplicative inverse.
4. A two-sided number line can be created by reflecting the fractions across zero. Numbers located to the left of zero on the number line are called negative numbers and are labeled with a negative sign.

<sup>48</sup> Glossary: Multiplicative inverses. Two numbers whose product is 1 are multiplicative inverses of one another. Example:  $3/4$  and  $4/3$  are multiplicative inverses of one another because  $3/4 \times 4/3 = 4/3 \times 3/4 = 1$ .

- Two different numbers, such as 7 and  $-7$ , that are equidistant from zero are said to be opposites of one another. The opposite of 7 is  $-7$  and the opposite of  $-7$  is 7. The opposite of the opposite of a number is the number itself. The opposite of 0 is 0. The operation of attaching a negative sign to a number can be interpreted as reflecting the number across zero on the number line.
- The absolute value of a number is its distance from zero on the number line. For any positive number  $q$ , there are two numbers whose absolute value is  $q$ , namely  $q$  and  $-q$ .
- The absolute value of a signed quantity (e.g. account balance, elevation) tells the size of the quantity irrespective of its sense (debit or credit; above or below sea level).
- Comparison of numbers can be extended to the full number system. The statement  $p > q$  means that  $p$  is located to the right of  $q$  on the number line, while  $p < q$  means that  $p$  is located to the left of  $q$  on the number line. The statement  $p > q$  does not mean  $|p| > |q|$ .

**Core Standards · Students can and do:**

- Divide fractions, and divide finite decimals by expressing them as fractions.
- Solve problems requiring arithmetic with fractions presented in various forms, converting between forms as appropriate and estimating to check reasonableness of answers.
- Find and position rational numbers<sup>49</sup> on the number line.
- Use rational numbers to describe quantities such as elevation, temperature,<sup>50</sup> account balance and so on. Compare these quantities using  $>$  and  $<$  symbols and also in terms of absolute value.
- Graph points and identify coordinates of points on the Cartesian coordinate plane in all four quadrants.

**Statistics**

**Core Standards · Students understand that:**

- The mean is a measure of center in the sense that it is the balance point; the mean is the value each data point would take on if the total value of all the data points were redistributed fairly.
- When the mean and median of a data set differ substantially, both measures should be provided, and the difference explained in terms of the data values.

**Core Standards · Students can and do:**

- Collect data to answer a predefined question about a measurement quantity. Make a dot plot to display the data, and describe the data using measures of center and measures of variation.<sup>51</sup>

**Geometry**

**Core Standards · Students understand that:**

- Triangles and parallelograms can be dissected and reassembled into rectangles with the same area; this leads to a formula for area in terms of base and height.
- Polygons can be dissected into triangles in order to find their area.

**Core Standards · Students can and do:**

<sup>49</sup> Glossary: Rational number. A number expressible in the form  $a/b$  for integers  $a$  and  $b \neq 0$ . The rational numbers include positive and negative integers, positive and negative fractions, and 0.

<sup>50</sup> A caution for temperature problems: The rational numbers are not a good model for a temperature scale. There is no temperature that solves the equation  $T + 1000^\circ\text{C} = 0$ .

<sup>51</sup> Data sets should include fractional values at this grade but not negative values.

- a. Find the area of right triangles, other triangles, special quadrilaterals, and polygons (by dissection into triangles and other shapes).
- b. Find surface area of cubes, prisms and pyramids (include the use of nets to represent these figures).
- c. Solve problems involving area, volume and surface area of objects.
- d. Examine the relationship between volume and surface area. Exhibit rectangular prisms with the same surface area and different volume, and with the same volume and different surface area.
- e. Use exponents and symbols for square roots and cube roots to express the area of a square and volume of a cube in terms of the side length, and to express the side length in terms of the area or volume.

## Expressions and Equations

### Core Standards · Students understand that:

1. A number that is the result of a sequence of operations with other numbers can be expressed in different ways using conventions about order of operations and parentheses, rules for working with fractions, and the Properties of Arithmetic. All such expressions are equivalent.
2. A letter is used to stand for a number in an expression in cases where one doesn't know what the number is, or where, for the purpose at hand, it can be any number in the domain of interest. Such a letter is called a variable.
3. An equation is a statement that two expressions are equal, and a solution to an equation is a value of the variable (or a set of values for each variable if there is more than one variable) that makes the equation true.

### Core Standards · Students can and do:

- a. Represent an unknown number using a letter in simple expressions such as  $y + 2$ ,  $y - 3$ ,  $6 + y$ ,  $5 - y$ ,  $3y$ ,  $y/2$ , and  $(3 \pm y)/5$ .
- b. Interpret  $3y$  as  $y + y + y$  or  $3 \times y$ ,  $y/2$  as  $y \div 2$  or  $1/2 \times y$ ,  $(3 \pm y)/5$  as  $(3 \pm y) \div 5$  or  $1/5 \times (3 \pm y)$ .<sup>52</sup>
- c. Evaluate simple expressions when values for the variables in them are specified (exclude expressions with a variable in denominator).
- d. Choose variables to represent quantities in a word problem and construct simple equations to solve the problem by reasoning about the quantities.
- e. Solve equations of the form  $x + p = q$  (for  $p < q$ ) and  $px = q$  where  $p$  and  $q$  are fractions.

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<sup>52</sup> From Singapore Secondary 1

## Mathematics: Seventh Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Ratios and Proportional Relationships

#### Core Standards · Students understand that:

1. Two variable quantities  $x$  and  $y$  are said to be proportional to one another if the ratio  $x/y$  is always equal to the same quantity  $k$ , so that  $y = kx$ . The constant  $k$  is the unit rate, and tells how much of  $y$  per unit of  $x$ .

#### Core Standards · Students can and do:

- a. Compare proportional relationships represented in different ways (e.g. compare a graph to an equation to determine which of two objects has greater speed).
- b. Decide whether two quantities that vary together have a proportional relationship, analyze proportional relationships using the unit rates that characterize them, and solve word problems involving proportional relationships.
- c. Plot pairs  $(x, y)$  from a proportional relationship  $y = kx$ , and pass a straight line through them and the origin. Observe that increases in  $y$  are proportional to increases in  $x$ , and calculate  $[\text{increase in } y]/[\text{increase in } x] = k$ .

### The Number System

#### Core Standards · Students understand that:

1. On the number line, the sum  $p + q$  is defined to be the number lying distance  $|q|$  from  $p$ , to the right of  $p$  if  $q$  is positive and to the left of  $p$  if  $q$  is negative. A number and its opposite are additive inverses (add to zero).<sup>53</sup>
2. Sums of signed numbers can be computed using the Properties of Arithmetic.<sup>54</sup>
3. The additive inverse of a sum is the sum of the additive inverses.<sup>55</sup>
4. Subtraction is defined as adding the additive inverse. This definition of subtraction allows subtraction of rational numbers and agrees with previous understandings of subtraction with positive numbers.<sup>56</sup> On the number line, the difference  $p - q$  lies distance  $|q|$  from  $p$ , to the left of  $p$  if  $q$  is positive and to the right of  $p$  if  $q$  is negative.
5. The absolute value of  $p - q$  equals the distance between  $p$  and  $q$  on the number line.
6. Products of signed numbers can be computed using the Properties of Arithmetic.<sup>57</sup> In particular, multiplying a number by  $-1$  produces its additive inverse.<sup>58</sup>

<sup>53</sup> Glossary: Additive inverses. Two numbers whose sum is 0 are additive inverses of one another. Example:  $3/4$  and  $-3/4$  are additive inverses of one another because  $3/4 + (-3/4) = (-3/4) + 3/4 = 0$ .

<sup>54</sup> For example,  $7 + (-3) = 4$  because  $7 + (-3) = (4 + 3) + (-3) = 4 + [3 + (-3)] = 4 + [0] = 4$ . And  $(-2) + (-3) = -5$  because  $5 + [(-2) + (-3)] = (2 + 3) + [(-2) + (-3)] = [2 + (-2)] + [3 + (-3)] = [0] + [0] = 0$  so  $(-2) + (-3)$  is the additive inverse of 5, that is  $-5$ .

<sup>55</sup> For example,  $-(6 + -2) = (-6) + 2$  because  $[6 + (-2)] + [(-6) + 2] = [6 + (-6)] + [(-2) + 2] = [0] + [0] = 0$ .

<sup>56</sup> For example, the subtraction  $7 - 3$  means 7 plus the additive inverse of 3, i.e.  $7 + (-3)$ , which equals 4. The subtraction  $9 - (-4)$  means 9 plus the additive inverse of  $-4$ , i.e.  $9 + 4$ , which equals 13.

<sup>57</sup> For example,  $(-1) \times (-1) = 1$  because  $(-1) + (-1) \times (-1) = 1 \times (-1) + (-1) \times (-1) = [1 + (-1)] \times (-1) = 0 \times (-1) = 0$ .

<sup>58</sup> Because  $(-1) \times a + a = (-1) \times a + (1) \times a = [(-1) + (1)] \times a = 0 \times a = 0$ .

- Every nonzero rational number has a multiplicative inverse. Division of rational numbers is defined as multiplying by the multiplicative inverse.
- The operation of adding the rational number  $q$  to points on the number line is a translation; it shifts points to the right if  $q > 0$ , to the left if  $q < 0$ , and not at all if  $q = 0$ . The operation of adding  $-q$  undoes the operation of adding  $q$ .
- The operation of multiplying points on the number line by a positive rational number  $k$  is a dilation; it scales points further away from zero if  $k > 1$ , closer to zero if  $k < 1$ , and not at all if  $k = 1$ . The operation of multiplying by  $1/k$  undoes the operation of multiplying by  $k$ .

**Core Standards · Students can and do:**

- Explore and explain with number lines the rules for adding rational numbers, e.g.,  $r + s = s + r$ ;  $r + (-s) = r - s$ ;  $p - (q + r) = p - q - r$ .
- Use the rules of arithmetic to explore and explain with specific numbers the rules for multiplying rational numbers, e.g.,  $4 \times -5$  is  $-5$  added to itself 4 times, so equal to  $-20$ ;  $-3 \times (-2 + 2) = -3 \times 0 = 0$ , so  $-3 \times -2 = -(-3) \times 2 = -(-6) = 6$ .
- Add and subtract rational numbers, and use these operations to solve word problems (including signed quantities such as elevation, temperature, account balance, and so on).
- Multiply and divide rational numbers, and use these operations to solve word problems (including signed quantities).

**Expressions and Equations**

**Core Standards · Students understand that:**

- Expressing a quantity in different forms serves a purpose in analyzing quantitative situations.
- The distributive property can be used in two directions, both to expand linear expressions, and to factor a sum of terms with a common factor.

**Core Standards · Students can and do:**

- Construct algebraic expressions for simple real-world situations and generate equivalent expressions to interpret their meaning (e.g.,  $P + 0.05P = 1.05P$  means that “increase by 5%” is the same as “multiply by 1.05”).
- Generate equivalent expressions from a given expression, including putting linear expressions in standard form and taking out a common factor. Include expressions involving negative numbers and exponents 2 and 3.
- Solve multi-step word problems that lead to equations of the form  $px + q = r$  and  $p(x + q) = r$ , where  $p$ ,  $q$ , and  $r$  are rational numbers, by undoing the operations involved in producing the expression on the left, using additive and multiplicative inverses.
- Solve simple absolute value equations of the form  $|x + h| = j$  and  $|x - h| = j$ , where  $h$  and  $j$  are integers.
- Read the structure in a numerical expression at a level necessary to enter it into a calculator or spreadsheet, making use of parentheses and the conventions on order of operations.

**Statistics**

**Core Standards · Students understand that:**

- In addition to measurement variability, another source of variation in data is randomness.

**Core Standards · Students can and do:**

- a. Collect experimental or simulation data from repeated random trials. Make a histogram showing absolute frequencies and a bar graph of relative frequencies. Discuss the patterns and make predictions for further experiments or simulations.

## Probability

### Core Standards · Students understand that:

1. Chance events fall along a spectrum: nearly impossible | unlikely | neither likely nor unlikely | likely | nearly certain.
2. Probability is a quantitative measure of likelihood. Probabilities are numbers lying between 0 and 1, with 0 representing impossible and 1 representing certain (in the case of a finite sample space).
3. The experimental probability of a specified outcome is the observed fraction of the outcome in a data set collected from a process involving randomness or chance.
4. In a random process, the individual outcomes are unpredictable, but patterns may emerge after repeated trials. Experimental probabilities in random experiments tend to approach stable values as more and more data is generated.
5. In a theoretical probability model, the set of distinct possible outcomes for a random experiment is called the sample space. An event is a set of sample points; a sample point may belong to several events. A specified event occurs in some fraction of the sample space. This fraction is called the theoretical probability of the event.
6. When computing theoretical probabilities, all members of the sample space are assumed equally probable. Theoretical probabilities will not match long-run experimental probabilities if this assumption is inappropriate (e.g., as in the case of a loaded die).

### Core Standards · Students can and do:

- a. Compute experimental probabilities from data sets, including data sets generated by simulations or sampling experiments.
- b. Compute experimental probabilities to estimate theoretical probabilities when no theoretical probability model is apparent.
- c. Represent sample spaces for one-stage random experiments; identify members of the sample space in which specified events occur.
- d. Use a theoretical probability model to compute theoretical probabilities for one-stage random experiments, expressing theoretical probabilities as fractions, decimals and percents.
- e. Compare experimental probabilities to theoretical probabilities for one-stage random experiments, examining and if feasible revising the assumptions of the theoretical model when the two conflict.

## Geometry

### Core Standards · Students understand that:

1. Two polygons are congruent<sup>59</sup> if and only if there is a correspondence between vertices so that the corresponding sides are equal and the corresponding angles are equal.
2. A plane or solid figure is similar to another if the second can be obtained from the first by a similarity transformation.<sup>60</sup> All ratios of lengths in the second figure to corresponding lengths in the first figure are equal to the scale factor of the dilation.

<sup>59</sup> Glossary: Congruent. Two plane or solid figures are *congruent* if one can be obtained from the other by a sequence of rigid motions (rotations, reflections, and translations).

<sup>60</sup> Glossary: Similarity transformation. A rigid motion followed by a dilation. Glossary: Dilation. A transformation that moves each point along the ray through the point emanating from a fixed center, and multiplies distances from the center by a common scale factor.

3. Congruent figures have the same area or volume. A similarity transformation with a scale factor of  $k$  leaves angle measures unchanged, changes lengths by a factor of  $k$ , changes areas by a factor of  $k^2$ , and changes volumes by a factor of  $k^3$ .
4. Given a line in the coordinate plane not parallel to either axis, any two right triangles with legs parallel to the axes and hypotenuse on the given line are similar, and so the slope of the line (rise over run) is the same regardless of which two distinct points are used to compute it.

**Core Standards- Students can & do:**

- a. Solve problems involving similar triangles and scale drawings (including computing actual lengths, areas and volumes from a scale drawing and reproducing a scale drawing at a different scale).
- b. Explore using hands-on activities the area of non-rectangular figures and the perimeter of curvilinear figures, and the fact that a dilation of the plane changes areas by the square of the scale factor.<sup>61</sup>
- c. Use scale factors to find lengths and areas of similar figures, including an informal derivation of the formulas relating the area, radius and circumference of a circle.
- d. Give an explanation of why the volume of a cylinder is the area of the base times the height, using informal arguments involving slices.
- e. Use coordinate grids to transform figures and to predict the effect of dilations, translations, rotations and reflections.
- f. Use two-dimensional representations of three-dimensional objects (schematics, assembly instructions, perspective drawings and multiple views) to solve problems.
- g. Explore three-dimensional figures formed by translations and rotations of plane figures through space.
- h. Sketch and describe cross-sections of cones, cylinders, pyramids and prisms.

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<sup>61</sup> Include using grids of squares with fractional side lengths to estimate area, and measuring the length of strings wrapped around the perimeter.

## Mathematics: Eighth Grade

### Developing Coherent Understanding

[Temporarily removed for editing.]

### Functions and the Situations They Model

#### Core Standards · Students understand that:

1. A function is a rule, often defined by an expression, that states a relationship between the values of two variable quantities.
2. A linear function models a situation where the change in one quantity is proportional to the corresponding change in the other quantity. The constant of proportionality,  $m$ , is the rate of change of the function. If  $x$  is the input and  $y$  is the output then the function is defined by  $y = mx + b$  for some constant  $b$ , which is called the initial value of the function (the value of the function when  $x$  is 0).
3. The graph of a linear function  $y = mx + b$  is a straight line, and the slope of the line is the function's rate of change.
4. The problem of finding where two linear functions have the same output value for a common input value leads to an equation in one variable; the solution or solutions (if any) can be visualized as the input value(s) where the graphs of the functions intersect.
5. A linear equation in one variable can be solved by successively transforming it into simpler equations with the same solutions using the Properties of Arithmetic and the Properties of Equality, until an equation of the form  $x = a$ ,  $a = a$ , or  $a = b$  results (where  $a$  and  $b$  are different numbers).

#### Core Standards · Students can and do:

- a. Compare features of two or more functions that may be presented in different representations (as formulas, graphs, tables of values, or verbally).
- b. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship; from two  $(x, y)$  values (including reading these from a table); or from a graph.
- c. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
- d. Solve linear equations with rational number coefficients, including equations that require expanding expressions using the distributive law and collecting like terms.

### The Number System

#### Core Standards · Students understand that:

1. The number line has numbers that are not rational, such as  $2\pi$  or  $2 + \sqrt{3}$ , called irrational numbers.
2. An irrational number can be approximated to arbitrary precision by rational numbers.
3. If  $n > 0$  is an integer and  $\sqrt{n}$  is not an integer, then  $\sqrt{n}$  is irrational. If  $q$  is rational and  $r$  is irrational, then  $q + r$  is irrational, and so is  $qr$  provided  $q \neq 0$ .

#### Core Standards · Students can and do:

- a. Use rational approximations to compare the size of irrational numbers, locate them approximately on a number line and estimate the value of expressions (e.g.  $\pi^2$ ).

## Geometry

### Core Standards · Students understand that:

1. Angle measures formed by a configuration of lines in a plane can often be deduced from other angle measures (e.g., vertically opposite angles, angles produced when a transversal line cuts two parallel lines).
2. The side lengths of a right triangle are related by the Pythagorean theorem.

### Core Standards · Students can and do:

- a. Explore and explain by hands-on activities facts about the angle sum of triangles, exterior angles, and alternate interior angles of parallel lines. Use these facts to determine the angle sum of interior angles of convex polygons, and the angle sum of exterior angles of convex polygons.<sup>62</sup>
- b. Explore and explain using hands-on activities: parallel lines in space, line perpendicular to a line through a given point, lines perpendicular to a plane, lines parallel to a plane, the plane passing through three given points, and the plane perpendicular to a given line at a given point.
- c. Use facts about angles to write and solve simple equations for an unknown angle in a figure.
- d. Explain a proof of the Pythagorean theorem.<sup>63</sup>
- e. Use the Pythagorean theorem to determine missing side lengths in right triangles and to solve problems in two and three dimensions.
- f. Use the Pythagorean theorem to find the distance between two points in a coordinate system.
- g. Draw (freehand, with ruler and protractor, and with technology) geometric shapes from given conditions. (Focus on constructing triangles from three measures of angles or sides, noticing when the triangle is uniquely defined, ambiguous, or impossible.)
- h. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc): copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.
- i. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

## Statistics

### Core Standards · Students understand that:

1. Scatterplots for bivariate continuous data may reveal patterns of association between two quantities. This kind of relationship between quantities is not a functional relationship—and yet, a function might be a valuable way to describe a statistical relationship.

### Core Standards · Students can and do:

- a. Construct and interpret scatterplots for bivariate measurement data.
- b. Describe patterns that appear in scatterplots, such as clustering, outliers, positive/negative association, linear association, nonlinear association.
- c. For scatterplots that suggest a linear association, model the relationship with a linear function using an informal fitting procedure. Use the model function to solve problems in the context of the data,

<sup>62</sup> Use physical models, transparencies, or dynamic geometry software to make rigid motions and give informal arguments, for example, arrange three copies of the same triangle so that the three angles form a line, and give an argument in terms of transversals why this is so.

<sup>63</sup> For example, by the method of right triangles in a square.

interpreting the slope/rate of change and intercept/initial value. Informally assess the goodness of the model by judging the closeness of the data points to the graph of the function.

## Probability

### Core Standards · Students understand that:

1. The framework for theoretical probability models is the same for compound events as for simple events: the theoretical probability is the fraction of the sample space in which the compound event occurs.

### Core Standards · Students can and do:

- a. Compute experimental probabilities from data sets, including data sets generated by simulations or repeated sampling experiments.
- b. Compute experimental probabilities to estimate theoretical probabilities of compound events when no theoretical probability model is apparent.
- c. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams; identify members of the sample space in which specified events occur.
- d. Compute theoretical probabilities for compound events by counting members of the sample space.
- e. Compare experimental probabilities to theoretical probabilities for multi-stage random experiments, examining the assumptions of the theoretical model when the two conflict.

## Mathematics: High School—Expressions

### A Coherent Understanding of Expressions

[Final draft of CCR narrative goes here.]

#### Seeing structure in expressions

##### Core Standards · Students understand that:

1. Different forms of expression for functions reveal different properties of the function; a purpose in transforming expressions is to find those properties.

For example, factoring a quadratic expression reveals the zeros of the function it defines, and putting the expression in vertex form reveals the maximum or minimum of the function; the expression  $1.15^t$  can be rewritten in the form  $(1.15^{1/12})^{12t} \approx 1.012^{12t}$  to reveal the approximate monthly interest rate if the annual rate is 15%.

2. The laws of exponents for whole number exponents follow from an understanding of exponents as indicating repeated multiplication, and from the associative property of multiplication.
3. The interpretation of zero, fractional and negative exponents follows from extending the laws of exponents to those values.

For example, since  $(x^{1/3})^3 = x^{(1/3) \cdot 3} = x^1 = x$ ,  $x^{1/3}$  is the cube root of  $x$ .

4. Complex expressions can be interpreted by “chunking”: temporarily viewing a part of the expression as a single entity.

##### Core Standards · Students can and do:

- a. Factor, expand, and complete the square in quadratic expressions.
- b. Use chunking to see expressions in different ways that suggest ways of rewriting them.

For example, see  $x^4 - y^4$  as  $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that can be factored as  $(x^2 - y^2)(x^2 + y^2)$ .

- c. Rewrite expressions using the laws of exponents.

For example  $(x^{1/2})^3 = x^{3/2}$  and  $1/x = x^{-1}$ .

- d. Use the laws of exponents to interpret expressions for exponential functions, recognizing fractional exponents as indicating roots of the base and negative exponents as indicating the reciprocal of a power.

For example, identify the relative rate of change in functions such as  $y = (1.02)^t$ ,  $y = (0.97)^t$ ,  $y = (1.2)^{10t}$ ,  $y = (1.01)^{t/12}$ , and recognize that any non-zero number raised to the 0 power is 1 (for example,  $12(1.05)^0 = 12$ ). Avoid common errors such as confusing  $6(1.05)^t$  with  $(6 \cdot 1.05)^t$  and  $5(0.03)^t$  with  $5(1.03)^t$ .

- e. Given an expression for an exponential function, identify whether it represents exponential growth or decay.
- f. Using a method such as the factorization  $(x^n - 1) = (x - 1)(x^{n-1} + \dots + 1)$  where  $n$  is a whole number, prove the formula for the sum of a geometric series, and use the formula to solve problems.

Include problems involving compound interest and mortgage payments.

#### The arithmetic of polynomials and rational functions

##### Core Standards · Students understand that:

1. Polynomials form a system analogous to the integers, closed under the operations of addition, subtraction, and multiplication.

2. A polynomial of degree  $n$  has  $n$  complex roots, where roots are counted according to multiplicity.
3. For a polynomial  $p(x)$ ,  $p(a) = 0$  if and only if  $(x - a)$  is a factor of  $p(x)$ .
4. The Binomial Theorem gives the expansion of  $(x + a)^n$  in powers of  $x$  for a whole number  $n$  and a real number  $a$ , with coefficients determined for example by Pascal's triangle. The Binomial Theorem can be proved by mathematical induction.
5. Rational functions are fractions whose numerator and denominator are polynomials, and the rational functions are closed under the operation of division by a nonzero rational function.

**Core Standards - Students can and do:**

- a. Add, subtract and multiply polynomials.
- b. Identify zeros of polynomials when suitable factorizations are available, and graph polynomials.
- c. Transform simple rational functions using the Properties of Arithmetic and the rules for operations on fractions.
- d. Identify zeros and asymptotes of rational functions, when suitable factorizations are available, and graph rational functions.
- e. Divide polynomials by monomials

## Mathematics: High School—Equations

### A Coherent Understanding of Equations

[Final draft of CCR narrative goes here.]

#### Building equations to model relations between quantities

##### Core Standards · Students understand that:

1. Choosing a unit for a general quantity (e.g. length) establishes a correspondence between specific instances of the quantity (e.g. lengths of specific objects) and numbers called coordinates.
2. A relation between two quantities can be represented by an equation in variables representing coordinates for the quantities; by a graph on a pair of axes marked with units for the quantities; and by a table of coordinate pairs from the relation. The graph and the table show pairs that are solutions to the equation.

##### Core Standards · Students can and do:

- a. Build equations to express relations between quantities and solve problems.  
Include equations arising from situations involving linear, quadratic, simple rational, and exponential functions.
- b. Rearrange formulas to isolate a quantity of interest.
- c. Build systems of equations and solve problems involving systems of equations.

#### Reasoning with equations and inequalities

##### Core Standards · Students understand that:

1. To solve an equation algebraically, one assumes it is true and deduces the solutions, often in steps that replace it with a simpler equation whose solutions include the solutions of the original one.
2. Adding a number to both sides of an equation, or multiplying both sides by a nonzero number, leads to an equation that has exactly the same solutions as the original.
3. If the product of two numbers is zero, then at least one equals zero, and conversely. This principle is the basis for solving equations by factoring.
4. Multiplying both sides of an equation by an expression that can be zero for certain values of the variables in it, or squaring both sides of an equation, can lead to an equation that has more solutions than the original. Evaluating these in the original equation eliminates extraneous solutions.
5. The method of completing the square can transform any quadratic equation in  $x$  into an equivalent equation of the form  $(x - p)^2 = q$ . This leads to the quadratic formula.
6. Equations not solvable in one number system may have solutions in a larger number system.
7. Equations of the form  $f(x) = g(x)$  can be solved graphically by finding the intersections (if any) of the graphs of  $f(x)$  and  $g(x)$ .
8. The relationship between a function  $f$  and its inverse (if it has one) can be used to solve equations of the form  $f(x) = c$ . For example, a logarithmic function can help solve exponential equations, and an inverse trigonometric function can help solve trigonometric equations.
9. Given a system of linear equations, adding a multiple of one equation to another produces a system with the same solutions. This principle, combined with principles already encountered with equations in one variable, allows for the simplification of systems.

10. The solutions to an equation in two variables form a graph—a set of points, often a curve or a line, in the coordinate plane.
11. The solutions to two equations in two variables (if any) can be visualized as the points of intersection of their graphs, because those points satisfy both equations simultaneously.
12. The solution to a system of inequalities in two variables can be visualized as the intersection of the regions in the plane defined by the inequalities.

**Core Standards · Students can and do:**

- a. Solve simple rational and radical equations, noting and explaining extraneous solutions.
- b. Solve quadratic equations over the real numbers by completing the square, using the quadratic formula and factoring.
- c. Solve linear inequalities in one variable and graph the solution set on a number line.  
  
Emphasize solving the associated equality and determining on which side of the solution of the associated equation the solutions to the inequality lie.
- d. Solve linear systems of equations algebraically, focusing on pairs of linear equations in two variables.
- e. Graph a system of two linear or quadratic equations in two unknowns and estimate the solution from a graph.
- f. Graph the solution set of a linear inequality in two variables.
- g. Use the properties of logarithms to solve equations involving exponential functions.
- h. Use inverse trigonometric functions to solve equations of the form  $A\sin(Bx + C) = D$ .
- i. Find complex roots of quadratic equations.
- j. Solve a system of two quadratic equations in two unknowns.

## Mathematics: High School—Functions

### A Coherent Understanding of Functions

[Final draft of CCR narrative goes here.]

#### Interpreting functions

##### Core Standards - Students understand that:

1. The domain of a function is the set of its inputs, and the range is the set of its outputs.
2. Function notation uses a letter to stand for a function. If  $f$  is a function and  $x$  is a number in its domain, then  $f(x)$  indicates the output of  $f$  corresponding to the input  $x$ .
3. Functions can be described by key characteristics, including: zeros; vertical intercept; extreme points; average rates of change (over intervals); intervals of increasing, decreasing and/or constant behavior; and end behavior.
4. Linear, quadratic and exponential functions are defined by expressions that have forms specific to each type, in which the parameters can often be interpreted in terms of characteristics of the graph.
5. An equation in two variables implicitly expresses one variable as a function of the other if there are no points on the graph having the same value of the first variable but different values of the second.
6. When  $x$  is a power of ten, the common logarithm  $\log(x)$  tells the exponent. When  $x$  lies between  $10^n$  and  $10^{n+1}$ ,  $\log(x)$  lies between  $n$  and  $n+1$ .

##### Core Standards - Students can and do:

- a. Describe qualitatively the functional relationship between two quantities by reading a graph; e.g., where the function is increasing or decreasing, what its long run behavior appears to be, and whether it appears to be periodic.
- b. Sketch a graph that exhibits the qualitative features of a function that has been described verbally.
- c. Compare values and properties of two functions represented in different ways (algebraically, graphically, numerically in tables, or by verbal descriptions).
- d. Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.
- e. Describe the qualitative behavior of common types of functions using graphs and tables.

Identify: intercepts; intervals where the function is increasing, decreasing, positive or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. Use technology to explore the effects of parameter changes on the graphs of linear, power, quadratic, square root and cube root, polynomial, simple rational, exponential, logarithmic, sine and cosine, absolute value and step functions.

- f. Interpret the parameters in the general expressions for linear, quadratic, and exponential functions, and draw conclusions about the parameters by inspection of the graph.
- g. Given a function  $f$ , and given a constant  $c$ , evaluate  $f(c)$  if possible and find solutions to  $f(x) = c$  (if they exist). Where appropriate, relate the possibility of evaluation to the domain and the existence or nonexistence of solutions to the range.

#### Building functions

##### Core Standards - Students understand that:

1. Varying a parameter in the general expression for a linear, quadratic or exponential function can (often) be interpreted as performing a geometric transformation on the graph. This can be used to adjust a function to model a particular situation.

2. Composing a function  $f$  with a function  $g$  creates a new function called the composite function—for an input number  $x$ , the output of the composite function is  $f(g(x))$ .
3. The inverse of a function “undoes” what the function does; that is, composing the function with its inverse in either order returns the original input.
4. Sequences are functions whose domain is the whole numbers, and they can be defined recursively as well as explicitly. Arithmetic sequences are linear functions and geometric sequences are exponential functions.

### Core Standards · Students can and do:

- a. Make graphs of linear, quadratic, cubic, absolute value and exponential functions, and, given the graph of one of these types, identify the type.
- b. Sketch graphs of quadratic functions presented in the form  $y = ax^2 + bx + c$ ,  $y = a(x-h)^2 + k$  and  $y = a(x-p)(x-q)$  (without plotting points).
- c. Solve problems involving quadratic functions, such as analyzing projectile motion and maximizing profit.
- d. Identify the effect on the graph of replacing  $f(x)$  by  $f(x) + k$ ,  $kf(x)$ ,  $f(kx)$ , and  $f(x + k)$ . Include both positive and negative  $k$ ; find the value of  $k$  given the graphs.
- e. Write an expression of the form  $a(1+r)^t$  or  $ab^t$  for an exponential function to express a constant percent growth rate or a constant growth factor.
- f. Evaluate composite functions and compose functions symbolically in simple cases (e.g. one or both functions linear).
- g. Read values of an inverse function from a graph or a table, given that the function has an inverse.
- h. For linear or simple exponential functions, find a formula for an inverse function by solving an equation.
- i. For linear functions or simple exponential functions, verify symbolically by composition that one function is the inverse of another.
- j. Write arithmetic and geometric sequences both recursively and in closed form, and translate between the two forms.

## Linear vs. exponential behavior

### Core Standards · Students understand that:

1. Linear functions grow by equal differences in equal time periods; exponential functions grow by equal factors in equal time periods.
2. The rate of change of a linear function is constant; the rate of change of an exponential function is proportional to the value of the function.
3. Exponential growth eventually outstrips polynomial growth (including, in particular, linear growth).

### Students can and do:

- a. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- b. Interpret absolute and relative rates of change and use them to make predictions.
- c. Identify the initial value and growth or decay rate from a table or graph of an exponential function.
- d. Calculate and interpret the growth factor for an exponential function (presented symbolically or as a table) given a fixed time interval. Estimate the growth factor from a graph.
- e. Recognize a quantitative relationship as linear or exponential from description of a situation.

## Trigonometric functions

### Core Standards · Students understand that:

1. The unit circle in the coordinate plane enables one to extend the domains of the sine, cosine and tangent functions of right-triangle trigonometry to the real numbers.
2. Trigonometric functions are periodic by definition, and sums and products of these functions are periodic.
3. Restricting trigonometric functions to a domain on which they are always increasing or always decreasing allows for the construction of an inverse function.

**Core Standards - Students can and do:**

- a. Use radian measure and revisit graphs of trigonometric functions in terms of radians.
- b. Use the unit circle to determine geometrically the values of sine, cosine, tangent for multiples of  $\pi/4$  and  $\pi/3$ ; commit sines and cosines of principal angles to memory.
- c. Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.
- d. Solve simple trigonometric equations formally using inverse trigonometric functions;<sup>64</sup> evaluate solutions using technology.
- e. Explain relationships between the identity  $\sin^2 x + \cos^2 x = 1$ , the equation of a circle, and the Pythagorean theorem.
- f. Explain proofs of the sine and cosine addition and subtraction formulas.
- g. Use trigonometric identities to simplify expressions.
- h. Use trigonometric functions to solve problems in science, economics or other fields where periodic phenomena occur.

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<sup>64</sup> Solving trigonometric equations by means of the quadratic formula is optional.

## Mathematics: High School—Coordinates

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### A Coherent Understanding of Coordinates.

[Final draft of CCR narrative goes here.]

#### Expressing geometric properties with equations

##### Core Standards · Students understand that:

1. The graph of a linear equation is the straight line through any two of its solutions. Conversely, any line is the set of solutions to some linear equation.
2. Two lines with well-defined slopes are parallel if their slopes are equal and perpendicular if their slopes multiply to  $-1$ .
3. The equation of a circle can be found using its definition and the Pythagorean theorem.
4. Transforming the graph of an equation by reflecting in the axes, translating parallel to the axes, or applying a dilation to one of the axes correspond to substitutions in the equation.

For example, reflection in the  $y$  axis corresponds to  $(x,y) \rightarrow (-x,y)$ , translation vertically down by three units corresponds to  $(x,y) \rightarrow (x,y+3)$ , and dilating by a factor of 2 parallel to the  $x$ -axis corresponds to  $(x,y) \rightarrow (x/2,y)$ .

5. An ellipse is obtained by stretching a circle, leading to an equation of the form  $x^2/a^2 + y^2/b^2 = 1$ .
6. The formula  $A = \pi ab$  for the area of an ellipse can be derived from the formula for the area of a circle.

##### Core Standards · Students can and do:

- a. Write the equation of a line in point-slope form, slope-intercept form, or standard form.
- b. Identify parallel and perpendicular lines in a coordinate plane, and use the relationship between slopes of parallel and perpendicular lines to solve problems. Know the equations of vertical and horizontal lines.
- c. Find the point on the segment between two given points that divides the segment in a given ratio.
- d. Complete the square to find the center and radius of a circle given by an equation.
- e. Find an equation for an ellipse given the lengths of its major and minor axes; calculate the area of an ellipse.
- f. Use coordinates to solve geometric problems.

Include proving simple geometric theorems algebraically, using coordinates to compute perimeters and areas for triangles and rectangles, finding midpoints of line segments, finding distances between pairs of points and determining when two lines are parallel or perpendicular.

#### Vectors and matrices<sup>65</sup>

##### Core Standards · Students understand that:

1. Vectors are quantities having both magnitude and direction. They are typically represented by directed line segments.
2. On a coordinate plane, vectors are determined by the coordinates of their initial and terminal points or by their  $x$ - and  $y$ -components.

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<sup>65</sup> Limit to vectors in the plane and  $2 \times 2$  matrices.

3. Vectors can be added end-to-end, component-wise, or by the parallelogram rule. The length of the sum of two vectors is typically not the sum of the lengths.
4. Translations of the plane can be represented by vectors.
5. Vectors are often used to describe “directed quantities” in physics, such as position, velocity, acceleration and force. Vector addition is used to find resultant forces or compute displacements.
6. Multiplying a  $2 \times 2$  matrix into a vector produces another vector. This can be viewed as a transformation of the plane.
7. A system of two linear equations in two variables can be represented as a single matrix equation in a vector variable.
8. Matrices can be added, subtracted and multiplied.
9. The zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a  $2 \times 2$  matrix determines whether it has a multiplicative inverse.

#### Core Standards · Students can and do:

- a. Represent vectors graphically.
- b. Perform basic vector operations (addition, subtraction, scalar multiplication) both graphically and algebraically.
- c. Use vectors to model and solve problems.
- d. Use trigonometry to decompose a vector into perpendicular components.
- e. Add, subtract and multiply matrices.
- f. Represent systems of equations as matrix equations.
- g. Find the inverse of a matrix if it exists and use it to solve equations.

### Complex Numbers

#### Core Standards · Students understand that:

1. To solve quadratic equations that have no solutions in the real numbers, the number system can be extended to include the square roots of  $-1$ , creating a closed number system called the complex numbers.
2. The Properties of Arithmetic and the relation  $i^2 = -1$  can be used to perform operations on complex numbers.
3. All polynomials can be factored over the complex numbers, e.g. as in  $x^2 + 4 = (x + 2i)(x - 2i)$ .
4. Complex numbers can be visualized on the complex plane. Real numbers fall on the horizontal (real) axis, and imaginary numbers fall on the vertical axis.
5. On the complex plane, arithmetic of complex numbers can be interpreted geometrically: addition is analogous to vector addition, and multiplication can be understood as rotation and dilation about the origin. Complex conjugation is reflection across the real axis.
6. The absolute value (or modulus) of a complex number is defined as its distance from the origin in the complex plane. On the complex plane, as on the real line, the distance between numbers is the absolute value of the difference, and the midpoint of a segment is the average of the numbers at its endpoints.
7. Euler’s formula  $e^{i\theta} = \cos\theta + i \sin\theta$  links complex numbers to trigonometry.

#### Core Standards · Students can and do:

- a. Add, subtract and multiply complex numbers.
- b. Find the conjugate of complex a number and use it to find absolute values and divide complex numbers.
- c. Graph complex numbers in both rectangular and polar form and interpret arithmetic of complex numbers geometrically.

- d. Solve quadratic equations over the complex numbers.
- e. Convert complex numbers between rectangular and polar form.
- f. Re-derive trigonometric identities using complex methods.

## Mathematics: High School—Modeling

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### A Coherent Understanding of Modeling.

Modeling uses mathematics to help us make sense of the real world—to understand quantitative relationships, make predictions, and propose solutions.

A model can be very simple, such as a geometric shape to describe a physical object like a coin. Even so simple a model involves making choices. It is up to us whether to model the solid nature of the coin with a three-dimensional cylinder, or whether a two-dimensional disk works well enough for our purposes. For some purposes, we might even choose to adjust the right circular cylinder to model more closely the way the coin deviates from the cylinder.

In any given situation, the model we devise depends on a number of factors: How precise an answer do we want or need? What aspects of the situation do we most need to understand, control, or optimize? What resources of time and tools do we have? The range of models we can create and analyze is constrained as well by the limitations of our mathematical and technical skills. For example, modeling a physical object, a delivery route, a production schedule, or a comparison of loan amortizations each requires different sets of tools. Networks, spreadsheets and algebra are powerful tools for understanding and solving problems drawn from different types of real-world situations. One of the insights provided by mathematical modeling is that essentially the same mathematical structure might model seemingly different situations.

The basic modeling cycle is one of (1) identifying the key features of a situation, (2) creating geometric, algebraic or statistical objects that describe key features of the situation, (3) analyzing and performing operations on these objects to draw conclusions and (4) interpreting the results of the mathematics in terms of the original situation. Choices and assumptions are present throughout this cycle.

### The modeling cycle and general tools

#### Core Standards · Students understand that:

1. The behavior of quantities in physical, economic, public policy, social and everyday situations can be modeled using mathematics. Mathematics is used to model relationships among quantities, constraints and objectives.
2. Models are formulated to answer questions about the world based on an analysis of the situation and a conceptual model that involves assumptions and choices.
3. Quantities in the situation are represented by variables in the model, usually through measurement. Modeling includes decisions about what to measure and how, and how well the measurements work for the purpose.
4. Mathematical knowledge and skill are required in order to get results from a mathematical model—even to devise a model in the first place. Areas of mathematics commonly used in modeling include linear, quadratic, exponential or other functions; probability and statistics; and geometry (solid, plane and coordinate). In active modeling, fluency with math content is required in order to focus on the larger problem.
5. Technology is often required in order to obtain results from a model.
6. The results of a mathematical model must be evaluated against evidence and the phenomena at hand. If the mathematics is correct, then unreasonable results point to unreasonable assumptions and the need to revise the model.
7. Real-world problems do not announce that they are amenable to mathematical analysis and solution; bringing mathematics to bear on such a problem is a highly creative act.

#### Core Standards · Students can and do:

- a. Creatively apply the mathematics they know to situations in which it only imperfectly applies—and achieve useful results by doing so.

For example, independently choose to describe HIV transmission as a random event with a fixed probability per sexual encounter.

- b. Decide what measures are relevant to a problem.

For example, given the purpose at hand, is traffic safety best measured in terms of fatalities per year or fatalities per vehicle-mile? (or fatalities per 100 million vehicle-miles?)

- c. Use network diagrams or other techniques to visualize complex situations with many factors, causes or agents.

For example, what agents and factors are responsible for setting the price of gasoline? How do they interact?

- d. In situations with many factors, causes or agents, organize the factors/causes/agents into a hierarchy of importance.

For example, what are the primary, secondary, and relatively rare causes of lung cancer?

- e. Use order of magnitude estimates, unprompted, to identify important effects, disregard unimportant effects and predict results of a more detailed model.

- f. Use 2-by-2 tables, flowcharts, and other strategies to organize information and manage scenarios.

## Modeling with geometry, equations, functions, probability, and statistics

### Core Standards - Students can and do:

- a. Model physical objects with geometric shapes.

Include common objects that can reasonably be idealized as two- and three-dimensional geometric shapes. Identify the ways in which the actual shape varies from the idealized geometric model.

- b. Model situations with equations and inequalities.

Include situations well described by a linear inequality in two variables or a system of linear inequalities defining a region in the plane.

- c. Model situations with common functions.

Include situations well described by linear, quadratic or exponential functions; and situations that can be well described by inverse variation ( $f(x) = k/x$ ). Include identifying a family of functions that models features of a problem, and identifying a particular function of that family and adjusting it to fit by changing parameters. Understand the recursive nature of situations modeled by linear and exponential functions.

- d. Model situations using probability and statistics.

Include using simulations to model probabilistic situations; describing the shape of a distribution of values and summarizing a distribution with measures of center and variability; modeling a bivariate relationship using a trend line or a regression line.

## Mathematics: High School—Statistics

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### A Coherent Understanding of Statistics.

[Final draft of CCR narrative goes here.]

#### Summarizing and interpreting categorical, count and measurement data

##### Core Standards - Students understand that:

1. Statistical methods take variability into account to support making informed decisions based on quantitative studies designed to answer specific questions.
2. Visual displays and summary statistics condense the information in data sets into usable knowledge.

##### Core Standards - Students can and do:

- a. Summarize comparative or bivariate categorical data in two-way frequency tables; interpret joint, marginal and conditional relative frequencies in the context of the data.
- b. Compare data on two or more count or measurement variables by using plots on the real number line (dot plots, histograms and box plots); use appropriate statistics to summarize center (median, mean) and spread (interquartile range, standard deviation) of the data sets; interpret changes in shape, center and spread in the context of the data sets, accounting for possible effects of extreme data points.
- c. Summarize bivariate quantitative data by giving a regression line and a measure of goodness of fit.

#### Making inferences and justifying conclusions drawn from data

##### Core Standards - Students understand that:

1. Statistics is a process for making inferences about population parameters based on a sample from that population; randomness is the foundation for statistical inference.
2. The design of an experiment or sample survey is of critical importance to analyzing the data and drawing conclusions.

##### Core Standards - Students can and do:

- a. Use probabilistic reasoning to decide if a specified model is consistent with a given data-generating process.
- b. Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each.
- c. Use data from a sample survey to estimate a population parameter.
- d. Use data from a randomized experiment to compare two treatments.
- e. Evaluate reports based on data.

## Mathematics: High School—Probability

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### A Coherent Understanding of Probability.

[Final draft of CCR narrative goes here.]

#### Modeling random events with finite sample spaces

##### Core Standards - Students understand that:

1. Random phenomena can be modeled mathematically using a sample space in which sample points represent distinct outcomes, and in which each sample point is assumed to have the same probability.
2. Events are subsets of a sample space that can be defined using characteristics (or categories) of the sample points, as well as unions, intersections, or complements thereof ('and', 'or', 'not'). A sample point may belong to several events (categories).
3. If A and B are two events (categories), then the conditional probability of A given B, denoted by  $p(A | B)$ , is the fraction of sample points in B that also lie in A.
4. The laws of probability can be used to generate new probabilities from known probabilities.

##### Core Standards - Students can and do:

- a. Compute theoretical probabilities of compound events by constructing and analyzing representations, including tree diagrams, systematic lists, and Venn diagrams
- b. Use the addition and multiplication laws of probability to compute probabilities of complementary, disjunctive, and compound events.
- c. Apply concepts such as intersections, unions and complements of events, and conditional probability and independence, to define or analyze compound events, calculate probabilities, and solve problems.
- d. Construct and interpret two way tables to show probabilities when two characteristics (or categories) are associated with each sample point. Use a two way table to determine conditional probabilities.
- e. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.
- f. Use permutations and combinations to compute probabilities of compound events and solve problems.

#### Experimenting and simulating to model probabilities

##### Core Standards - Students understand that:

1. Sets of data obtained from surveys, simulations, or other means, can be used as probability models, by treating the data set itself as a sample space, in which the sample points are the individual pieces of data. The probability of an event within the data set is its relative frequency.
2. The law of large numbers provides the basis for estimating certain probabilities by use of empirical relative frequencies.
3. The probability of an outcome can be interpreted as an assertion about the long-run proportion of the time the outcome will occur if the random experiment is repeated a large number of times. The observed proportion of occurrence for the outcome of interest can be used as an estimate of the relevant probability.

##### Core Standards - Students can and do:

- a. Calculate experimental probabilities by performing simulations or experiments involving a probability model and using relative frequencies of outcomes.

- b. Compare the results of simulations (e.g., random number tables, random functions, and area models) with predicted probabilities. When there are substantial discrepancies between predicted and observed probabilities, explain them in terms of the assumptions of the probability model.
- c. Use the relationship between conditional probabilities and relative frequencies in contingency tables to analyze decision problems.
- d. Use the mean and standard deviation of a data set to fit it to a normal distribution (bell-shaped curve) and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets and tables to estimate areas under the normal curve.
- e. Apply the binomial theorem to solve probability problems.

### Using probability to make decisions

#### Core Standards - Students understand that:

1. A probability distribution is a collection of probabilities  $\{p_1, \dots, p_n\}$  for a set of mutually exclusive and jointly exhaustive events  $\{E_1, \dots, E_n\}$ . The probabilities in a probability distribution sum to unity.
2. A random variable attaches a value to each event in a probability distribution. The expected value of the random variable is the weighted average of its possible values, with weights given by their respective probabilities.
3. When the possible outcomes of a decision can be assigned probabilities and payoff values, the decision can be analyzed as a random variable with an expected value, e.g. of a wager. If possible, this is the first thing to compute in a decision context.

#### Core Standards - Students can and do:

- a. Calculate expected value to analyze mathematical fairness, payoff.
- b. Evaluate and compare options in situations where all of the available options share the same expected value but carry different levels of risk.
- c. Analyze each of two options and make a quantitatively informed decision in situations where one option has both a higher expected return and a higher level of risk. Include both low-stakes and high-stakes decisions.
- d. Analyze decision problems using probability concepts.

## Mathematics: High School—Geometry

### A Coherent Understanding of Geometry.

[Final draft of CCR narrative goes here.]

#### Triangle Congruence

##### Core Standards - Students understand that:

1. Rigid motions move lines to lines and segments to segments; preserve the distance between points; and preserve measures of angles.
2. Two geometric figures are congruent if there is a sequence of rigid motions that carries one onto the other. This is the principle of superposition.
3. Criteria for triangle congruence can be thought of as answers to the following question: What information about the measures in a triangle ensures that all triangles drawn with those measures are congruent?
4. Criteria for triangle congruence can be established using rigid motions.

##### Core Standards - Students can and do:

- a. Use (in reasoning and problem solving) precise definitions of angles, polygons, parallel and perpendicular lines, rigid motions (rotations, reflections, translations), parallelograms and rectangles; commit these definitions to memory.
- b. Prove theorems about lines and angles; test conjectures and identify logical errors in fallacious proofs.  
  
Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; measures of supplementary angles sum to  $180^\circ$ ; two lines parallel to a third are parallel to each other; points on a perpendicular bisector of a segment are exactly those equidistant from the segment's endpoints.
- c. Prove theorems about triangles; test conjectures and identify logical errors in fallacious proofs.  
  
Theorems include: measures of interior angles of a triangle sum to  $180^\circ$ , base angles of isosceles triangles are equal, the triangle inequality, the longest side of a triangle faces the largest angle and vice-versa, the exterior-angle inequality, and the segment joining midpoints of two sides of a triangle parallel to the third side and half the length.
- d. Use and prove properties of and relationships among special quadrilaterals: parallelogram, rectangle, rhombus, square, trapezoid and kite.
- e. Characterize parallelograms in terms of equality of opposite sides, in terms of equality of opposite angles, and in terms of bisection of diagonals; characterize rectangles as parallelograms with equal diagonals.

#### Similarity, Right Triangles and Trigonometry

##### Core Standards - Students understand that:

1. The dilation of a given line is parallel to the given line. (In particular, lines passing through the center remain unchanged.)
2. The dilation of a given segment is parallel to the given segment and longer or shorter in the ratio given by the scale factor. A dilation leaves a segment unchanged if and only if the scale factor is 1.
3. The assumed properties of dilations can be used to establish the AA, SAS and SSS criteria for similarity of triangles.
4. Similarity allows one to view side ratios in right triangles as properties of the angles themselves, leading to elementary definitions of sine, cosine and tangent.

### Core Standards · Students can and do:

- Use triangle similarity criteria to solve problems and to prove relationships in geometric figures.
- Prove that two lines with well-defined slopes are parallel if and only if they have the same slope, and perpendicular if and only if the product of their slopes is equal to  $-1$ .
- Give an informal explanation using successive approximation that a dilation of scale factor  $r$  changes the length of a curve by a factor of  $r$  and the area of a region by a factor of  $r^2$ .
- Use and explain the relationship between the trigonometric ratios of complementary angles.
- Use trigonometric ratios and the Pythagorean theorem to solve right triangles<sup>66</sup> in applied problems.

## Circles

### Core Standards · Students understand that:

- All circles are similar.
- There is a unique circle through three non-collinear points, or tangent to three non-concurrent lines.

### Core Standards · Students can and do:

- Identify and describe relationships among angles, radii, and chords.

Include the relationship between central, inscribed and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.

- Identify and define radius, diameter, chord, tangent, secant and circumference.
- Determine the arc lengths and the areas of sectors of circles, using proportions.
- Construct a tangent line from a point outside a given circle to the circle.
- Prove and use basic theorems about circles, and use these theorems to solve problems. Include:
  - Symmetries of a circle
  - Similarity of a circle to any other
  - Tangent line, perpendicularity to a radius
  - Inscribed angles in a circle, relationship to central angles, and equality of inscribed angles
  - Properties of chords, tangents and secants as an application of triangle similarity.

## Axiomatic Systems

### Core Standards · Students understand that:

- Mathematical statements are proven or disproven by deductive reasoning. Conjectures can arise from inductive reasoning, but they cannot be proven that way.
- Precise definitions make possible rigorous logical reasoning, and definitions shared in common make possible the objective evaluation of one's own reasoning by others.
- Logical reasoning requires avoiding common fallacies, such as using an example to prove the rule or confusing a statement with its converse.
- Axiomatic systems require precise definitions, but some terms must be left "undefined." The axioms specify how the undefined terms behave.
- The first three postulates of the *Elements* are models of straightedge and compass construction.
- Hilbert and other mathematicians improved on the *Elements* by identifying its hidden assumptions and making them explicit with additional axioms.

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<sup>66</sup> A right triangle has five parameters, its three lengths and two acute angles. Given a length and any other parameter, "solving a right triangle" means finding the remaining three parameters. (It is worth reflecting on why this problem is well-posed.)

7. Three classical construction problems (trisecting an angle, duplicating a cube and squaring a circle) inspired the development of much important mathematics.
8. The Parallel Postulate (axiom) distinguishes Euclidean geometry from other geometries. Other geometries, such as spherical and hyperbolic geometry, use alternatives to the Parallel Postulate. Many theorems of Euclidean geometry are not theorems in other geometries.

#### Core Standards - Students can and do:

- a. Use the terms point, line and plane to define other geometric terms as line segments, angles and rays.
- b. With ruler and compass:
  - Divide a segment into any number of equal parts.
  - Given two segments of lengths  $r$  and  $s$ , construct a segment of length  $rs$  and one of length  $r/s$ .
  - Given a segment of length  $r$ , construct a segment of length  $\sqrt{r}$ .

### Trigonometry of General Triangles

#### Core Standards - Students understand that:

1. The Law of Sines generalizes the side-angle inequality.
2. The Law of Cosines generalizes the Pythagorean theorem.
3. The Laws of Sines and Cosines embody the triangle congruence criteria, in that three pieces of information are usually sufficient to completely solve a triangle. Furthermore, these laws yield two possible solutions in the ambiguous case, illustrating that “Side-Side-Angle” is not a congruence criterion.

#### Core Standards - Students can and do:

- a. Explain proofs of the Law of Sines and the Law of Cosines.
- b. Use the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).

### Geometric Measurement and Dimension

#### Core Standards - Students understand that:

1. Congruence plays a fundamental role defining the concepts of length, area and volume.
2. Areas of polygons can be computed by dissecting them into triangles and using the fundamental property of area, that the area of a dissected figure is the sum of the areas of its components.
3. Lengths of curves and areas of curved regions can be defined informally using the concept of “limit.”
4. Cavalieri’s principle allows one to understand volume formulas informally by visualizing volumes as stacks of thin slices.

#### Core Standards - Students can and do:

- a. Give definitions of rectangular prism, (right) pyramid, (right circular) cone, (right circular) cylinder and sphere.
- b. For a pyramid or a cone, give an heuristic argument to show why its volume is  $(1/3)$  its height times the area of its base.
- c. Use the behavior of length and area under dilations to prove the formulas for the circumference and area of a circle.

- d. Apply formulas and solve problems involving volume and surface area of right prisms, right circular cylinders and right pyramids, cones, spheres and composite figures.
- e. Identify and apply the 3:2:1 relationship among volumes of circular cylinders, hemispheres and cones with same height and circular base and 3:1 relationship between volume of a prism and pyramid with same base area and height.
- f. Identify cross-sectional shapes of slices of three-dimensional objects, and identify three-dimensional objects traced out by rotations of two-dimensional objects.

## Mathematics: High School—Calculus

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Calculus is an important part of the high school curriculum for a large and growing number of students. To see well-established standards for this course, please see course descriptions such as those of the College Board, International Baccalaureate Organization, or any of the following states: California, Florida, Hawaii, Indiana, Mississippi, Pennsylvania, South Carolina, Tennessee, Utah, and Virginia. We invite feedback from states as to whether they would like to see Calculus in future drafts of the Common Core Standards.

## Progressions in Grades K–8

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Note, a progression may appear in more than one band.

### Grades K-5

#### Number

- Counting and Cardinality
- Base Ten Computation
- Early Relations and Operations
- Quantity and Measurement
- Operations and the Problems They Solve
- Fractions

#### Geometry

- Shapes
- Coordinates
- Geometry

#### Data

- Statistics

### Grades 6-8

#### Number

- The Number System

#### Algebra

- Ratios and Proportional Relationships
- Expressions and Equations
- Functions and the Situations They Model

#### Geometry

- Geometry

#### Data

- Statistics
- Probability

## List of Progressions and Grade Ranges

| Strand   | Progression                            | Start | End |
|----------|--|-------|-----|
| Number   | Counting and Cardinality               | K     | K   |
|          | Early Relations and Operations         | K     | 1   |
|          | Base Ten Computation                   | K     | 5   |
|          | Quantity and Measurement               | K     | 5   |
|          | Operations and the Problems They Solve | 2     | 4   |
|          | Fractions                              | 3     | 5   |
|          | Ratios and Proportional Relationships  | 6     | 7   |
|          | The Number System                      | 6     | 8   |
| Geometry | Shapes                                 | K     | 4   |
|          | Coordinate Geometry                    | 5     | 5   |
|          | Geometry                               | 6     | 8   |
| Algebra* | Expressions and Equations              | 6     | 7   |
|          | Functions & The Situations They Model  | 8     | 8   |
| Data*    | Statistics                             | 5     | 8   |
|          | Probability                            | 7     | 8   |

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\* The Algebra and Data strands have concepts and skills in earlier grades than progressions in the Number strand.

## GLOSSARY

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**Additive inverses.** Two numbers whose sum is 0 are additive inverses of one another. Example:  $\frac{3}{4}$  and  $-\frac{3}{4}$  are additive inverses of one another because  $\frac{3}{4} + (-\frac{3}{4}) = (-\frac{3}{4}) + \frac{3}{4} = 0$ .

**Algorithm.** A step by step routine that always gives some answer, rather than ever giving no answer; that always gives the right answer, and never gives a wrong answer; that can always be completed in a finite number of steps, rather than in an infinite number of steps; and that applies to all problems of a given type (e.g., adding any two multidigit whole numbers, or bisecting any angle). Cf. Wikipedia's "effective procedure," from which this definition is adapted.

**Common logarithm.** The common logarithm of  $x$  is the power to which you raise 10 in order to get  $x$ .

**Congruent.** Two plane or solid figures are congruent if one can be obtained from the other by a sequence of rigid motions (rotations, reflections, and translations).

**Dilation.** A transformation that moves each point along the ray through the point emanating from a fixed center, and multiplies distances from the center by a common scale factor.

**Integer.** A positive whole number, a negative whole number, or 0.

**Mean.** The sum of the values in a list divided by the number of values in the list. (To be more precise, this defines the *arithmetic mean*.)

**Median.** In a list of values, the value appearing at the center of a sorted version of the list—or the mean of the two central values, if the list contains an even number of values.

**Multiplicative inverses.** Two numbers whose product is 1 are multiplicative inverses of one another. Example:  $\frac{3}{4}$  and  $\frac{4}{3}$  are multiplicative inverses of one another because  $\frac{3}{4} \times \frac{4}{3} = \frac{4}{3} \times \frac{3}{4} = 1$ .

**Range.** The difference between the greatest and smallest values in a list of numbers.

**Rational number.** A number expressible in the form  $\frac{a}{b}$  for integers  $a$  and  $b \neq 0$ . The rational numbers include positive and negative integers, positive and negative fractions, and 0.

**Related fractions.** Two fractions are *related* if one denominator is a factor of the other. (See Ginsburg, Leinwand and Decker (2009), *Informing Grades 1-6 Mathematics Standards Development: What Can Be Learned from High-Performing Hong Kong, Korea, and Singapore?*, Table A1, p. A-5, grades 3 and 4.)

**Similarity transformation.** A rigid motion followed by a dilation.

**Single-place number.** The numbers that result when a whole number between 1 and 9 (inclusive) is multiplied by the numbers 10, 100, 1000, etc.

**Teen number.** A whole number that is greater than or equal to 11 and less than or equal to 19.

**Transitive property of measurement order.** If one object is bigger than a second, and the second object is bigger than a third object, then the first object is bigger than the third object.

# English Language Arts

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K-12



## Introduction

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The *Standards for English Language Arts K–12* are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of English language arts (ELA) standards. Its companion document, *Standards for Literacy in History and Science 6–12*, extends the same principle to communication skills in other content areas. The present work, led by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA), builds on the foundation laid by states in their decades-long work on crafting high-quality education standards. The *Standards* also draw upon the most important international models as well as research and input from numerous sources, including scholars, assessment developers, professional organizations, and educators from kindergarten through college. In their design and content, the *Standards* represent a synthesis of the best elements of standards-related work to date and an important advance over that previous work.

As specified by CCSSO and NGA, the *Standards* are (1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous, and (4) internationally benchmarked. A particular standard was to be included in the document only when the best available evidence indicated that its mastery was essential for students to be college and career ready in a twenty-first-century, globally competitive society. As new and better evidence emerges, the *Standards* will be revised accordingly.

The *Standards* are an extension of a prior initiative led by CCSSO and NGA to develop college and career readiness (CCR) standards in reading, writing, and speaking and listening as well as in mathematics. The CCR Reading, Writing, and Speaking and Listening Standards, released in draft form in September 2009, served as a touchstone for the present work. While the format, structure, content, and purpose of that earlier document differ in some ways from this document, the basic aims and concepts are clearly connected. The main difference is that while the earlier CCR document defined a goal toward which education efforts should aim—college and career readiness for all students—the current document describes the progressive development of skills and understandings across the grades necessary for all students to reach that goal. Just as feedback on the September 2009 CCR draft has greatly influenced the design and development of the K–12 standards, so too will the response to the K–12 standards help guide subsequent revisions to the CCR standards. In their final forms, both documents—CCR and K–12—will be tightly aligned and mutually supporting.

While the *Standards* treat college and career readiness for all students as the end point—an ambitious goal in its own right—many students will reach this point before the end of high school. For them, advanced work in literature, composition, language, history, science, and so on should be available. It is beyond the scope of the *Standards* to describe what such advanced work should consist of, but it needs to provide the next logical step up from the college and career readiness baseline established here.

As a natural outgrowth of meeting the charge to define college and career readiness, the *Standards* also lay out a vision of what it means to be a literate person in the twenty-first century. Indeed, the skills and understandings students must demonstrate have broad applicability outside of the classroom or workplace. The *Standards* insist upon the sort of close, attentive reading that is at the heart of understanding and appreciating the aesthetics of literature. They require the sort of critical reading that is necessary to sift carefully through the staggering amount of information available today in print and online. They demand the sort of wide, deep, and thoughtful engagement with high-quality literary and informational text that builds knowledge, enlarges experience, and broadens world views. They mandate the sort of cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic. In short, they promote the development of skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language.

## Key design considerations

### *A blend of cross-cutting and specific standards*

The Reading, Writing, and Speaking and Listening strands include two levels of standards. The cross-cutting Core Standards are the same across the two *Standards* documents, their commonality emphasizing the broad responsibility within the school for meeting the standards and also facilitating schoolwide professional development. Then there are specific Standards that are unique to a given content area, which respects the particular demands of reading, writing, speaking, and listening in ELA and in other disciplines.

### *A focus on results rather than means*

The *Standards* define what all students must learn, not everything that teachers are allowed to teach. By focusing on required achievements, the *Standards* leave room for teachers, curriculum developers, and states to determine how those goals should be reached and what additional topics should be addressed. The *Standards* require, for example, that all students be able to produce writing in a variety of situations, including those that allow time for revision. The *Standards* do not, however, specify a particular writing process that students must use (although certain elements common to process-writing approaches, particularly revision, are embedded in the requirements). Teachers are thus freed—and obligated—to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for those assignments that allow for multiple drafts. Similarly, the *Standards*, with their emphasis on observable outcomes, do not enumerate various metacognitive strategies that students may need to use to monitor and direct their thinking and learning.

### *Shared responsibility for literacy*

The *Standards for English Language Arts K–12* and the *Standards for Literacy in History and Science 6–12* together establish the requirement that instruction in reading, writing, speaking, listening, and language use be a shared responsibility. The *Standards* present reading instruction in K–5 as fully integrative, including a rich blend of narratives, drama, poetry, and informational text. ELA-specific instruction in grades 6 and above includes fiction, poetry, and drama but also a particular form of informational text: literary exposition and argument (e.g., speeches, essays, and historical documents with significant cultural importance and literary merit). Teachers in other content areas must use their unique disciplinary expertise to help students meet the particular challenges of reading, writing, speaking, listening, and language use in their respective field. Progress toward college and career readiness and building a rich knowledge base require that at least half of the reading students do must focus on history, science and related disciplines. This distributed approach honors the unique place of English language arts instruction in literacy development while ensuring that students have communication skills tailored to the demands of other disciplines. It also reflects the reality that students must communicate effectively in a wide range of disciplines, not just ELA.

### *Grade bands to describe growth, grades to focus instruction*

Evidence consulted in creating the *Standards* suggests that beyond the earliest grades, major developments in students' literacy skills typically occur across spans of grades rather than within individual grades. This document stays true to that evidence by organizing standards after grade 3 into multiyear bands (grades 4–5, 6–8, 9–10, and 11–CCR). At the same time, the work of educating students does proceed on a day-to-day, year-to-year basis. Any standards document must therefore provide guidance to educators on what each year's instruction and assessment should look like. To make the grade specific focuses for instruction clear, after the descriptions of the standards in each area of ELA, we provide a one page summary of the grade specific focuses for each grade from fourth grade onwards, including how the grade specific focus in each area relates to the grade band requirements. The *Standards* offer that focus through several grade-specific elements:

- Single-grade standards in many areas of kindergarten and grades 1, 2, and 3
- Text complexity expectations in Reading, beginning at grade 2
- Areas of focus in Writing, beginning at grade 4

- Areas of focus in the Conventions section of Language Development, beginning at grade 4

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### *Research and media skills integrated into the standards as a whole*

To be ready to meet the challenges of the twenty-first century, students need a mix of the communication skills that have served literate people for millennia and new competencies necessary in an information- and media-saturated world. To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, report on, and create a high volume and extensive range of print and nonprint texts in media forms old and new. Just as the need to research and to consume and produce media are embedded into every element of today's curriculum, so too are the associated skills and understandings embedded throughout the *Standards* rather than treated separately. Web links to sample media texts are included selectively among the reading text exemplars in Appendix B to reinforce the point that print and online materials can be used together instructionally to enhance students' understanding.

### *An integrated model of English language arts*

Although the *Standards* divide the English language arts into Reading, Writing, Speaking and Listening, and Language Development strands for conceptual purposes, the processes of communication are in theory and practice an undivided whole. As illustrated in the graphic that introduces each grade or grade band and as embodied in the content of the standards themselves, reading, writing, speaking, listening, and language development are tightly interrelated and often reciprocal.

## Central features of the document

### *Reading and Literature: Text complexity and the growth of comprehension*

As students advance through the grades, they must be able to handle independently texts of steadily increasing complexity and be able to gain more from what they read. Beginning formally at grade 2, the *Standards* specify what proportion of texts students read should be within grade band and, at some grades, above grade band. (Additional material in Appendix A of the *Standards* defines and explains text complexity in more detail.) Whatever texts they are reading, students must also show a steadily increasing ability to discern more from and make fuller use of text. This means, for example, finding and making an increasing number of connections among ideas and between texts; considering a wider range of textual evidence; and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. The *Standards* place growing demands on students' comprehension at each higher grade or grade band to ensure that all students are college- and career-ready readers no later than the end of high school.

### *Writing and Research: Text types, grade-level focuses, and research*

While some writing skills, such as the ability to reflect audience, purpose, and task in what one writes, are important for many types of writing, others are more properly part of writing in specific text types: narrative, informative and explanatory text, and argument. Beginning at grade 4, the *Standards* specify the sorts of writing over extended and shorter timeframes that students in each grade must be able to produce in response to sources. Although conducting research calls upon reading, speaking, listening, and language skills, writing is typically central to analyzing information and presenting findings. The *Standards* pair writing and research to signal that close connection.

### *Speaking and Listening: Flexible communication*

Including but not limited to skills necessary for formal presentations, the Speaking and Listening strand requires students to develop a range of broadly useful oral communication and interpersonal skills: listening attentively, participating productively, exchanging information, and speaking effectively. Students must learn to sift through and evaluate multiple points of view; listen thoughtfully in order to build on and constructively question the ideas of others while contributing their own ideas; and, where appropriate, reach agreement and common goals through teamwork.

### *Language Development: Conventions and vocabulary*

The Conventions standards in the Language Development strand include the essential “rules” of formal written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. Thus, standards pertaining to grammar and usage, mechanics, and the fundamentals of language and writing are accompanied by standards on word choice and style. The Vocabulary standards focus both on understanding words and their nuances and on acquiring new words through conversation and reading and by being taught them directly. Rather than require that students use one particular skill or another to determine a word’s meaning, the Vocabulary standards insist only that students get the proper meaning, with the means (context, word analysis, and so on) to be chosen flexibly based on the situation.

### *Appendices*

The *Standards* include a range of supporting materials that help explain and enrich the main document:

- Appendix A contains a model of text complexity, including both qualitative and quantitative measures of how easy or hard a text is to read, as well as supplementary statements about instruction in writing, language conventions, and vocabulary
- Appendix B consists of text exemplars at all grades/bands to illustrate appropriate complexity and quality in the text types required by the Reading standards
- Appendix C consists of annotated writing samples to show how grade- or grade-band-appropriate writing embodies the relevant Writing standards

*January 2010*

## Student Practices in Reading, Writing, Speaking, Listening, and Language Use

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The following Student Practices in reading, writing, speaking, listening, and language use undergird and help unify the rest of the *Standards*. The Student Practices are not themselves standards: every idea introduced here is subsequently represented in one or more places within the larger document. They are, rather, the “premises”—broad statements about the nature of college and career readiness in reading, writing, speaking, listening, and language use—that underlie the individual standards and cut across the various sections of the document.

\* \* \*

As students progress toward being college and career ready, they exhibit with increasing fullness and regularity the following capacities in their reading, writing, speaking, listening, and language use:

### **1. They demonstrate independence as readers, writers, speakers, listeners, and language users.**

Students can, without significant scaffolding or support, comprehend and evaluate complex text across a range of types and disciplines, and they can construct effective arguments and clearly convey intricate or multifaceted information. Likewise, students are independently able to discern a speaker’s key points as well as ask questions, build on others’ ideas, and articulate their own ideas. They apply language conventions without prompting. On their own, they determine the meaning of words in context and acquire and use new words.

### **2. They build strong content knowledge.**

Students build a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They demonstrate their ability to become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and the discipline-specific expertise needed to comprehend subject matter and solve problems in different fields. They refine their knowledge and share it through substantive writing and speaking.

### **3. They respond to the varying demands of audience, task, purpose, and discipline.**

Students consider their reading, writing, speaking, listening, and language use in relation to the contextual factors of audience, task, purpose, and discipline. They appreciate nuances, such as how the composition and familiarity of the audience should affect tone and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in the sciences).

### **4. They comprehend as well as critique.**

Students are engaged and open-minded—but skeptical—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author’s or speaker’s assumptions and assess the veracity of claims.

### **5. They privilege evidence.**

Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others’ use of evidence.

## **6. They care about precision.**

Students are mindful of the impact of specific words and details, and they consider what would be achieved by different choices. Students pay especially close attention when precision matters most, such as in the case of reviewing significant data, making important distinctions, or analyzing a key moment in the action of a play or novel.

## **7. They craft and look for structure.**

Students attend to structure when organizing their own writing and speaking as well as when seeking to understand the work of others. They understand and make use of the ways of presenting information typical of different disciplines. They observe, for example, how authors of literary works craft the structure to unfold events and depict the setting.

## **8. They use technology strategically and capably.**

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

## **9. They come to understand other perspectives and cultures.**

Students appreciate that the twenty-first-century classroom and workplace are diverse settings in which people from often widely divergent backgrounds must learn and work together. They actively seek to understand other perspectives and cultures through reading and listening. They do not simply adopt other points of view as their own but rather evaluate them critically and constructively. Literature can play a special role in expanding students' horizons in this way: through reading great classic and contemporary works, students can vicariously inhabit worlds and experiences much different than their own.

## English Language Learners

The *Standards* articulate rigorous grade-level expectations in the areas of speaking, listening, reading and writing to prepare students to be college and career ready. English language learners (ELLs) must be held to the same high standards expected of students who are already proficient in English. However, because these students are acquiring English language proficiency and content area knowledge concurrently, some students will require additional time and all will require appropriate instructional support and aligned assessments.

ELLs are a heterogeneous group with differences in ethnic background, first language, socio-economic status, quality of prior schooling, and levels of English language proficiency. Effectively educating these students requires adjusting instruction and assessment in ways that consider these factors. For example ELLs who are literate in a first language that shares cognates with English can apply first-language vocabulary knowledge when reading in English; likewise ELLs with high levels of schooling can bring to bear conceptual knowledge developed in their first language when reading in a second language. On the other hand, ELLs with limited or interrupted schooling will need to acquire background knowledge prerequisite to educational tasks at hand. As they become acculturated to US schools, ELLs who are newcomers will need sufficiently scaffolded instruction and assessments to make sense of content delivered in a second language and display this content knowledge.

While some ELLs are economically and educationally advantaged, this is not the case for many of these students. Moreover, once in the U.S., the majority of ELLs attend high poverty schools with high percentages of other ELLs. These schools often lack the resources and capacity needed to help ELLs reach high academic standards. However, schools and districts can be assisted in providing a positive learning environment that capitalizes on the linguistic and cultural diversity of the student body.

To help ELLs meet high academic standards in reading, writing, speaking, listening and language use it is essential that ELLs have access to:

- The requisite coursework to prepare them for post-secondary education or the workplace;
- Coursework that is made comprehensible for students learning content in a second language, through specific pedagogical techniques and additional resources;
- Teachers, as well as school-level and district personnel, who are well prepared and qualified to support English-language learners;
- Well designed opportunities for classroom discourse and interaction to enable ELLs to develop communicative strengths in language arts
- Speakers of English who know the language well enough to provide the ELLs with models and support; and
- Ongoing assessment and feedback to guide learning.

It is also worth noting that instruction for these students is additionally guided by language proficiency standards that language arts teachers can use in conjunction with the English language arts standards to help ELLs become fully proficient and literate in English.

## Access for Students with Disabilities

The *Standards* articulate rigorous expectations in the areas of reading, writing, speaking, listening, and language use in order to prepare students to be college and career ready. These standards identify the knowledge and skills students must acquire in order to be successful. Research shows that students with disabilities are capable of high levels of learning and should not be limited by low expectations and watered down curriculum. The vast majority of this population of students, including students with intellectual impairments,<sup>1</sup> *can* achieve proficiency when they receive high-level instruction and accommodations. It is imperative that these highly capable students—regardless of their disability—are held to the same expectations articulated in the Core Standards as other students.

However, *how* these high standards are taught is of the utmost importance in reaching students with special needs. When acquiring the knowledge and skills represented in the Core Standards, students with disabilities may need accommodations<sup>2</sup> or—in exceptional cases—modified goals, incorporated in an individualized education program (IEP),<sup>3</sup> to help them access information or demonstrate their knowledge. In instances when a standard asks students to perform actions they are physically incapable of, students will need to be presented with alternative options to demonstrate similar knowledge and skills within the range of their abilities. Accommodations based on individual needs allow students of all disability levels to learn within the framework of the *Standards*.

### Meeting English Language Arts (ELA) Standards

Reading, writing, speaking, listening, and language use standards—given the nature of the standards themselves—often require accommodations for students with disabilities. For example, a standard that calls for “listening” should be interpreted to include reading sign language. “Speaking” should be read broadly to include “communication” or “self-expression.” “Reading” should allow for students’ use of Braille, screen reader technology, or other assistive devices to demonstrate comprehension skills. In a similar vein, “writing” should not preclude the use of a scribe, computer, or speech-to-text technology. With appropriate accommodations and support, students with all levels of disabilities can participate in the general education curriculum and achieve grade-level proficiency with regard to the ELA content and skills articulated in the *Standards*.

In short, while the *Standards* set and retain high expectations for all students, they may need to be translated and occasionally modified to apply appropriately to students with disabilities, including all levels of intellectual impairment. Promoting a culture of high expectations for all students is a fundamental goal of the *Standards*. Achieving this goal requires the inclusion of students with disabilities.

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<sup>1</sup> Less than two percent of the population of all students and less than 20% of the population of students with disabilities.

<sup>2</sup> See the Council of Chief State School Officers, (2003). *Training District and State Personnel on Accommodations: A Study of State Practices, Challenges, and Resources* at <http://www.ccsso.org/publications/details.cfm?PublicationID=221> for further explanation and evidence around accommodations.

<sup>3</sup> According to the Individuals with Disabilities Act (IDEA), an IEP includes appropriate accommodations that are necessary to measure the individual achievement and functional performance of a child.

# How to Read This Document

The *Standards* are divided into an ELA-specific document (*Standards for English Language Arts K–12*) and a literacy document for history and science (*Standards for Literacy in History and Science 6–12*). The ELA document includes standards for and examples of history and science reading in K–5.

The ELA-specific document is organized by grade (kindergarten and grades 1, 2, and 3) and grade band (grades 4–5, 6–8, 9–10, and 11–CCR). The *Standards for Literacy in History and Science* are organized by grade band (grades 4–5, 6–8, 9–10, and 11–CCR). Each grade/band is divided into strands—Reading, Writing, Speaking and Listening, and Language Development.

While all strands contain standards statements, each strand also has its own specific features.

## Reading and Literature (ELA)/Reading (History/Science)

Kindergarten and grade 1 begin with the **mix of key text types (A)**, which identifies the genres and subgenres of reading material appropriate for each grade. This is followed by a list of **illustrative texts (B)** in the key text types. This list is suggestive of the sorts of texts appropriate for the grade in terms of complexity and quality; excerpts appear in Appendix B.

**Mix of Key Text Types for Grade 1**

| Narratives  | Drama   | Informational   |
|---|---|---|
| In this text, students identify characters, events, descriptions, settings, events, feelings, reactions, actions, and work. | In this text, students study dialogue and stage directions. | In this text, students identify the subject of the text, main ideas, and details. |

**Illustrative Texts for Narratives, Drama, and Poetry**

*From Apples and Honey by Dr. Seuss (1958)*  
*Ang and Fred Together by Arnold Lobel (1977)*  
*Willy and Wonka: The Five Kids of Their Adventure by Charles Whittle, Illustrated by Mike Stewison (1982)*  
"Hallowe'en" by S. A. Mitchell (1931)  
"He Fell in the Sky" by Eric Auerbach (1966)  
Read Aloud:

**Illustrative Informational Text**

*I Was a Slave by Chris Riddell, Illustrated by Nancy Spector (2004) (NGSS) (Lex: 2002)*  
*What Do You Do with a Tail Like This? by Steve Jenkins & Robin Page (2007)*  
"Map Shows Earth's 14 Countries" Geographic Young Explorer, April 2004 (1004)  
Read Aloud:  
*Follow the Water from Beach to Ocean by Arthur Elgort*

Grades 2, 3, 4–5, 6–8, 9–10, and 11–CCR include this information immediately after a graphic specifying **required text complexity by grade (C)**—in brief, the proportion of texts within and above grade band that students must read each year. (For example, 70% of the texts that grade 3 students read should

come from the grades 2–3 text complexity band, while the other 30% should come from the grades 4–5 band.) An overview of the method for **determining text complexity (D)** in the particular grade band follows. (A fuller treatment is provided in Appendix A.)

**Required Text Complexity by Grade**

Grades 4–5, 6–8, 9–10, and 11–CCR

**Determining Text Complexity for Grades 4–5**

It is essential to use a particular and consistent method for measuring text complexity across all grades. The method for measuring text complexity is based on a number of factors, including the text's length, the text's content, and the text's structure. The method for measuring text complexity is based on a number of factors, including the text's length, the text's content, and the text's structure.

All grades/bands organize standards under a number of boxed subheadings (e.g., "Grasping specific details and key ideas"). The standards at all grade levels are divided into cross-cutting **Core Standards (E)**, which are numbered and applicable to many types of reading, and more specific **Standards (F)**, which are lettered and organized by text type (e.g.,

**Reading and Literature Standards**

**Grasping specific details and key ideas**

**Core Standards – Students**

1. Reread what the text says explicitly in order to locate and support those ideas that support them.
2. Identify the main ideas and supporting details that support them.
3. Describe in detail a specific idea or event that occurs in the text.

**Standards – Students can and do (by key text type):**

**Narratives, Drama, and Poetry**

- a. ask and answer clarifying questions (e.g., how, why, and what) concerning specific details or events in order to analyze how specific details, sentences, or paragraphs in a text work together to develop a particular theme, topic, or issue, and to analyze how specific characters, events, or issues in a text are related to one another.

**Informational Text**

- a. accurately restate the key information presented by the text.
- b. ask and answer clarifying questions (e.g., how, why, and what) concerning specific details or events in order to analyze how specific details, sentences, or paragraphs in a text work together to develop a particular theme, topic, or issue, and to analyze how specific characters, events, or issues in a text are related to one another.
- c. explain the topic and main points in a text, analyzing how specific details, sentences, or paragraphs in a text work together to develop a particular theme, topic, or issue, and to analyze how specific characters, events, or issues in a text are related to one another.
- d. identify specific events in historical or scientific texts and discuss when, how, and why they happened, according to data taken from the text.

**Reading Foundations**

**Phonics and Word Recognition**

- a. read and understand words and phrases.
- b. know the common spelling patterns for consonants (e.g., -ck, -tch, -dge, -ph, -ff, -ss, -sh, -ch, -ge, -qu, -ck, -tch, -dge, -ph, -ff, -ss, -sh, -ch, -ge, -qu).
- c. know the common spelling patterns for vowels (e.g., -ea, -ee, -ie, -oa, -oo, -ou, -ow, -oy, -oi, -oi, -oi).
- d. use knowledge of phonics and spelling conventions to correct regularly used words (e.g., work, sight, stop, job, long).

"Narratives, Drama, and Poetry"). Kindergarten and grades 1, 2, and 3 also include boxed sections of **reading foundations (G)**, which enumerate basic concepts of print and other foundational skills in reading that very young students must acquire.

### Writing and Research

Cross-cutting **Core Standards (H)**, which are numbered and apply to many types of writing, are organized under a number of boxed subheadings (e.g., “Writing to reflect audience, purpose, and task”). **Standards (I)** specific to writing in particular text types—narrative, informative and explanatory text, and argument—are lettered and follow in a separate section. In kindergarten through grade 5, writing arguments takes the form of opinion writing, hence the parenthetical notation next to “Arguments” in those grades/bands.

### Speaking and Listening

Cross-cutting **Core Standards**, which are numbered and apply to speaking and listening in many situations, are grouped with lettered **Standards**, which set requirements for speaking and listening in key communication (e.g., “Presentation of Ideas and Information”).

### Language Development

This strand is organized differently in the ELA and history/science documents. The ELA strand comprises two full sections: Conventions and Vocabulary. Each section includes numbered **Core Standards** organized under a number of boxed subheadings (e.g., “Mechanics”) and introduced by a brief summative paragraph and list of **key terms (J)** intended to be taught explicitly in grade-appropriate ways. ELA Vocabulary consists of three subsections—determining the meaning of words, understanding the nuances of words, and acquiring vocabulary—under each of which numbered **Core Standards** appear. Language Development in the history/science document consists of the summative paragraphs for Conventions and all of the Vocabulary section found in ELA except for nuances in word meaning.

**Writing and Research Standards**

**Writing to reflect audience, purpose, and task**

**Core Standards – Students can and do:**

- Write narratives, informative and explanatory texts, and arguments that demonstrate an awareness of audience that are familiar and known to the student.

**Conducting research**

**Core Standards – Students can and do:**

- Prepare short, focused **H** to build knowledge by exploring aspects of a single issue.
- Gather information from **H** skill as print and digital resources.
- Determine the accuracy **H** the information gathered to answer specific questions.
- Restate information in **H** in one’s own words, through summaries or paraphrase.
- Provide basic bibliographic information for print and digital sources.

**Revising writing**

**Core Standards – Students can and do:**

- With guidance and support from peers and adults, strengthen writing through revision, editing, or beginning again to maintain a clear focus throughout.

**Using tools and technology**

**Core Standards – Students can and do:**

- Use technology and other tools to produce, revise, and edit writing.

**Developing proficiency in a range of writing**

- Create a variety of extended and on-demand writing products to demonstrate proficiency in a range of writing.<sup>14</sup>

**Standards – Students can and do (by key text type):**

**Narratives**

- orient the reader **I** by introducing characters, setting, and location, or by hooking the reader into the storyline.
- create an engaging **I** with events or incidents that are logically or causally sequenced.
- in producing a story **I** with an incident, event, description, action, a dilemma, and a resolution.
- use a variety of **I** **I** and diverse temporal sequence.
- use vivid and sensory details to describe narrative elements.

<sup>14</sup> See Appendix B for samples of student writing that illustrate the level of quality required to meet the writing standards.

**Language Development Standards**

**Conventions**

In grades 4–5, students heighten their ability to situate and describe using language that is increasingly precise and vivid. They form and use verbs of various tenses to locate people, actions, and events in time, and they correctly use adjectives and adverbs to modify. Students begin to gain control of frequently confused words (e.g., affect, effect) and edit writing to remove language that is not idiomatic. Their mastery of capitalization is complete. They use punctuation to separate items in a set of the sentence. Students mark titles in **J** **J** to distinguish an introductory element from the main part of the sentence. They understand how to quote and use quotation marks. Their spelling is conventional. They use increasingly topic-specific, precise, and varied, and they manipulate sentence structures for effect.

**Key Terms:** adjective, adverb, interjection, preposition, simple, progressive, and perfect tense.

**Conventions of language and writing**

**Core Standards – Students can and do:**

- Maintain the focus of a paragraph on a topic through structural elements such as main ideas, supporting sentences, and transitions.

**Grammar and usage**

**Core Standards – Students can and do:**

- Form and use the simple (e.g., I walked, I walk, I will walk), progressive (e.g., I was walking, I am walking, I will be walking) and the perfect (e.g., I had walked, I have walked, I will have walked) verb tenses.

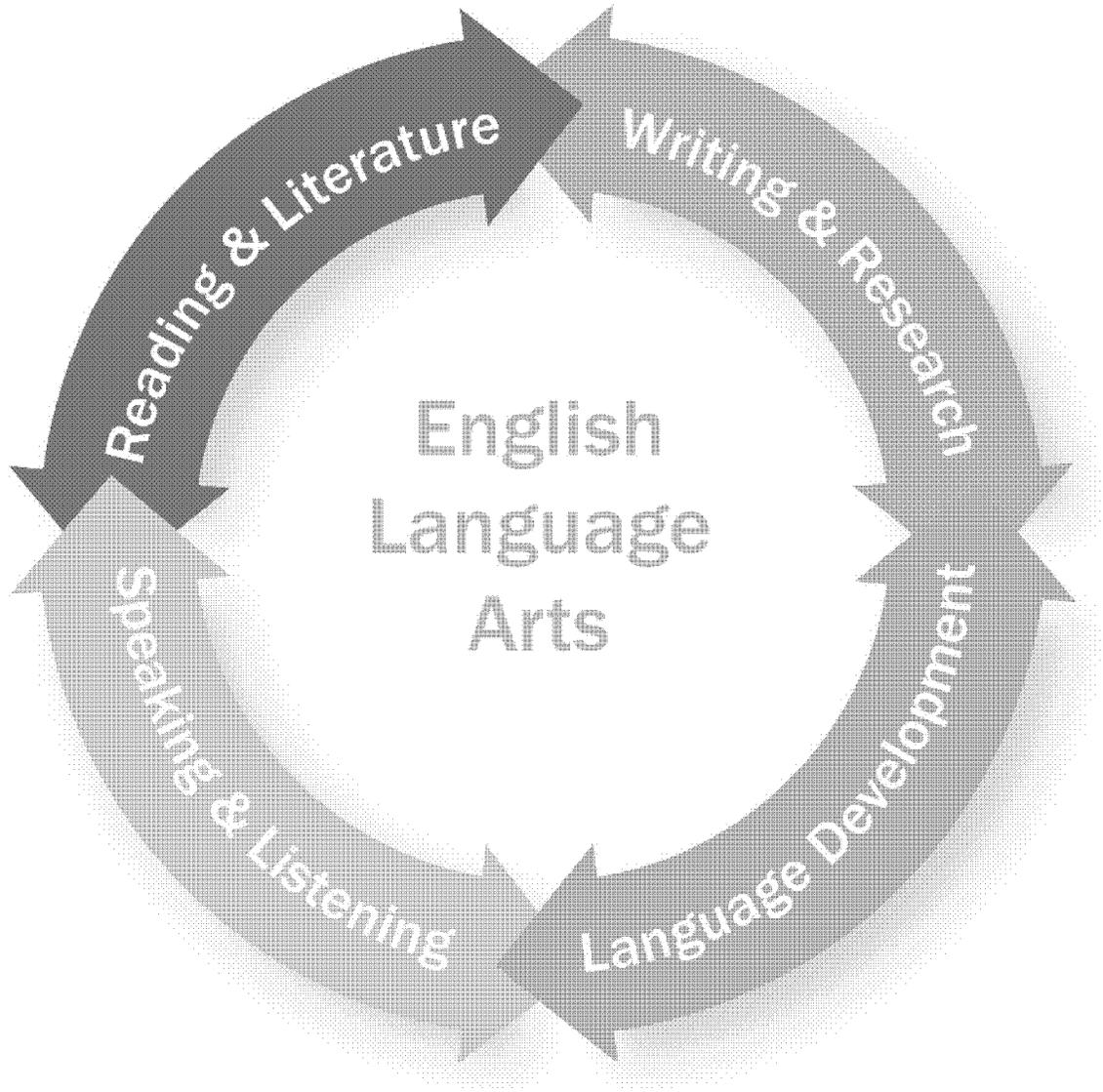
### Focus for Instruction

Beginning with grade 4, a page summarizing grade-level responsibility, including grade-specific areas of focus, is provided to help distinguish responsibilities within multiyear bands.

# English Language Arts

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## Kindergarten



### Mix of Key Text Types for Kindergarten

| Narratives  | Drama   | Poetry   | Informational Text  |
|---|---|--|---|
| <i>At this level, includes children’s adventure stories, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth.</i> | <i>At this level, includes staged dialogue and brief familiar scenes.</i> | <i>At this level, includes nursery rhymes and the subgenres of narrative poems, limericks, and free verse.</i> | <i>At this level, includes books about science, history, and the arts and other nonfiction materials.</i> |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>4</sup>

*Are You My Mother?* by P.D. Eastman (1960)

*Put Me in the Zoo* by Robert Lopshire (1960)

“Mix a Pancake” by Christina Rossetti (1986)

“Wouldn’t You?” by John Ciardi (1986)

#### Illustrative Informational Texts

*My Five Senses* by Alike (1962)

Read Alouds:

*Amazing Whales!* by Sarah L. Thomson (2005)

*The Year at Maple Hill Farm* by Alice and Martin Provensen (1978)

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<sup>4</sup> See Appendix B for other texts illustrative of Kindergarten-Grade 1 text complexity. This list includes read-alouds.

## Reading and Literature Standards<sup>5</sup>

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Retell key details and information drawn from the text.
2. Explain the subject of the text or the problem the characters face.
3. Answer questions about characters and events that take place in the text.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. retell the beginnings, middles, and endings of stories
- b. ask and answer questions about details of a text
- c. identify the problems that characters face in a story and the lessons learned
- d. identify the feelings of characters and the reasons for their actions
- e. differentiate between realistic and fantastical elements within a story

##### Informational Text

- a. restate key information (e.g., events, subject, ideas) from a text
- b. ask and answer questions about details of a text

## Reading Foundations

### Print Concepts

1. Students demonstrate understanding of the organization and basic features of print.
  - a. identify basic features and conventions of books and other written texts (e.g., front cover, back cover, title, author)
  - b. understand that print is left to right, top to bottom, and page by page
  - c. understand that words are separated by spaces in print
  - d. recognize and name all upper- and lowercase letters of the alphabet

### Linguistic Awareness

2. Students gain awareness of spoken words, syllables, and phonemes.
  - a. recognize, recite, and produce rhyming words
  - b. count, pronounce, blend, and segment syllables in spoken words
  - c. recognize, blend, and segment onset and rimes of spoken words [ /g/ - /oat/; /bl/ - /ock/ ]
  - d. count or place tokens for individual words in spoken phrases or simple sentences
  - e. orally blend and segment individual phonemes in simple, one-syllable words
  - f. demonstrate phonemic awareness by isolating and pronouncing the initial and final phonemes (sounds) in three-phoneme /CVC/ words without consonant blends (e.g., /road/, /save/, /ham/)
  - g. add or substitute individual phonemes in simple, one-syllable words to make new words (e.g., /at/ → /sat/ → /mat/ → /map/ )

<sup>5</sup> The expectation is that students can fulfill these standards with texts they read independently as well as texts that are read aloud to them.

## Observing craft and structure

### Core Standards — Students can and do:

4. Identify the meanings of words and phrases as they are used in the text.
5. Identify important parts or sections of texts.
6. Compare and contrast characters or events from different stories.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. identify words and phrases that suggest feelings or appeal to the senses
- b. identify similarities in beginning and ending sounds of words in children's poems and songs
- c. identify parts of a story and parts of a poem as well as sections of informational picture books and tell how they are different
- d. identify common characteristics of folktales and fairy tales, including their use of rhyme, rhythm, and repetition
- e. participate (e.g., react, speculate, read along, act out) when familiar texts are read aloud
- f. compare and contrast characters or events from different stories written by the same author or written about similar subjects

#### Informational Text

- a. identify basic text features and what they mean, including titles and subtitles, table of contents, and chapters

## Reading Foundations, continued

### Phonics and Word Recognition

3. Students know and apply grade-level phonics and word analysis skills in decoding words.
  - a. demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant
  - b. identify which letters represent the five major vowels and know the long and short sound of each
  - c. blend letter-sounds to decode short-vowel CVC words (e.g., *cat*, *mop*, *sun*)
  - d. read at least 25 very high frequency words by sight (e.g., *of*, *to*, *he*, *she*, *is*, *do*, *does*)

### Developing Fluency

4. Students read with sufficient accuracy and fluency to support comprehension.
  - a. read rebus and preprimer texts with purpose and understanding
  - b. demonstrate increased accuracy and fluency on successive readings of a text

## Integrating information and evaluating evidence

### Core Standards — Students can and do:

7. Use text illustrations to predict or confirm what the text is about.
8. Identify words in a text that link ideas and events together.
9. Identify who is telling a story or providing information in the text.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. use pictures, illustrations, and context to make predictions about and confirm story content
- b. identify words in a story that link events together (e.g., *first/second, then, next, before/after, later, finally*)
- c. identify who is the speaker in a story or poem

#### Informational Text

- a. identify words that link ideas together (e.g., *also, in addition, for example, but*)
- b. identify the author and sources of information when provided by the text

## Developing habits for reading text

### Core Standards — Students can and do:

10. Begin to read independently and/or with a partner, sustaining effort necessary to build understanding.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and opinions that communicate to a familiar, known audience.

### Conducting research

#### Core Standards — Students can and do:

2. Gather information from experiences or provided text sources.

### Revising writing

#### Core Standards — Students can and do:

3. With specific guidance, add details to strengthen writing through revision.

## Using tools and technology

### Core Standards — Students can and do:

4. Gain familiarity with technology and other tools to produce, revise, and edit writing.

### Standards — Students can and do (by key text type):<sup>6</sup>

#### Narratives

- establish a situation in time and/or place
- recount several loosely linked actions in a short, familiar event, controlling for chronological order
- provide a reaction to what happened

#### Informative and Explanatory Texts

- establish the topic in a title or first sentence
- supply facts and information relevant to the topic

#### Arguments (opinions)

- introduce the topic directly, or use the title of a book when writing about a text
- express preferences or opinions (e.g., *My favorite book is . . .*) relevant to the topic
- provide a reason for preference or opinion (e.g., *It reminded me of when I met my friend Carlos*)
- use linking words that express causality (e.g., *I like . . . because . . .*)

## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively in group activities requiring speaking and listening.
2. Listen closely to and sustain attention on texts read aloud as well as other sources of information presented orally, visually, or multi-modally and confirm understanding by restating the information and answering pertinent questions.

#### Standards — Students can and do (by key communication type):

##### Classroom discussions and participating productively

- initiate and participate in conversations with peers and adults through multiple exchanges, attending to the comments of others
- confirm understanding by restating information or answering questions about what has been discussed
- ask questions to get information, ask for help, or clarify something that is not understood
- follow norms for conversation, such as listening to others and taking turns to speak

### Exchanging information and speaking effectively

#### Core Standards — Students can and do:

<sup>6</sup> See Appendix D for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

3. Share experiences and ideas that demonstrate an awareness of their listeners.
4. Speak audibly and clearly.

### **Standards — Students can and do (by key communication type):**

Presentation of ideas and information

- a. describe people, places, things, and events with relevant facts and examples
- b. recite or read aloud poems, rhymes, songs, and stories, speaking clearly at an understandable pace

## **Language Development Standards**

### **Conventions**

In kindergarten, students learn to form letters and words in print and to relate sounds (phonemes) to one or more letters. They understand the notion of a sentence, that a sentence performs one of a few basic functions (make a statement, ask a question, or issue a command), and that end punctuation can signal the sentence's function or intensity. With prompting and assistance, they form and expand basic sentences in order to express thoughts, beginning the sentence with a capital letter. Students have a sense of what a noun is, of what singular and plural nouns are, and of how plural nouns are often formed. They also know how to use the most frequently occurring prepositions.

Key Terms: exclamation point, capital/uppercase and lowercase letter, singular and plural noun, period, punctuation, question mark, sentence

#### **Conventions of language and writing**

##### **Core Standards — Students can and do:**

1. Print all upper- and lowercase letters.
2. Write a letter or letters for each consonant and short-vowel sound (phoneme).

#### **Grammar and usage**

##### **Core Standards — Students can and do:**

3. Produce and expand complete sentences in shared writing and language activities.
4. Use and understand question words (e.g., *what, where, when, who, which, how*).
5. Form regular plural nouns by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes; baby, babies*).
6. Demonstrate understanding of the most frequently occurring prepositions (e.g., *to/from, in/out, on/off, for, of, by, with*).

#### **Mechanics**

##### **Core Standards — Students can and do:**

7. Capitalize the first word in a sentence and the pronoun *I*.
8. Identify end punctuation, including periods, question marks, and exclamation points.

9. Spell simple words phonetically using knowledge of sound-letter relationships.

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In kindergarten, students learn about words in terms of like versus unlike and “similar but not quite the same,” using objects and movements as aids. They learn to use descriptive language to distinguish one object from another and order and position words to describe sequences and spatial relationships. They acquire new words through interactive language use, including informal talk, discussion, listening to and responding to texts read aloud as well as by being taught the words directly.

### Determining the meaning of words

#### Core Standards — Students can and do:

1. Sort common objects into categories (e.g., shapes, foods).

### Understanding the nuances of words (denotations and connotations)

#### Core Standards — Students can and do:

2. Act out the meaning of verbs describing the same general action (e.g., *walk, march, strut, prance*) to gain a sense of their different meanings.
3. Demonstrate understanding of common adjectives by relating them to their opposites (antonyms).
4. Use common adjectives to distinguish objects (e.g., the *small blue* square, the *shy white* rabbit).

### Acquiring vocabulary

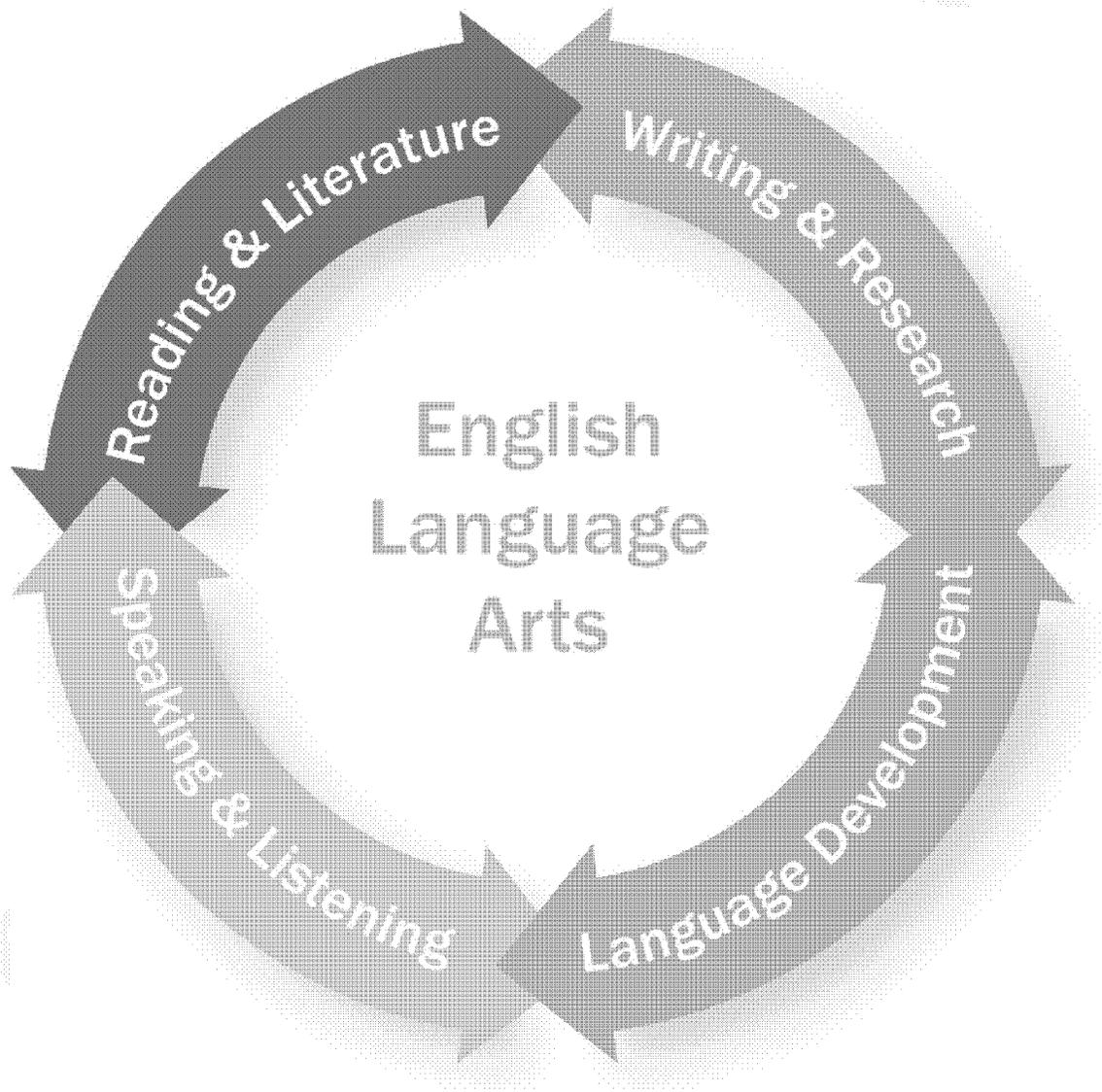
#### Core Standards — Students can and do:

5. Demonstrate meaning of new vocabulary taught directly and gained through conversations and hearing texts read aloud.
6. Demonstrate understanding of words that express order and position (e.g., *first, middle, last; before, after; under, over*).

# English Language Arts

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## Grade 1



### Mix of Key Text Types for Grade 1

| Narratives  | Drama  | Poetry   | Informational Text  |
|---|--|--|---|
| <i>At this level, includes children’s adventure stories, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth.</i> | <i>At this level, includes staged dialogue and brief, familiar scenes.</i> | <i>At this level, includes nursery rhymes and the subgenres of narrative poems, limericks, and free verse.</i> | <i>At this level, includes books about science, history, and the arts and other nonfiction materials.</i> |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>7</sup>

- Green Eggs and Ham* by Dr. Seuss (1960)
- Frog and Toad Together* by Arnold Lobel (1971)
- Henry and Mudge: The First Book of Their Adventures* by Cynthia Rylant, illustrated by Suçie Stevenson (1987)
- “Halfway Down” by A. A. Milne (1924)
- “It Fell in the City” by Eve Merriam (1986)
- Read alouds:
- Little House in the Big Woods* by Laura Ingalls Wilder, illustrated by Garth Williams (1932)
- Zin! Zin! Zin! a Violin* by Lloyd Moss, illustrated by Marjorie Priceman (1995)

#### Illustrative Informational Texts

- A Tree Is a Plant* by Clyde Robert Bulla, illustrated by Stacey Schuett (text: 1960/illus: 2001)
- What Do You Do With a Tail Like This?* by Steve Jenkins & Robin Page (2003)
- “Our Good Earth” in *National Geographic Young Explorer*, April (2009)
- Read alouds:
- Follow the Water from Brook to Ocean* by Arthur Dorros (1991)
- Living Sunlight: How Plants Bring the Earth to Life* by Molly Bang & Penny Chisholm, illustrated by Molly Bang (2009)

<sup>7</sup> See Appendix C for other texts illustrative of Kindergarten-Grade 1 text complexity. This list includes read-alouds.

## Reading and Literature Standards<sup>8</sup>

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Retell key details and information drawn from the text.
2. Explain the subject of the text or the problem the characters face.
3. Answer questions about characters and events that take place in the text.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. retell the beginnings, middles, and endings of stories
- b. ask and answer questions about details of a text
- c. identify the problems that characters face in a story and the lessons learned
- d. identify the feelings of characters and the reasons for their actions
- e. differentiate between realistic and fantastical elements within a story

##### Informational Text

- a. restate key information (e.g., events, subject, ideas) from a text
- b. ask and answer questions about details of a text

## Reading Foundations

### Linguistic Awareness

1. Students gain awareness of spoken words, syllables, and phonemes.
  - a. aurally distinguish long from short vowel sounds in spoken single-syllable words (e.g., /tap/ vs. /tape/; /sock/ vs. /soak/; /sit/ vs. /sight/)
  - b. produce single-syllable words by orally blending phonemes, including consonant blends (e.g., /cats/, /black/, /blast/)
  - c. isolate and pronounce initial, medial vowel, and final phonemes (sounds) in single-syllable words (e.g., *fast*, *fast*)
  - d. orally segment single-syllable words into their complete sequence of individual phonemes

<sup>8</sup> The expectation is that students can fulfill these standards with texts they read independently as well as texts that are read aloud to them.

## Observing craft and structure

### Core Standards — Students can and do:

4. Identify the meanings of words and phrases as they are used in the text.
5. Identify important parts or sections of texts.
6. Compare and contrast characters or events from different stories.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. identify words and phrases that suggest feelings or appeal to the senses
- b. identify similarities in beginning and ending sounds of words in children’s poems and songs
- c. identify parts of a story and parts of a poem as well as sections of informational picture books and tell how they are different
- d. identify common characteristics of folktales and fairy tales, including their use of rhyme, rhythm, and repetition
- e. participate (e.g., react, speculate, read along, act out) when familiar texts are read aloud
- f. compare and contrast characters or events from different stories written by the same author or written about similar subjects

#### Informational Text

- a. identify basic text features and what they mean, including titles and subtitles, table of contents, and chapters

## Reading Foundations, continued

### Phonics and Word Recognition

2. Students know and apply grade-level phonics and word analysis skills in decoding words.
  - a. know the common spelling-sound correspondences for consonants (e.g., *wr-*, *sh*, *-ck*, *-ll*)
  - b. know vowel digraph and final-*e* conventions for representing long vowels
  - c. know spelling-sound correspondences for diphthongs and other common vowel teams (e.g., *loud*, *cow*, *look*, *loop*, *boy*, *boil*)
  - d. use knowledge of phonics and spelling conventions to decode regularly spelled one-syllable words (e.g., *sick*, *march*, *sight*, *slice*, *bake*, *spring*)
  - e. understand that every syllable must have a vowel sound and use that knowledge to determine the number of syllables in a word
  - f. decode two-syllable words following basic patterns (e.g., *rabbit*, *magnet*, *napkin*, *pickle*, *butter*)
  - g. read words with inflectional endings (e.g., *-s*, *-es*, *ies*, *-ed*, *ied*, *-ing*, *-er*, *-est*)
  - h. use phonics to decode visually new words when reading
  - i. recognize grade-appropriate, irregularly spelled words by sight

## Integrating information and evaluating evidence

### Core Standards — Students can and do:

7. Use text illustrations to predict or confirm what the text is about.
8. Identify words in a text that link ideas and events together.
9. Identify who is telling a story or providing information in the text.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. use pictures, illustrations, and context to make predictions about and confirm story content
- b. identify words in a story that link events together (e.g., *first/second, then, next, before/after, later, finally*)
- c. identify who is the speaker in a story or poem

#### Informational Text

- a. identify words that link ideas together (e.g., *also, in addition, for example, but*)
- b. identify the author and sources of information when provided by the text

## Developing habits for reading text

### Core Standards — Students can and do:

10. Begin to read independently and/or with a partner, sustaining effort necessary to build understanding.

## Reading Foundations, continued

### Developing Fluency

3. Students read with sufficient accuracy and fluency to support comprehension.
  - a. demonstrate increased accuracy, fluency, and expression on successive readings of a text
  - b. use context to confirm or self-correct word recognition and understanding, rereading as necessary
  - c. read aloud, alone, or with a partner at least 15 minutes each day, in school or out

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and opinions that communicate to a familiar, known audience.

### Conducting research

#### Core Standards — Students can and do:

2. Gather information from experiences or provided text sources.

### Revising writing

#### Core Standards — Students can and do:

3. With specific guidance, add details to strengthen writing through revision.

### Using tools and technology

#### Core Standards — Students can and do:

4. Gain familiarity with technology and other tools to produce, revise, and edit writing.

### Standards — Students can and do (by key text type):<sup>9</sup>

#### Narratives

- a. establish a situation in time and/or place that is appropriate for the sequence of events to follow
- b. develop appropriately sequenced actions within one or more events using linking words, phrases, or clauses to signal chronological ordering
- c. provide a reaction to what happened
- d. include dialogue if appropriate, and some details
- e. provide a sense of closure and/or a reflective statement

#### Informative and Explanatory Texts

- a. include some sort of beginning to establish the topic (beyond using the title of the piece)
- b. supply facts and information relevant to the topic
- c. use simple additive linking words (e.g., *and*, *first*, *second*) to create connections between the facts
- d. provide examples relevant to the topic
- e. provide a sense of closure

#### Arguments (opinions)

- a. introduce the topic or book directly, or use the title of the book as an introduction
- b. state opinions (e.g., *My best friend is . . .*) relevant to the topic
- c. provide reasons for opinions and details to support them

<sup>9</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

- d. use linking words that express causality (e.g., *I like . . . because . . .*)
- e. refer to the content of the text when writing about literature

## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively in group activities requiring speaking and listening.
2. Listen closely to and sustain attention on texts read aloud as well as other sources of information presented orally, visually, or multi-modally and confirm understanding by restating the information and answering pertinent questions.

#### Standards — Students can and do (by key communication type):

##### Classroom discussions and participating productively

- a. initiate and participate in conversations with peers and adults through multiple exchanges, attending to the comments of others
- b. confirm understanding by restating information or answering questions about what has been discussed
- c. ask questions to get information, ask for help, or clarify something that is not understood
- d. follow norms for conversation, such as listening to others and taking turns to speak

### Exchanging information and speaking effectively

#### Core Standards — Students can and do:

3. Share experiences and ideas that demonstrate an awareness of their listeners.
4. Speak audibly and clearly.

#### Standards — Students can and do (by key communication type):

##### Presentation of ideas and information

- a. describe people, places, things, and events with relevant facts and examples
- b. recite or read aloud poems, rhymes, songs, and stories, speaking clearly at an understandable pace

## Language Development Standards

### Conventions

In grade 1, students gain increasing skill and independence in sentence formation and development. They have a sense of what a verb is and that its form changes to signal different time periods (past, present, and future). Their repertoire of prepositions continues to expand, and they use pronouns with regularity. Students capitalize names, places, and dates. They use end punctuation as well as commas in dates and in simple series of words. Their range of word-formation and spelling strategies grows.

Key Terms: comma, pronoun, verb

## Grammar and usage

### Core Standards — Students can and do:

1. Produce and expand complete sentences in response to questions and prompts.
2. Use subject, object, and possessive pronouns (e.g., *I, me, my; they, them, their*).
3. Use verbs to convey a sense of past, present, and future in writing and speaking (e.g., *Today I walk home; Yesterday I walked home; Tomorrow I will walk home*).
4. Demonstrate understanding of frequently occurring prepositions (e.g., *during, beyond, toward*).

## Mechanics

### Core Standards — Students can and do:

5. Capitalize names, places, and dates.
6. Use end punctuation for sentences, including periods, question marks, and exclamation points.
7. Use commas in dates and to separate single words in a series.
8. Form new words through addition, deletion, and substitution of sound and letters (e.g., *an → man → mat → mast → must → rust → crust*).
9. Use conventional spelling for words with common spelling patterns and common irregular words.
10. Use phonetic spellings for untaught words, drawing on phonemic awareness and spelling conventions.

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In grade 1, students begin to sort words themselves into categories rather than the objects that they name. They are able to define familiar words (e.g., *duck*) in a two-step process of identifying a category (bird) to which it belongs and naming one or more attributes that distinguish this category member from others (able to swim). Students grasp that many words they know can mean different things depending on how the word is used, and they make distinctions between and among closely related verbs and adjectives in terms of manner and intensity. They acquire new words through interactive language use, including informal talk, discussion, listening to and responding to texts read aloud as well as by being taught the words direct.

## Determining the meaning of words

### Core Standards — Students can and do:

1. Sort words into categories (e.g., colors, clothing).
2. Define words by category and by one or more key attributes (e.g., a *duck* is a bird that swims; a *tiger* is a large cat with stripes).
3. Demonstrate understanding of the concept of multiple-meaning words (e.g., *match, kind, play*) by identifying various meanings of some grade-appropriate examples of such words.

## Understanding the nuances of words (denotations and connotations)

### Core Standards — Students can and do:

4. Define, choose, or act out the meaning of closely related verbs that differ in manner (e.g., *look, peek, glance, stare, glare, scowl; speak, shout, mumble, whine, whimper, murmur*).
5. Distinguish among closely related adjectives that differ in intensity (e.g., *large, gigantic; hot, scalding; tasty, delicious; quiet, silent*).

## Acquiring vocabulary

### Core Standards — Students can and do:

6. Acquire and use new vocabulary taught directly and gained through conversations and hearing texts read aloud.

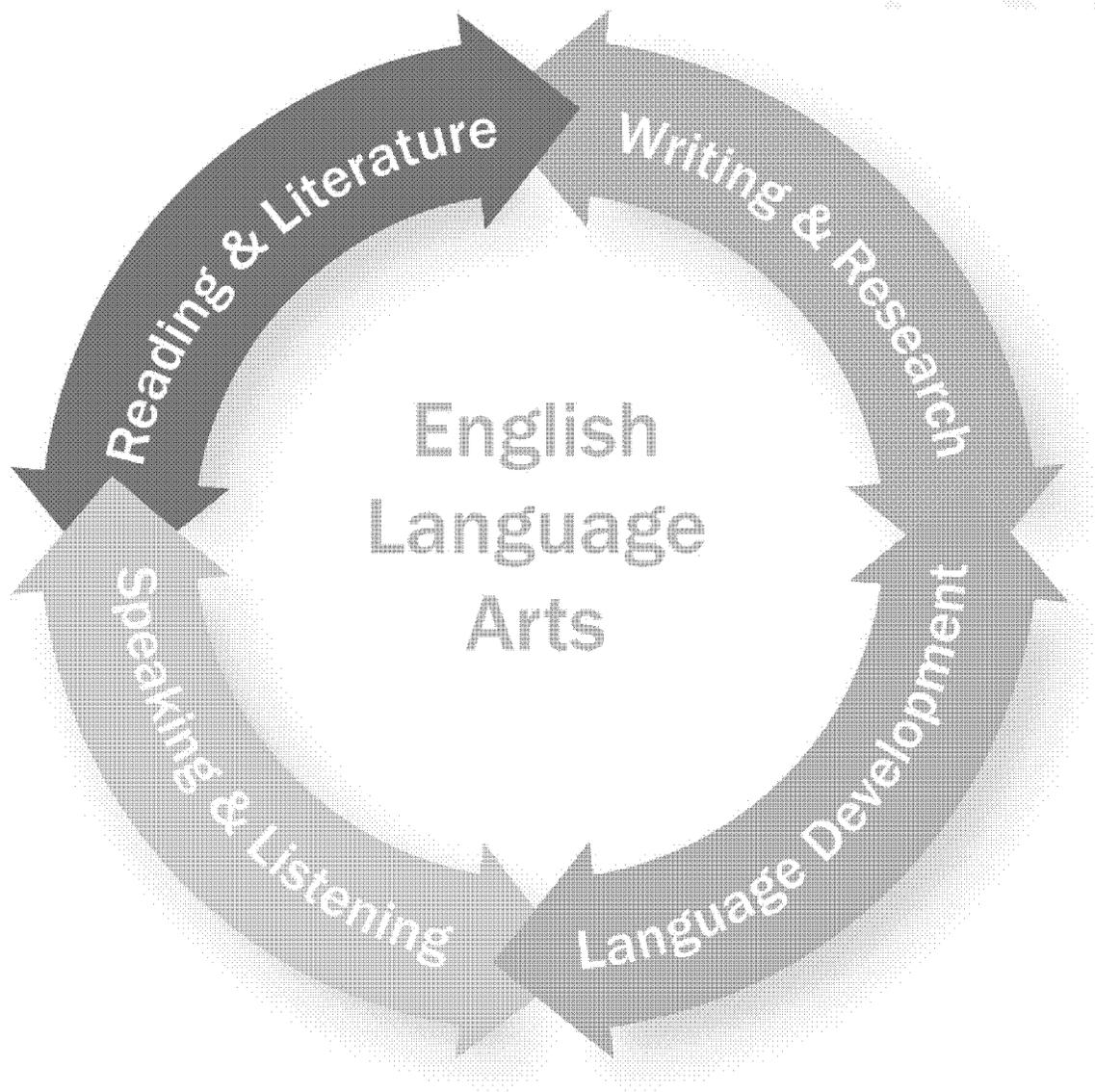
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# English Language Arts

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## Grade 2



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade

| Grades | 2–3 Level Text | 4–5 Level Text |
|--------|----------------|----------------|
| 2      | 100%           |                |
| 3      | 70%            | 30%            |

While advancing through the grades, students must engage with texts of steadily increasing complexity.

- In grade 2, students focus on reading texts in the 2–3 grade band level with scaffolding likely required for texts at the high end of the range.

### Determining Text Complexity for Grades 2–3

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts <sup>10</sup>  | Quantitative Measures of Texts  |
|--|---|
| <ul style="list-style-type: none"> <li>• <i>Structure:</i> Explicit, simple, conventional; simple graphic representations are supplementary to meaning; texts are relatively short</li> <li>• <i>Purpose:</i> Single; explicitly stated</li> <li>• <i>Style and Language:</i> Familiar, accessible, plain; few literary devices; mostly clear, everyday language; limited use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness:</i> A few ideas/concepts; concrete; low information density</li> <li>• <i>Relationships:</i> A few connections; explicit</li> <li>• <i>Knowledge Demands:</i> Ability to handle simple themes and fantastical elements as well as draw upon common, everyday experiences; general background knowledge and familiarity with genre conventions required; some everyday and general content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences as well as their interests, motivations, and maturity level.</p>   |   |

<sup>10</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for Grade 2

| Narratives  | Drama   | Poetry   | Informational Text  |
|---|---|--|---|
| <i>At this level, includes children’s adventure stories, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth.</i> | <i>At this level, includes staged dialogue, scenes, and brief, familiar scenes.</i> | <i>At this level, includes nursery rhymes and the subgenres of narrative poems, limericks, and free verse.</i> | <i>At this level, includes books about science, history, and the arts and other nonfiction materials.</i> |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>11</sup>

- Crow Boy* by Taro Yashima (1955)
- The Stories Julian Tells* by Ann Cameron (1981)
- Tops and Bottoms* by Janet Stevens (1995)
- “Grandpa’s Stories” by Langston Hughes (1958)
- “Weather” by Eve Merriam (1969)

#### Read alouds:

- The Cricket in Times Square* by George Selden, illustrated by Garth Williams (1960)
- “Fireflies” by Paul Fleischman, illustrated by Eric Beddows (1988)

#### Illustrative Informational Texts

- Maps & Globes* by Jack Knowlton, pictures by Harriet Barton (1985)
- Sunshine Makes the Seasons* by Franklyn M. Branley (1985)
- From Seed to Plant* by Gail Gibbons (1991)
- Boy, Were We Wrong About Dinosaurs* by Kathleen V. Kudlinski, illustrated by S.D. Schindler (2005)

<sup>11</sup> See Appendix B for other texts illustrative of Grades 2-3 text complexity.

## Reading and Literature Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Retell what the text says explicitly and make inferences required to understand the text.
2. Identify the lessons or topics of the text and the key details that support them.
3. Describe in detail a specific character, event, or topic in the text.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. ask and answer clarifying questions (e.g., how, why, where, when, who, and what) concerning specific details in the text and refer explicitly to parts of a text to answer these questions
- b. identify or infer the moral or lesson in well-known stories, fables, folktales, or myths
- c. describe how major events in a story often lead from problem to solution
- d. examine a specific incident in a story, narrative, or drama in depth and establish when, where, and why it occurs
- e. describe characters based upon what they say and do

##### Informational Text

- a. accurately restate the key information provided by the text
- b. ask and answer clarifying questions (e.g., how, why, and what) concerning specific details in the text and refer explicitly to parts of a text to answer these questions
- c. identify the main idea and supporting details and facts in a text
- d. explain the topic of each paragraph in a multi-paragraph text
- e. identify specific events in historical or scientific texts and discuss what happened, as well as where, when, and why it happened, according to facts taken from the text

## Reading Foundations

### Phonics and Word Recognition

1. Students know and apply grade-level phonics and word analysis skills in decoding words.
  - a. know the common spelling-sound correspondences for consonants (e.g., *wr-*, *sh*, *-ck*, *-ll*)
  - b. know vowel digraph and final-*e* conventions for representing long vowels
  - c. know spelling-sound correspondences for diphthongs and other common vowel teams (e.g., *loud*, *cow*, *look*, *loop*, *boy*, *boil*)
  - d. use knowledge of phonics and spelling conventions to decode regularly spelled one-syllable words (e.g., *sick*, *march*, *sight*, *slice*, *bake*, *spring*)

## Observing craft and structure

### Core Standards — Students can and do:

4. Explain the meanings of words and phrases as they are used in the text.
5. Gain familiarity with different ways of presenting stories and information in text.
6. Compare and contrast different versions of the same story or informational texts on the same subject.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

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- a. recognize sensory details and how they are used to describe events, feelings, and objects
- b. describe the different ways poets use rhyme, rhythm, and sensory images to convey a topic or message
- c. identify repetitions in phrases, refrains, or sounds in poems and songs
- d. describe story elements, including characters, setting, the problem, and how it is resolved
- e. discuss stories written by the same author about similar characters or compare different versions of similar well-known tales and myths from various cultures

#### Informational Text

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- a. locate key words, facts, or other details using features of texts (e.g., captions, headings, glossaries, indexes, electronic menus, and icons)
- b. distinguish between writing that is based on real events and writing that is based on fantasy or fictional events
- c. combine information from two different parts of a text and identify how they are related (e.g., chronology, causation)
- d. after reading two passages on the same subject, combine the information to more fully describe a topic

## Reading Foundations, continued

### Developing Fluency

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2. Students read with sufficient accuracy and fluency to support comprehension.
  - a. demonstrate increased accuracy, fluency, and expression on successive readings of a text
  - b. use context to confirm or self-correct word recognition and understanding, rereading as necessary
  - c. read alone or with a partner at least 20 minutes each day, in school or out

## Integrating information and evaluating evidence

### Core Standards — Students can and do:

7. Locate and use information from graphs, illustrations, and electronic sources.
8. Identify and understand words and phrases that indicate logical relationships.
9. Identify who is telling the story or providing information at any given point in the text.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. efficiently navigate stories in print and electronic text and explain how images and illustrations connect to and clarify the content
- b. identify who is telling the story or who is speaking in a drama

#### Informational Text

- a. use information from visual elements of print and electronic texts (e.g., graphs, maps, charts, illustrations, photographs, diagrams) and explain how they help a reader understand the text
- b. identify words (e.g., *such as*, *because*, *therefore*, *in order to*, *since*) that logically connect ideas in sentences and paragraphs

## Developing habits for reading complex text

### Core Standards — Students can and do:

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding text.

## Writing and Research Standards

## Writing to reflect audience, purpose, and task

### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and opinions that communicate to a familiar, known audience.

## Conducting research

### Core Standards — Students can and do:

2. Gather information from experiences or provided text sources.

## Revising writing

### Core Standards — Students can and do:

3. With specific guidance, strengthen writing through revision.

### Using tools and technology

#### Core Standards — Students can and do:

4. Gain familiarity with technology and other tools to produce, revise, and edit writing.

#### Standards — Students can and do (by key text type):<sup>12</sup>

##### Narratives

- establish a situation in time and/or place that is appropriate for the sequence of events to follow
- recount a single well-elaborated event or sequence of events, managing chronological sequence with temporal words, phrases, and clauses
- tell what the narrator thought or felt
- include dialogue if appropriate and specific details
- provide closure through reaction, commentary, or summation

##### Informative and Explanatory Texts

- produce a brief introduction
- create an organizational structure that presents similar information together, frequently patterned after chapter book headings or picture books
- use adequate and specific facts and definitions to develop points
- use linking words, such as *also*, *another*, *and*, and *more*, to connect ideas within categories of information, and headers to signal groupings
- include a concluding sentence or section

##### Arguments (opinions)

- introduce the topic or book(s) directly
- state opinion(s) relative to the topic
- provide reasons for opinions and details to support them
- create a list-like structure for organization
- use words to link and organize opinions and reason(s) (e.g., *because*, *another*, *and*, *also*)
- refer to the text(s) when writing about literature
- close with a concluding statement or recommendation

## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively in small groups and as a class, engaging in a series of oral exchanges about texts and topics.

<sup>12</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

2. Sustain concentration on information presented orally, visually, or multi-modally and confirm understanding by paraphrasing the information.

### **Standards — Students can and do (by key communication type):**

Classroom discussions and participating productively

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- a. engage in conversations on familiar topics
- b. paraphrase the key information or ideas of others presented orally or through other media
- c. inquire about oral or visual presentations to deepen understanding or clarify comprehension
- d. link additions to conversation to the previous remarks of others
- e. participate productively by listening politely to the ideas of others, taking turns speaking, and extending their ideas in light of discussions

## Exchanging information and speaking effectively

### **Core Standards — Students can and do:**

3. Share experiences and ideas, thinking about the needs of their listeners.
4. Speak audibly and clearly at an understandable pace.

### **Standards — Students can and do (by key communication type):**

Presentation of ideas and information

---

- a. recount stories or experiences with descriptive details by answering who, what, where, when, how, and why questions about them
- b. report on a topic, including appropriate facts and details
- c. use appropriate tone to express ideas, feelings, and needs clearly
- d. recite or read aloud poems, rhymes, songs, and stories, speaking clearly at an understandable pace

## Language Development Standards

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### Conventions

In grade 2, students create sentences of expanding length and complexity, though their control over these sentences is likely to be imperfect. Their command of noun and verb formation extends to common irregular forms. Students capitalize correctly in most situations. Their use of punctuation has grown to include commas in greetings and closings of letters as well as apostrophes to form contractions and to signal possession. Their spelling is increasingly conventional, and they now consult references, such as beginning dictionaries, to aid them when needed.

Key Terms: apostrophe, contraction, regular and irregular nouns and verb, possessive

## Grammar and usage

### **Core Standards — Students can and do:**

1. Generate and expand sentences with embedded, dependent, or conjoined clauses (e.g., *After we came home from school, I fed the gerbil and my sister cleaned the cage*).
2. Form common irregular plural nouns (e.g., *feet, children, teeth, mice, fish, women*).

3. Form the past tense of common irregular verbs (e.g., *sat, hid, told*).

## Mechanics

### Core Standards — Students can and do:

4. Capitalize holidays, product names, geographic names, and important words in titles.
5. Use commas in greetings and closings of letters.
6. Use apostrophes to punctuate contractions and to form common possessives.
7. Use conventional spelling for high-frequency and other studied words.
8. Generalize learned spelling patterns when writing words (e.g., *cage* → *badge*; *boy* → *boil*; *paper* → *copper*).
9. Use spelling rules for adding suffixes to base words (e.g., *sitting, smiled, cries, happiness*).
10. Consult reference materials, including beginning dictionaries, to check and correct spellings.

## Vocabulary

In grade 2, students use a repertoire of strategies for dealing with unknown words. They can analyze the word itself, consider how it is used, consult reference materials, use the components of a compound word as clues to the word's meaning, or employ some combination of these strategies to determine or clarify word meanings. They figure out which meaning of a multiple-meaning word is most likely intended in a particular circumstance, and they differentiate among the connotations of related verbs and adjectives. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly.

## Determining the meaning of words

### Core Standards — Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - identifying its base word when it has affixes (e.g., *happiness, finally, grimy, busily*)
  - determining how it is used in a sentence when reading, including whether it names or describes a thing or an action
  - consulting reference materials, including glossaries and beginning dictionaries, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Explain the meaning of grade-appropriate compound words (e.g., *birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark*).

## Understanding the nuances of words (denotations and connotations)

### Core Standards — Students can and do:

4. Distinguish among related verbs (e.g., *toss, throw, hurl*) to gain a sense of their shadings of meaning.
5. Distinguish among related adjectives (e.g., *thin, slender, skinny, scrawny; irritated, mad, angry, furious*) to gain a sense of their shadings of meaning.

## Acquiring vocabulary

### **Core Standards — Students can and do:**

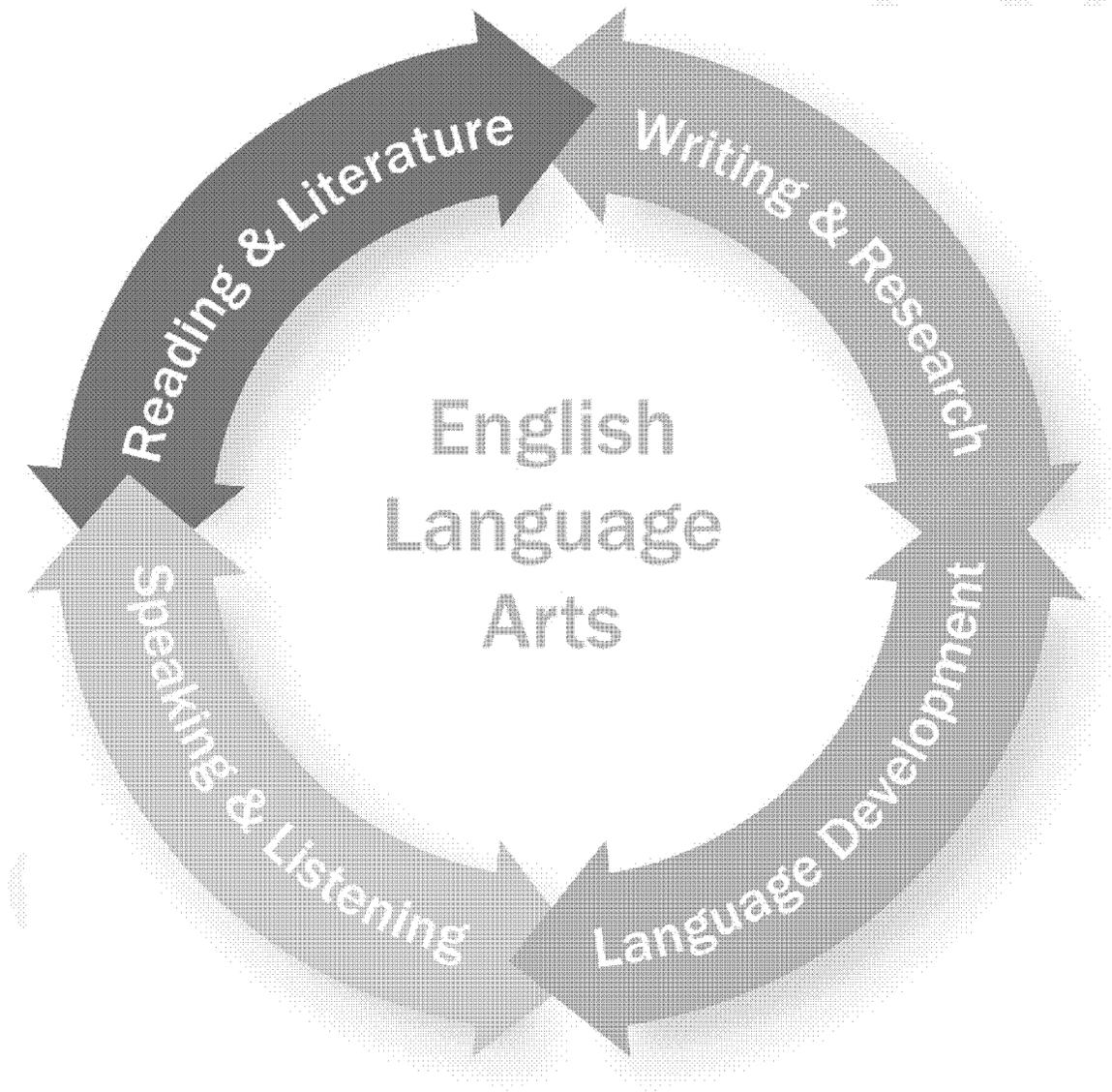
6. Acquire and use new vocabulary taught directly and gained through reading and conversations.

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# English Language Arts

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## Grade 3



### Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade

| Grades | 2–3 Level Text | 4–5 Level Text |
|--------|----------------|----------------|
| 2      | 100%           |                |
| 3      | 70%            | 30%            |

While advancing through the grades, students must engage with texts of steadily increasing complexity.

- **In grade 3**, students focus on reading texts in the 2–3 grade band level text (70 percent) independently and are introduced to texts in the 4–5 grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 2–3

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts <sup>13</sup>  | Quantitative Measures of Texts  |
|--|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Explicit, simple, conventional; simple graphic representations are supplementary to meaning; texts are relatively short</li> <li>• <i>Purpose</i>: Single; explicitly stated</li> <li>• <i>Style and Language</i>: Familiar, accessible, plain; few literary devices; mostly clear, everyday language; limited use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness</i>: A few ideas/concepts; concrete; low information density</li> <li>• <i>Relationships</i>: A few connections; explicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle simple themes and fantastical elements as well as draw upon common, everyday experiences; general background knowledge and familiarity with genre conventions required; some everyday and general content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences as well as their interests, motivations, and maturity level.</p>   |   |

<sup>13</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for Grade 3

| Narratives  | Drama  | Poetry  | Informational Text  |
|---|--|---|---|
| <i>At this level, includes children’s adventure stories, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth.</i> | <i>At this level, includes staged dialogue, scenes, and brief familiar scenes.</i> | <i>At this level, includes nursery rhymes, and the subgenres of narrative poems, limericks, and free verse.</i> | <i>At this level, includes books about science, history, and the arts and other nonfiction materials.</i> |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>14</sup>

*My Father’s Dragon* by Ruth Stiles Gannett, illustrated by Ruth Chrisman Gannett (1948)

*Sarah, Plain and Tall* by Patricia MacLachlan (1985)

*The One-Eyed Giant (Book One of Tales from the Odyssey)* by Mary Pope Osborne (2002)

“Knoxville, Tennessee” by Nikki Giovanni (1968)

“Eating While Reading” by Gary Soto (1995)

#### Read Alouds:

“How the Camel Got His Hump” in *Just So Stories* by Rudyard Kipling (1902)

#### Illustrative Informational Text

*A Medieval Feast* by Alike (1983)

*So You Want to Be President?* by Judith St. George, illustrated by David Small (2000)

*Bat Loves the Night* by Nicola Davies, illustrated by Sarah Fox-Davies (2008)

*Moonshot: The Flight of Apollo 11* by Brian Floca (2009)

<sup>14</sup> See Appendix B for other texts illustrative of Grades 2-3 text complexity.

## Reading and Literature Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Retell what the text says explicitly and make inferences required to understand the text.
2. Identify lessons or topics of the text and the key details that support them.
3. Describe in detail a specific character, event, or topic in the text.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. ask and answer clarifying questions (e.g., how, why, where, when, who, and what) concerning specific details in the text and refer explicitly to parts of a text to answer these questions
- b. identify or infer the moral or lesson in well-known stories, fables, folktales, or myths
- c. describe how major events in a story often lead from problem to solution
- d. examine a specific incident in a story, narrative, or drama in depth, and establish when, where, and why it occurs
- e. describe characters based upon what they say and do

##### Informational Text

- a. accurately restate key information provided by the text
- b. ask and answer clarifying questions (e.g., how, why, and what) concerning specific details in the text and refer explicitly to parts of a text to answer these questions
- c. identify the main idea and supporting details and facts in a text
- d. explain the topic of each paragraph in a multi-paragraph text
- e. identify specific events in historical or scientific texts and discuss what happened, as well as where, when, and why it happened, according to facts taken from the text

## Reading Foundations

### Phonics and Word Recognition

1. Students know and apply grade-level phonics and word analysis skills in decoding words.
  - a. identify and know the meaning of the most common prefixes and derivational suffixes (e.g., *un-*, *re-*, *mis-*, *-ful*, *-tion*, *-able*)
  - b. decode regularly spelled single-syllable and multi-syllable words (e.g., *vocabulary*, *refrigerator*, *terrible*, *frightening*)
  - c. read grade-appropriate irregularly spelled words by sight
  - d. use phonics and word analysis to identify visually new words when reading

## Observing craft and structure

### Core Standards — Students can and do:

4. Explain the meanings of words and phrases as they are used in the text.
5. Gain familiarity with different ways of presenting stories and information in text.
6. Compare and contrast different versions of the same story or informational texts on the same subject.

### Standards — Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. recognize sensory details and how they are used to describe events, feelings, and objects
- b. describe the different ways poets use rhyme, rhythm, and sensory images to convey a topic or message
- c. identify repetitions in phrases, refrains, or sounds in poems and songs
- d. describe story elements, including characters, setting, the problem, and how it is resolved
- e. discuss stories written by the same author about similar characters or compare different versions of similar well-known tales and myths from various cultures

#### Informational Text

- a. locate key words, facts, or other details using features of texts (e.g., captions, headings, glossaries, indexes, electronic menus, and icons)
- b. distinguish between writing that is based on real events and writing that is based on fantasy or fictional events
- c. combine information from two different parts of a text and identify how they are related (e.g., chronology, causation)
- d. after reading two passages on the same subject, combine the information to more fully describe a topic

## Integrating information and evaluating evidence

### Core Standards — Students can and do:

7. Locate and use information from graphs, illustrations, and electronic sources.
8. Identify and understand words and phrases that indicate logical relationships.
9. Identify who is telling the story or providing information at any given point in the text.

## Reading Foundations, continued

### Developing Fluency

2. Students read with sufficient accuracy and fluency to support comprehension.
  - a. demonstrate increased accuracy, fluency, and expression on successive readings of a text
  - b. use context to confirm or self-correct word recognition and understanding, rereading as necessary
  - c. read at least 20 minutes each day, in school or out

## Standards — Students can and do (by key text type):

### Narratives, Drama, and Poetry

- a. efficiently navigate stories in print and electronic text and explain how images and illustrations connect to and clarify the content
- b. identify who is telling the story or who is speaking in a drama

### Informational Text

- a. use information from visual elements of print and electronic texts (e.g., graphs, maps, charts, illustrations, photographs, diagrams) and explain how they help a reader understand the text
- b. identify words (e.g., *such as, because, therefore, in order to, since*) that logically connect ideas in sentences and paragraphs

## Developing habits for reading complex text

### Core Standards — Students can and do:

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding text.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and opinions that communicate to a familiar, known audience.

### Conducting research

#### Core Standards — Students can and do:

2. Gather information from experiences or provided text sources.

### Revising writing

#### Core Standards — Students can and do:

3. With specific guidance, strengthen writing through revision.

### Using tools and technology

#### Core Standards — Students can and do:

4. Gain familiarity with technology and other tools to produce, revise, and edit writing.

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## Standards — Students can and do (by key text type):<sup>15</sup>

### Narratives

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- a. set the time, indicate a location, introduce characters, or enter immediately into the story line to engage the reader
- b. recount a single, well-elaborated event or a sequence of events that unfold naturally using temporal words, phrases, and clauses
- c. tell what the narrator thought or felt
- d. develop a focus, provide pacing, and include only relevant information
- e. develop a character through the description of external behavior
- f. provide descriptive details
- g. employ dialogue and other narrative strategies
- h. provide a satisfying conclusion that is reflective and/or that effectively ties up loose ends

### Informative and Explanatory Texts

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- a. produce an introduction that names the topic and provides at least one general detail about it
- b. create an organizational structure that presents similar information together, frequently patterned after chapter book headings or picture books
- c. use adequate, relevant, and specific facts and definitions to develop points
- d. logically categorize details and facts drawn from personal experience and other sources
- e. use linking words, such as *also*, *another*, *and*, and *more*, to connect ideas within categories of information, and use headers to signal groupings
- f. include only appropriate information
- g. include a concluding sentence or section

### Arguments (opinions)

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- a. introduce the topic or book(s) directly, and attempt to capture the reader's interest
- b. state an opinion relative to the topic (e.g., *This is a good book* or *John is a good friend*)
- c. provide facts and details to support the opinion
- d. create a list-like organizing structure that provides reasons for the opinion
- e. use appropriate words to link and organize opinions and reason(s) (e.g., *because*, *another*, *and*, *also*)
- f. refer to the text(s) when writing about literature
- g. provide a concluding statement, reflection, and/or recommendation

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<sup>15</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

## Speaking and Listening Standards

### Listening critically and participating productively

#### Core Standards — Students can and do:

1. Participate productively in small groups and as a class, engaging in a series of oral exchanges about texts and topics.
2. Sustain concentration on information presented orally, visually, or multi-modally and confirm understanding by paraphrasing the information.

#### Standards — Students can and do (by key communication type):

##### Classroom discussions and participating productively

- a. engage in conversations on familiar topics
- b. paraphrase the key information or ideas of others presented orally or through other media
- c. inquire about oral or visual presentations to deepen understanding or clarify comprehension
- d. link additions to conversation to the previous remarks of others
- e. participate productively by listening politely to the ideas of others, taking turns speaking, and extending their ideas in light of discussions

### Exchanging information and speaking effectively

#### Core Standards — Students can and do:

3. Share experiences and ideas, thinking about the needs of their listeners.
4. Speak audibly and clearly at an understandable pace.

#### Standards — Students can and do (by key communication type):

##### Presentation of ideas and information

- a. recount stories or experiences with descriptive details by answering who, what, where, when, how, and why questions about them
- b. report on a topic, including appropriate facts and details
- c. use appropriate tone to express ideas, feelings, and needs clearly
- d. recite or read aloud poems, rhymes, songs, and stories, speaking clearly at an understandable pace

## Language Development Standards

### Conventions

By grade 3, students have learned the foundations of written and spoken language, including letter, word, and sentence formation and crucial forms of punctuation. They ensure agreement between subject and verb and between pronoun and antecedent in simple situations. Students use quotation marks to indicate dialogue. They know most of the conventions of spelling and consult references to look up words when they still have difficulty. They use precise everyday language to describe and begin to consider the effects of word choice in writing and speaking.

Key Terms: subject-verb and pronoun-antecedent agreement, comma splice, fragment, run-on, quotation mark

#### Conventions of language and writing

##### Core Standards — Students can and do:

1. Group related ideas into a paragraph.

#### Grammar and usage

##### Core Standards — Students can and do:

2. Generate complete sentences, avoiding fragments, comma splices, and run-ons.\*
3. Ensure subject-verb and pronoun-antecedent agreement.\*

#### Mechanics

##### Core Standards — Students can and do:

4. Use quotation marks in dialogue.
5. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing regular words.
6. Consult reference materials, including dictionaries, to check and correct spellings.

#### Word choice and style

##### Core Standards — Students can and do:

7. Use precise everyday language.
8. Choose words for effect.\*<sup>16</sup>

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<sup>16</sup> Conventions standards noted with an asterisk (\*) need to be revisited by students in subsequent grades. See Appendix A for a full listing.

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In grade 3, students use their repertoire of strategies to determine and clarify the meaning of unknown and multiple-meaning words. They know that words are sometimes used in nonliteral ways and can use that knowledge to help them understand common idioms. They learn and can paraphrase many common idioms and sayings. They recognize that words have nuances in meaning and rely on context and background knowledge to sort among related words that describe abstract concepts. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly.

### Determining the meaning of words

#### Core Standards — Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using prefixes and suffixes when it is a multimorpheme word (e.g., *thoughtless*, *recycle*, *unforgettable*)
  - determining how it is used in a sentence when reading
  - consulting reference materials, including glossaries and dictionaries, both print and digital
2. Determine the meaning of multiple-meaning words by using context.
3. Distinguish between literal and nonliteral uses of language.
4. Paraphrase the meaning of common idioms and sayings.

### Understanding the nuances of words (denotations and connotations)

#### Core Standards — Students can and do:

5. Distinguish among related words that describe states of mind, degrees of certainty, or other abstract concepts (e.g., *knew*, *believed*, *suspected*, *heard*, *wondered*).

### Acquiring vocabulary

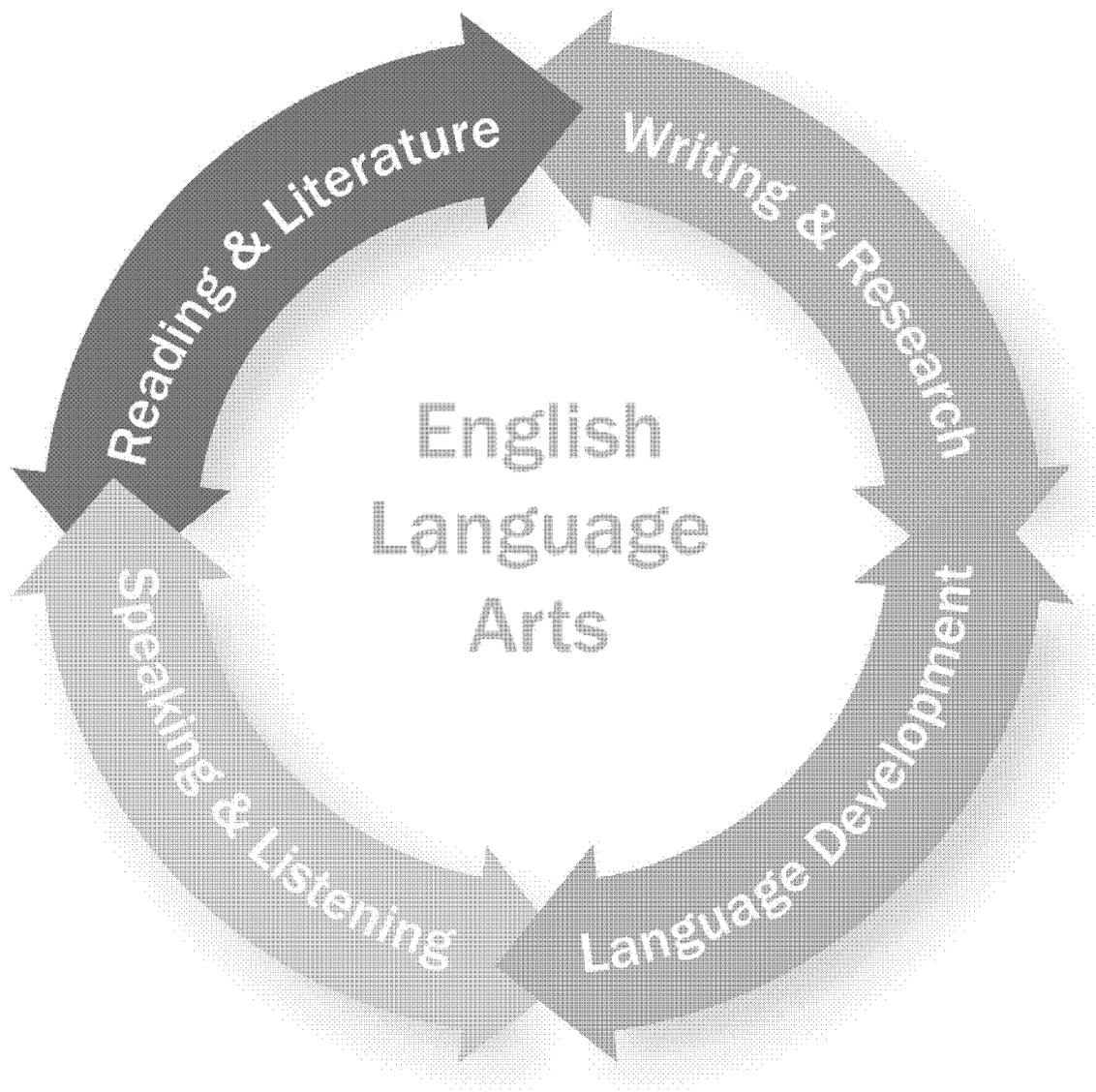
#### Core Standards — Students can and do:

6. Acquire and use new vocabulary taught directly and gained through reading and conversations.

# English Language Arts

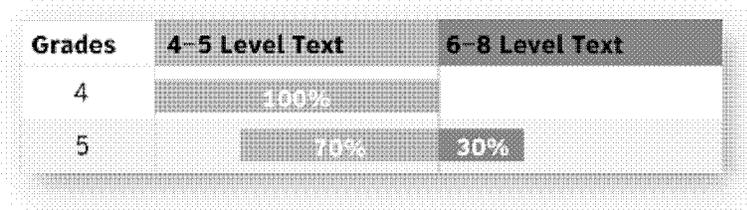
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Grades 4–5



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade



While advancing through grades 4–5, students must engage with texts of steadily increasing complexity.

- **In grade 4**, students focus on reading texts in the 4–5 grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 5**, students focus on reading in the 4–5 grade band level (70 percent) independently and are introduced to texts in the 6–8 grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 4–5<sup>17</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts   | Quantitative Measures of Texts  |
|---|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Largely explicit and direct; graphic representations are supplementary to meaning; texts are of increasing length</li> <li>• <i>Purpose</i>: Single or twofold; clearly indicated</li> <li>• <i>Style and Language</i>: Moderately accessible; some literary devices; some everyday language; some use of Tier 2 and Tier 3 words and figurative language</li> <li>• <i>Richness</i>: Some ideas/concepts; mostly concrete; moderate information density</li> <li>• <i>Relationships</i>: Some connections; largely explicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle fairly simple themes, consider a perspective somewhat different from one’s own, and understand unfamiliar experiences; general background knowledge and familiarity with genre conventions required; some general and discipline-specific content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences as well as their interests, motivations, and maturity level.</p>  |   |

<sup>17</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for Grades 4–5

| Narratives  | Drama   | Poetry  | Informational Text   |
|---|---|---|--|
| <i>At this level, includes children’s adventure stories, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth.</i> | <i>At this level, includes staged dialogue and brief familiar scenes.</i> | <i>At this level, includes nursery rhymes, and the subgenres of narrative poems, limericks, and free verse.</i> | <i>At this level, includes books about science, history, and the arts and other nonfiction materials and digital media sources on a range of topics.</i> |

| <b>Illustrative Texts for Narratives, Drama, and Poetry<sup>18</sup></b>   | <b>Illustrative Informational Texts</b>  |
|--|--|
| <i>Alice in Wonderland</i> by Lewis Carroll (1865)                         | <i>Discovering Mars</i> by Melvin Berger (1992)                                      |
| <i>The Little Prince</i> by Antoine de Saint-Exupery (1943)                | <i>Hurricanes: Earth’s Mightiest Storms</i> by Patricia Lauber (1996)                |
| <i>Bud, Not Buddy</i> by Christopher Paul Curtis (1999)                    | “Ancient Mound Builders” by E. Barrie Kavash from <i>Cobblestone</i> (2003)          |
| “The Echoing Green” from <i>Songs of Innocence</i> by William Blake (1789) | <i>Volcanoes</i> by Seymour Simon (2006)   |
| “Casey at the Bat” by Ernest Lawrence Thayer (1888)                        | “Kenya’s Long Dry Season” by Nellie Gonzalez Cutler from <i>Time for Kids</i> (2009) |
| “Words Free As Confetti” by Pat Mora (1996)                                | “Seeing Eye to Eye” by Leslie Hall from <i>National Geographic Explorer</i> (2009)   |
| <i>Where the Mountain Meets the Moon</i> by Grace Lin (2009)               |  |

<sup>18</sup> See Appendix B for other texts illustrative of Grades 4-5 text complexity.

## Reading and Literature Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Determine what the text says explicitly and make inferences required for understanding; explain how those inferences stem from the text.
2. Articulate the main ideas and themes of the text and provide a summary that captures the key supporting details.
3. Describe in detail two or more characters, events, or topics in the text and explain how they are related to one another.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. determine the theme of a story or drama, basing the understanding of theme on how characters adapt or change in response to the challenges posed in the plot
- b. summarize accurately the significant events of a play or narrative in chronological order, describing where, when, why, and how specific actions take place
- c. describe characters based on evidence from their thoughts, words, deeds, and interactions with others
- d. describe the setting in detail, drawing on evidence of the time, place, and other cues
- e. determine the theme of a poem, basing the understanding of theme on the key observations, images, or statements in a poem

##### Informational Text

- a. outline the main and supporting ideas in the text and provide an accurate summary
- b. identify the topic sentence and gist of each paragraph in a multi-paragraph text
- c. describe related events in a history text or related topics in a science text and explain the relationships between the events or topics

### Observing craft and structure

#### Core Standards — Students can and do:

4. Explain the meanings of words and phrases in the text, distinguishing literal and figurative uses.
5. Comprehend literature and information presented in a range of structures.
6. Compare and contrast texts written on the same topic or theme and explain how they are different and similar.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. describe the sensory details in texts and distinguish the use of literal versus figurative language
- b. observe and explain how words with similar meanings can have different connotations
- c. identify the meaning of figurative phrases and culturally significant characters found in mythology that are integral to understanding other works of literature and texts (e.g., *Herculean*, *Pandora's box*)
- d. identify how narratives and plays are structured to describe the progress of characters through a series of events and challenges

- e. identify rhymes and other repetitions of sounds that supply rhythm and pattern in poems and narrative prose
- f. compare a narrative or a play with a presentation in another format, such as film, stage, or interactive text, and note what is surprising or different about the alternative version
- g. compare works of literature on the same topic or with a similar theme

#### Informational Text

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- a. explain the meaning of key words and terms as they are used in the text
- b. understand information drawn from a variety of texts with different structures, such as chronological, compare-and-contrast, or as a chain of causes and effects
- c. identify and use text features (e.g., bold print, key words, topic sentences, hyperlinks, electronic menus, and icons) to locate information quickly and aid in comprehension
- d. compare and contrast related accounts on the same or similar topics by different authors, by analyzing their content and perspectives

### Integrating information and evaluating evidence

#### Core Standards — Students can and do:

- 7. Explain and use information presented graphically or visually in print, videos, or electronic texts.
- 8. Outline the information or evidence used to support an explanation or argument, determining which points support which key statements.
- 9. Determine the point of view or purpose that guides how events or ideas are described.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

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- a. identify the narrator of a story and explain how different stories are narrated from different perspectives
- b. compare accounts of historical events and figures or natural phenomena with their depiction in a fictional work

##### Informational Text

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- a. explain how factual information presented graphically or visually (e.g., maps, charts, diagrams, timelines, animations, and other interactive visual elements) aids in the comprehension of print and electronic texts
- b. explain how authors support their specific claims with evidence, including which evidence supports which claims
- c. determine the author's purpose and how that is reflected in the description of the events and ideas

### Developing habits for reading complex text

#### Core Standards — Students can and do:

- 10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and arguments that demonstrate an awareness of audiences that are familiar and known to the student.

### Conducting research

#### Core Standards — Students can and do:

2. Perform short, focused research tasks that build knowledge by exploring aspects of a single topic.
3. Gather information from experience, as well as print and digital resources.
4. Determine the accuracy and relevance of the information gathered to answer specific questions.
5. Restate information from source materials in one's own words, through summary or paraphrase.
6. Provide basic bibliographic information for print and digital sources.

### Revising writing

#### Core Standards — Students can and do:

7. With guidance and support from peers and adults, strengthen writing through revision, editing, or beginning again to maintain a clear focus throughout.

### Using tools and technology

#### Core Standards — Students can and do:

8. Use technology and other tools to produce, revise, and edit writing.

### Developing proficiency in a range of writing

9. Create writing over extended timeframes (time for reflection and revision) and shorter timeframes (a single sitting or a day or two), responding to specific sources.

Focus by grade level:

Grade 4: Describing the content of literary or informational sources at the 4-5 grade band level of text complexity and content

Grade 5: Comparing the contents of literary or informational sources at the 4-5 grade band level of complexity and content

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## Standards — Students can and do (by key text type):<sup>19</sup>

### Narratives

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- a. orient the reader by establishing a situation, introducing characters, setting, and location, or by backfilling information after entering immediately into the storyline
- b. create an organizing structure in which events are logically or causally sequenced
- c. in producing a story, create a plot with an initiating event, complicating action, a climax, and a resolution
- d. use a variety of temporal words, phrases, and clauses to signal sequence
- e. use concrete and sensory details to develop narrative elements
- f. develop the narrative using techniques such as dialogue, pacing, and reporting the narrator's thoughts
- g. show both external behaviors and the internal responses of characters to events
- h. provide closure and a realistic outcome of the narrative's events

### Informative and Explanatory Texts

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- a. state the topic clearly and provide a general observation and focus
- b. develop the subject using relevant facts, concrete details, quotations, or other information and examples
- c. group related information logically in basic structures (paragraphs, sections) and provide headings or illustrations when useful
- d. employ specialized vocabulary and a formal, objective style when appropriate
- e. use appropriate links to join ideas
- f. include only relevant appropriate information to demonstrate focus
- g. provide a conclusion related to the information or explanation offered

### Arguments (opinions)

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- a. introduce an opinion about a concrete issue or topic
- b. support opinions with relevant reasons
- c. support reasons with specific details
- d. link the reasons together using words, phrases, and clauses (e.g., *because*, *since*)
- e. adopt a relatively formal style for sharing and defending an opinion when appropriate to the discipline or context
- f. provide a concluding statement or section that offers reflections, restatement, or recommendations consistent with the opinion presented

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## Speaking and Listening Standards

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### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively one on one, in small groups, and as a whole class, joining in discussions and making relevant points about what they have read, heard, or written.
2. Sustain concentration on information presented orally, visually, or multi-modally and confirm understanding by summarizing the main ideas and supporting details.

#### Standards — Students can and do (by key communication type):

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<sup>19</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

### Classroom discussions and collaboration

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- a. come to discussions having read required material and, in conversation, build upon background knowledge from that material and other information known about the topic
- b. demonstrate understanding of the content and ideas presented or discussed by distilling them into an accurate summary
- c. ask questions to clarify or follow up on ideas or information presented orally or through other media
- d. respond to questions and make comments that contribute to the topic and ideas of previous speakers
- e. explain information presented graphically or visually in conjunction with other information presented orally
- f. engage productively and respectfully with others during discussions, including listening actively, gaining the floor respectfully, and qualifying or justifying what they think after listening to others' questions or accounts

### Exchanging information and speaking effectively

#### Core Standards — Students can and do:

3. Share experiences, opinions or other information, choosing material that is relevant to the topic and to the listeners.
4. Speak audibly and clearly at an appropriate and understandable pace, using formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

#### Standards — Students can and do (by key communication type):

##### Presentation of ideas and information

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- a. speak coherently about events, topics, or texts that focus and organize ideas in a logical sequence and include facts, details, or other information that support the main ideas
- b. use appropriate volume, phrasing, and pace for clarity
- c. read aloud prose and poetry, with appropriate emotion and fidelity to the text

## Language Development Standards

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### Conventions

In grades 4–5, students heighten their ability to situate and describe using language that is increasingly precise and vivid. They form and use verbs of various tenses to locate people, actions, and events in time, and they correctly use adjectives and adverbs to modify. Students begin to gain control of frequently confused words (e.g., *effect*, *affect*) and edit writing to remove language that is not idiomatic. Their mastery of capitalization is complete. They use punctuation to separate items in a series and a comma to distinguish an introductory element from the main part of the sentence. Students mark titles in conventional ways. They understand how to quote and use quotation marks. Their spelling is conventional. Their language is increasingly topic specific, precise, and varied, and they manipulate sentence structure for effect.

Key Terms: adjective; adverb; interjection; preposition; simple, progressive, and perfect tense

### Conventions of language and writing

#### Core Standards — Students can and do:

1. Maintain the focus of a paragraph on a topic through structural elements such as main ideas, supporting sentences, and transitions.

## Grammar and usage

### Core Standards — Students can and do:

2. Form and use the simple (e.g., *I walked, I walk, I will walk*), progressive (e.g., *I was walking, I am walking, I will be walking*) and the perfect (e.g., *I had walked, I have walked, I will have walked*) verb tenses.
3. Recognize and correct inappropriate shifts in verb tense.\*
4. Form and choose between adjectives and adverbs (including comparative and superlative forms), placing them appropriately within the sentence.\*
5. Correctly use frequently confused words.\*
6. Use idiomatic language.\*

## Mechanics

### Core Standards — Students can and do:

7. Capitalize the first word in quotations as appropriate and other important words, such as section headers.
8. Use punctuation to separate items in a series.\*
9. Use a comma to separate an introductory element from the rest of the sentence.
10. Use underlining, quotation marks, or italics to indicate titles of works.
11. Use quotation marks to mark direct speech and quotations from a text.
12. Spell grade-appropriate words correctly, consulting references as needed.\*

## Word choice and style

### Core Standards — Students can and do:

13. Use specialized, topic-specific language to convey ideas precisely.\*
14. Use figurative language to create images or make comparisons and connections between people, objects, or ideas.\*
15. Use punctuation for effect.\*
16. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.\*<sup>20</sup>

### Focus by Grade-Level

Grade 4: Distinguish one idea or thing from another (Conventions Standards #'s 1-3, #8, #9, #11)

Grade 5: Word choice (Conventions Standards #'s 4-6, #13, #14)

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<sup>20</sup> Conventions standards noted with an asterisk (\*) need to be revisited by students in subsequent grades. See Appendix A for a complete listing.

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In grades 4–5, students are capable of selecting among a wide range of strategies—analyzing the word itself, using localized context clues (particularly at the sentence level), and consulting reference materials—to determine and clarify the meaning of unknown and multiple-meaning words. They develop the habit of verifying their inferences of word meanings. They are able to interpret simple figurative language found in what they read. They learn and can paraphrase many common idioms, proverbs, and adages. They make distinctions among words based on connotation. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly. This includes a focus on “Tier 2” words and phrases (those that commonly appear in writing but not in spoken language), “Tier 3” words and phrases (those that are specific and important to particular disciplines).<sup>21</sup>

### Determining the meaning of words

#### Core Standards — Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - analyzing the word's sounds, spelling, and meaningful word parts
  - using semantic clues in sentences, such as definitions, examples, or restatements included within the text
  - using syntactic clues, such as using its position within the sentence as a guide to whether it represents a thing or an action
  - consulting reference materials, including glossaries, dictionaries, and thesauruses, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).
4. Interpret figurative language, including simple similes and metaphors.
5. Paraphrase the meaning of common idioms, adages, and proverbs.

### Understanding the nuances of words (denotations and connotations)

#### Core Standards — Students can and do:

6. Distinguish a word from other words with similar but not identical meanings (synonyms).

### Acquiring vocabulary

#### Core Standards — Students can and do:

7. Acquire and use a grade-appropriate vocabulary of Tier 2<sup>22</sup> words taught directly and gained through reading.
8. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.
9. Know and use words and phrases that signal contrast, addition, or other logical relationships (e.g., *however*, *although*, *nevertheless*, *similarly*, *moreover*, *in addition*).

<sup>21</sup> Beck I. L., McKeown, M.G. & Kucan, L. (2002). *Bringing Words to Life: Robust Vocabulary Instruction*, New York; Guilford Press

## Grade 4 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 4, students apply the reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read text at the 4-5 grade band level independently, with scaffolding likely required for texts at the high end of the range.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 100% text at the 4-5 grade band level

100%

### Writing and Research

*In grade 4, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by describing the contents of literary or informational sources at the 4-5 grade band level of complexity and content

### Speaking and Listening

*In grade 4, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentation of ideas and information

### Language Development

*In grade 4, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Distinguish one idea or thing from another:
  - Maintain the focus of a paragraph on a topic ... (Conventions Standard #1)
  - Form and use the simple, progressive and perfect verb tenses ... (Conventions Standard #2)
  - Recognize and correct inappropriate shifts in verb tense. (Conventions Standard #3)
  - Use punctuation to separate items in a series ... (Conventions Standard #8)
  - Use a comma to separate an introductory element ... (Conventions Standard #9)
  - Use quotation marks to mark direct speech and quotations ... (Conventions Standard #11)

# Grade 5 English Language Arts: Focus for Instruction

## Reading and Literature

*In grade 5, students apply the reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read text at the 4-5 grade band level independently and are introduced to 6-8 grade band “stretch” texts, which will likely require scaffolding.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 70% text at the 4-5 grade band level, 30% text at the 6-8 grade band level

70%

30%

## Writing and Research

*In grade 5, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. There also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by comparing the contents of literary or informational sources at the 4-5 grade band level of complexity and content.

## Speaking and Listening

*In grade 5, students apply the speaking and listening standards in different contexts.*

- Speaking and listening Standards applied in different contexts: classroom discussion and collaboration as well as in presentation of ideas and information.

## Language Development

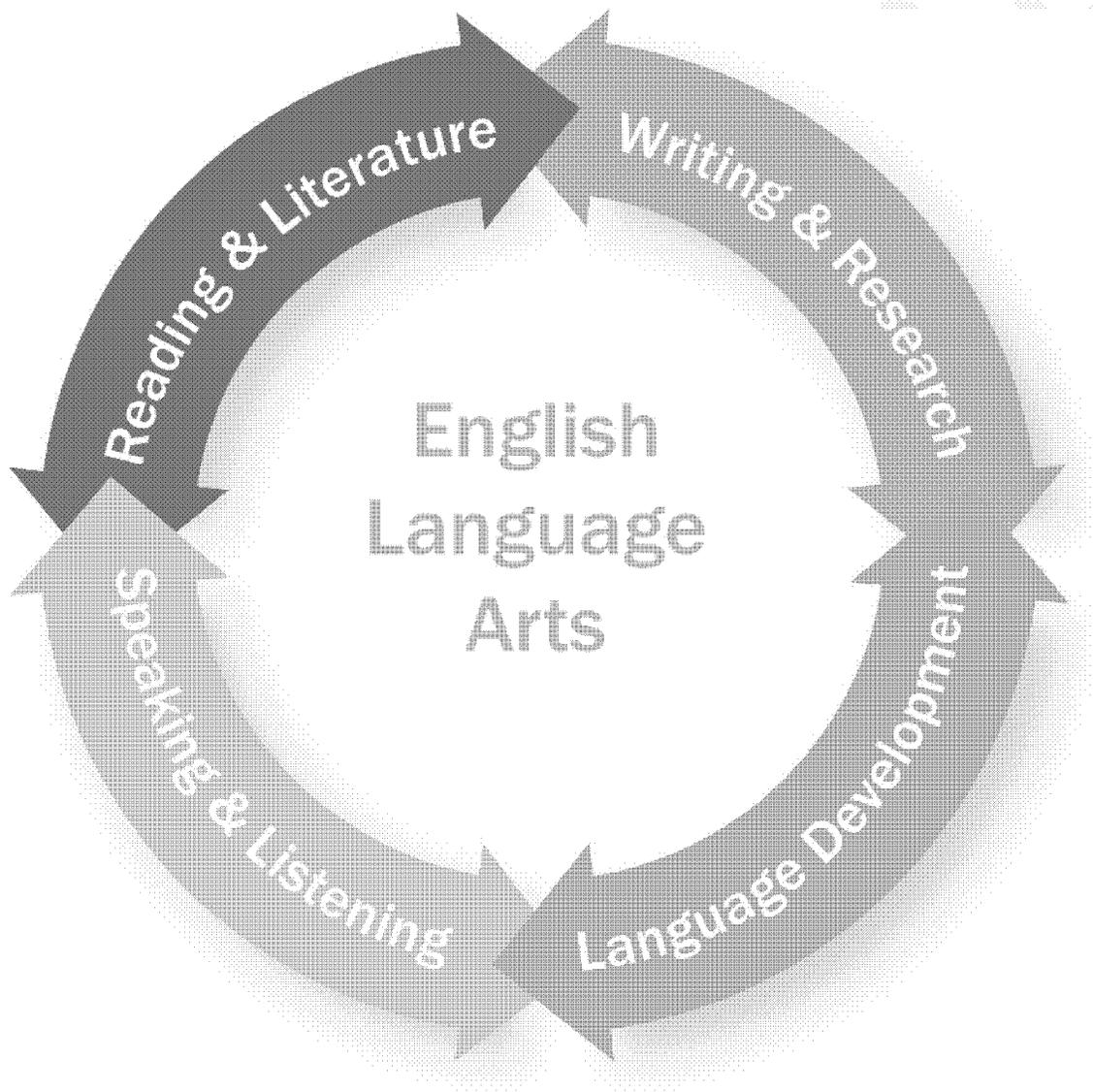
*In grade 5, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions,*

- Vocabulary standards applied to both reading, writing, speaking and listening
- **Grade-specific conventions focus:** Word choice
  - Form and choose between adjectives and adverbs. (Conventions Standard #4)
  - Correctly use frequently confused words. (Conventions Standard #5)
  - Use idiomatic language. (Conventions Standard #6)
  - Use specialized, topic specific language to convey ideas precisely. (Conventions Standard #13)
  - Use figurative language to create images ... (Conventions Standard #14)

# English Language Arts

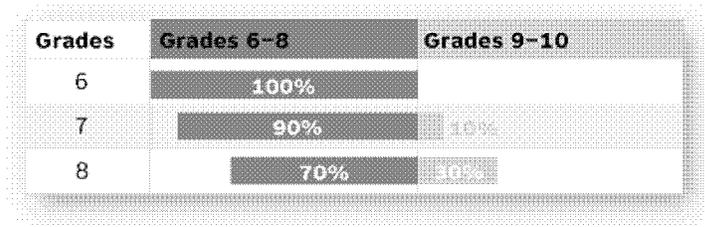
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Grades 6–8



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade



While advancing through grades 6–8, students must engage with texts of steadily increasing complexity.

- **In grade 6**, students focus on reading texts in the 6–8 grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 7**, students focus on reading texts in the 6–8 grade band level (90 percent) independently and are introduced to texts in the 9–10 grade band level as “stretch” texts (10 percent), which will likely require scaffolding.
- **In grade 8**, students focus on reading texts in the 6–8 grade band level (70 percent) independently as well as sustained practice with texts in the 9–10 grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 6–8<sup>23</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts  | Quantitative Measures of Texts  |
|--|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Largely implicit and subtle; graphic representations are essential to meaning; texts are of increasing length</li> <li>• <i>Purpose</i>: Single or multiple; subtly stated</li> <li>• <i>Style and Language</i>: Moderately demanding; several literary devices; consistent use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness</i>: Several ideas/concepts; mostly abstract; moderate information density</li> <li>• <i>Relationships</i>: Several connections; largely implicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle fairly challenging themes, consider multiple perspectives, and understand unfamiliar experiences; cultural and historical knowledge useful for understanding characters, settings, and allusions; some discipline-specific content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences as well as their interests, motivations, and maturity level.</p>   |   |

<sup>23</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for Grades 6–8

| Narratives  | Drama   | Poetry  | Informational Text  |
|---|---|---|---|
| <i>At this level, includes the subgenres of adventure stories, biographies, memoirs, historical fiction, mysteries, folktales, legends, fables, tall tales, myths, fantasy, science fiction, realistic fiction, and graphic novels.</i> | <i>At this level, includes one-act and multi-act plays both as text and film.</i> | <i>At this level, includes the subgenres of narrative poems, lyrical poems, free verse, odes, ballads, and epics.</i> | <i>At this level, includes such subgenres as exposition and argument in the form of essays, opinion pieces, speeches, opinion pieces as well as other documents and digital media sources on a range of topics.</i> |

| Illustrative Texts for Narratives, Drama, and Poetry <sup>24</sup>   | Illustrative Informational Texts  |
|--|---|
| <p><i>Little Women</i> by Louisa May Alcott (1869)</p> <p><i>The Adventures of Tom Sawyer</i> by Mark Twain (1876)</p> <p><i>A Wrinkle in Time</i> by Madeline L’Engle (1962)</p> <p><i>The Dark Is Rising</i> by Susan Cooper (1973)</p> <p><i>Black Ships before Troy: The Story of the Iliad</i> by Rosemary Sutcliff (1993)</p> <p><i>A Midsummer Night’s Dream</i> by William Shakespeare (1596)</p> <p>“Oh Captain, My Captain” by Walt Whitman (1865)</p> <p>“Stopping by a Wood on a Snowy Evening” by Robert Frost (1923)</p> <p>“I, Too” by Langston Hughes (1925)</p> | <p><i>Preamble and First Amendment to the United States Constitution</i> by United States (1787, 1791) **</p> <p><i>Narrative of the Life of Frederick Douglass an American Slave</i> by Frederick Douglass (1845)</p> <p>“Gettysburg Address”** by Abraham Lincoln (1863)</p> <p>“Blood, Toil, Tears and Sweat” by Winston Churchill (1940)</p> <p><i>Travels with Charley: In Search of America</i> by John Steinbeck (1962)</p> <p><i>I Know Why the Caged Bird Sings</i> by Maya Angelou (1969)</p> |

**\*\*Seminal historical texts that all students are expected to read**

<sup>24</sup> See Appendix B for other texts illustrative of Grades 6-8 text complexity.

# Reading and Literature Standards

## Grasping specific details and key ideas

### Core Standards – Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to support understanding in discussion and in writing.
2. Articulate the text's main ideas and themes and provide a summary that captures the key supporting details, without taking a position or expressing an opinion.
3. Explain in detail how events, ideas, and characters unfold in the text and interact with one another.

### Standards – Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. infer themes when they are not explicitly stated and provide evidence on which those inferences are based
- b. analyze the development of the narrative, describing how particular incidents advance or foreshadow the plot
- c. recognize how the setting unfolds over the course of the text and describe its significance to the work
- d. build on an author's explicit descriptions and other evidence to draw reasonable conclusions about characters and how they interact, change, and influence the central events
- e. describe how a play unfolds and how particular lines of dialogue propel the action, reveal aspects of a character, or provoke a decision
- f. analyze how patterns of imagery in a poem contribute to its overall theme or meaning

#### Informational Text

- a. summarize a text without expressing a personal opinion by drawing on the author's specific description of events or information
- b. determine how key ideas or concepts build on one another to reveal an overarching theme or idea

## Observing craft and structure

### Core Standards – Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and explain how specific word choices shape the meaning of the text.
5. Explain the text's structure, including how specific sentences, paragraphs, and larger portions build on each other and contribute to the whole of the text.
6. Compare and contrast how two or more texts written on similar topics or themes differ in their focus and key details.

### Standards – Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. analyze how the author's choice of specific words or details contributes to the understanding of events and characters or to the tone of a narrative
- b. trace the specific comparisons made by similes, metaphors, and analogies and explain how they contribute to the meaning of the text
- c. compare similar ideas and themes as well as character types in myths, folktales, and legends from different cultures

- d. analyze the impact of line breaks and stanzas on the meaning of a poem and acts, scenes, and stage directions on the meaning of a drama
- e. compare the events, characters, ideas, and themes in texts written by the same author or on similar topics or themes

#### Informational Text

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- a. interpret the connotative meaning of closely related words and phrases as they are used in the text (e.g., *angry* versus *irate*)
- b. describe how an author organizes the explanation or argument, as well as the ways in which the text's structure, language, and examples support its purpose
- c. examine the structure of a Web site or other electronic text and describe how it organizes information and links to additional sources

### Integrating information and evaluating evidence

#### Core Standards — Students can and do:

- 7. Interpret information presented graphically or visually in print, videos, or electronic texts and explain how this information clarifies and contributes to the text.
- 8. Analyze the structure and content of an argument, including its main claims or conclusions, supporting premises, and evidence.
- 9. Determine the point of view or purpose represented in the text, assessing how it shapes the content.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

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- a. compare the points of view from which different novels and poems are told, as well as the viewpoints of different characters in a drama
- b. compare the fictional portrayal of a time, place, or character to historical sources from the period to determine which historical details have been emphasized, deleted, or changed in the fictional portrayal

##### Informational Text

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- a. interpret factual and quantitative data presented in diverse formats (including maps, charts, and diagrams as well as electronic media) and explain how this information clarifies or contributes to the text
- b. distinguish between fact, opinion, and reasoned judgment presented in essays, speeches, and critiques
- c. evaluate the strength of an argument's premises and specific claims as well as the degree to which each is supported by evidence
- d. compare and contrast the viewpoints and use of evidence of two different authors writing about the same topic

### Developing habits for reading complex text

#### Core Standards — Students can and do:

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and arguments that match purpose to task and address familiar as well as somewhat distant audiences (e.g., mayor, readers of school or neighborhood newspaper).

### Conducting research

#### Core Standards — Students can and do:

2. Perform short, focused research projects that demonstrate understanding of the material under investigation and generate additional related questions for research.
3. Gather information independently using a variety of relevant print and digital resources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered.
5. Represent and cite accurately the data, conclusions, and opinions of others, quoting and paraphrasing them into one's own work while avoiding plagiarism.
6. Provide full bibliographic information for print and digital sources in a standard format and document quotations, paraphrases, and other information.

### Revising writing

#### Core Standards — Students can and do:

7. With some guidance and support from peers and adults, strengthen writing through revising, editing, or beginning again to ensure logical organization, precision of word choice, and coherence.

### Using tools and technology

#### Core Standards — Students can and do:

8. Use technology and other tools to produce, revise, and distribute writing, as well as interact online with others about writing, including responding to and providing feedback

### Developing proficiency in a range of writing

9. Create writing over extended timeframes (time for reflection and revision) and shorter timeframes (a single sitting or a day or two), responding to specific sources.

Focus by grade level:

- Grade 6: Conveying the main ideas and key details of literary or informational sources at the 6-8 grade band level of text complexity and content
- Grade 7: Analyzing the contents of literary or informational sources at the 6-8 grade band level of complexity and content
- Grade 8: Comparing or evaluating the contents of literary or informational sources at the 6-8 grade band level of complexity and content

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## Standards — Students can and do (by key text type):<sup>25</sup>

### Narratives

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- a. orient the reader by establishing a situation, introducing characters, setting, and location, or by backfilling information after entering immediately into the storyline
- b. create an organizing structure in which events are logically or causally sequenced
- c. in producing a story, create a plot with well-structured episodes (e.g., initiating event, complicating action, resolution)
- d. use a variety of temporal words, phrases, and clauses to convey sequence, to shift from one time frame to another, and to show the relationships among events
- e. use relevant, specific details and literary devices, such as imagery and metaphor, purposefully to develop setting, plot, and character
- f. use techniques such as pacing, dialogue, or foreshadowing to highlight the significance of events or create particular effects (e.g., tension or suspense)
- g. show internal mental processes to develop complex characters and convey their needs, motives, and emotional responses
- h. provide an engaging conclusion, such as a surprise ending, a reflection, or a conclusion that returns to the beginning

### Informative and Explanatory Texts

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- a. establish the topic in an introduction that provides a sense of what's to follow
- b. develop the subject through relevant and specific facts, concrete details, quotations, or other information and examples
- c. organize specific information under broader concepts or categories and provide headings, figures, tables, or diagrams when useful
- d. use factual, precise language and maintain a formal, objective style when appropriate
- e. use strategies appropriate to informational and explanatory texts such as defining, classifying, comparing/contrasting, and cause/effect
- f. use appropriate links to join ideas and create cohesion
- g. provide only accurate and relevant information
- h. provide a conclusion that follows logically from the information or explanation presented

### Arguments

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- a. introduce a claim about a topic or concept
- b. support claims with logical reasons
- c. support reasons with detailed and relevant evidence

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<sup>25</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

- d. signal the relationship between reasons, or between reasons and evidence, using words, phrases, and clauses (e.g., *another reason, such as, therefore, in addition*)
- e. sustain an objective style and tone appropriate for making a case when appropriate to the discipline or context
- f. include only relevant information and evidence in support of claims
- g. provide a concluding statement or section that offers reflections, a restatement, or recommendations that follow from the argument

## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards – Students can and do:

1. Participate productively one on one, in small groups, and as a whole class, joining in discussions and remaining flexible and adaptable as participants.
2. Sustain concentration on information presented orally, visually, or multi-modally and confirm understanding by drawing well-supported inferences about the purpose and meaning of the information.

#### Standards – Students can and do (by key communication type):

##### Classroom discussions and collaboration

- a. come to discussions having completed reading or other preparation in advance and draw on that material explicitly in discussions
- b. determine a speaker's attitude or point of view toward a topic presented orally or through other media
- c. ask questions to check understanding to clarify the main ideas and the supporting evidence of material presented orally or through other media
- d. advance a discussion by answering questions precisely and sharing specific factual knowledge and observations supported by credible evidence
- e. interpret information presented in visual and digital formats and explain how this data clarifies and contributes to a discussion or information presented orally
- f. support productive teamwork by setting clear goals and deadlines, monitoring progress and participation of each team member, and taking different views into account and modifying own views when indicated in light of what others say

### Exchanging information and speaking effectively

#### Core Standards – Students can and do:

3. Share experiences, opinions, and other information, gaining and maintaining the interest and response of listeners.
4. Use appropriate tone and phrasing for emphasis, demonstrating a growing command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

#### Standards – Students can and do (by key communication type):

### Presentation of ideas and information

- a. organize and present information about situations, topics, or texts that emphasize salient points and clarify and support claims and findings with pertinent and specific descriptions, facts, and examples in ways that are accessible and verifiable to listeners
- b. use gesture, tone, phrasing, and pace for emphasis
- c. incorporate visual displays and electronic media when helpful and in a manner that strengthens the presentation
- d. perform dramatic readings of various prose and poetry speaking with clarity, fidelity, and responsiveness to the text, noting changes in the situation, mood, or tone of text

## Language Development Standards

### Conventions

In grades 6–8, students develop a firm command of sentence structure. They are able to form sentences of varying structures, place phrases and clauses properly within a sentence, and use a variety of coordinating and subordinating conjunctions to express relationships between sentence parts. Students have also mastered pronoun use, ensuring proper case, number, and person and avoiding vagueness. They understand and use verb voice and mood, and identify and correct inappropriate shifts in pronouns and verbs. Students set off nonrestrictive or parenthetical elements from the rest of the sentence with proper punctuation and use a comma before a coordinating conjunction in a compound sentence. They vary sentence patterns for effect and edit writing for redundancy and wordiness.

Key Terms: conjunction; dash; nonrestrictive/parenthetical element; indicative, imperative, interrogative, conditional, and subjunctive mood; parentheses; phrase and clause; pronoun case, number, and person; simple, compound, complex, and compound-complex sentence; active and passive voice

### Grammar and usage

#### Core Standards — Students can and do:

1. Form compound, complex, and compound-complex sentences.
2. Place phrases and clauses within a sentence, avoiding misplaced and dangling modifiers.\*
3. Ensure that pronouns are in the proper case (subjective, objective, possessive).
4. Recognize and correct inappropriate shifts in pronoun number and person.\*
5. Recognize and correct vague pronouns with unclear or ambiguous antecedents.\*
6. Form and use verbs in the active and passive voice.
7. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
8. Avoid inappropriate shifts in verb voice and mood.\*

### Mechanics

#### Core Standards — Students can and do:

9. Use punctuation to set off nonrestrictive/parenthetical elements with commas, parentheses, or dashes.\*
10. Use a comma before a coordinating conjunction in a compound sentence.

## Word choice and style

### Core Standards — Students can and do:

11. Use verbs in the active and passive voice and in the conditional and subjunctive moods to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).
12. Vary sentence patterns for meaning, reader/listener interest, and style.\*
13. Choose words and phrases to express ideas precisely and concisely, avoiding wordiness and redundancy.\*<sup>26</sup>

### Grade-Level Focus

#### Focus by Grade-Level

Grade 6: Pronouns (Conventions Standards #s 3-5)

Grade 7: Sentence structure (Conventions Standards #1, #2, #12)

Grade 8: Verb voice and mood (Conventions Standards #s 6-8, #11)

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In grades 6–8, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering the word's use in a broader context that includes the content of the paragraph in which the word appears and the overarching structure of the text. They habitually verify their inferences of word meanings. They interpret a variety of figurative language found in what they read. They make distinctions among words based on connotation. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly. This includes a continuing focus on “Tier 2” words and phrases (those that commonly appear in writing but not in spoken language), “Tier 3” words and phrases (those that are specific and important to particular disciplines).

## Determining the meaning of words

### Core Standards — Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using knowledge of roots, prefixes, and suffixes
  - using semantic clues, such as sentence and paragraph context as well as the organizational structure of the text (e.g., cause and effect, comparison and contrast)
  - using syntactic clues, such as using its position within the sentence as a guide to whether it is a subject, verb, or object
  - consulting reference materials, including glossaries, dictionaries, and thesauruses, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).
4. Interpret figurative language, including metaphors, similes, and idioms.

<sup>26</sup> Conventions standards noted with an asterisk (\*) need to be revisited by students in subsequent grades. See Appendix A for a complete listing.

## Understanding the nuances of words (denotations and connotations)

### **Core Standards — Students can and do:**

5. Distinguish a word from other words with similar but not identical meanings (synonyms).

## Acquiring vocabulary

### **Core Standards — Students can and do:**

6. Acquire and use a grade-appropriate vocabulary of Tier 2 words taught directly and gained through reading.
7. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.

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## Grade 6 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 6, students apply the reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read text at the 6-8 grade band level independently, with scaffolding likely required for texts at the high end of the range.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 100% text at the 6-8 grade band level

100%

### Writing and Research

*In grade 6, students apply the writing standards to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter time frames, responding to specific sources by conveying the main ideas and key details of literary or informational sources at the 6-8 grade band level of complexity and content.

### Speaking and Listening

*In grade 6, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening Standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

*In grade 6, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions*

- Vocabulary standards applied to both reading, writing, speaking and listening
- **Grade-specific conventions focus:** Pronouns
  - Ensure that pronouns are in the proper case... (Conventions Standard #3)
  - Recognize and correct inappropriate shifts... (Conventions Standard #4)
  - Recognize and correct vague pronouns... (Conventions Standard #5)

## Grade 7 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 7, students apply the reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read text at the 6-8 grade band level independently and are introduced to 9-10 grade band level “stretch” texts, which will likely require scaffolding.*

- Reading Standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 90% at the 6-8 grade band level, 10% at the 9-10 grade band level

90%

10%

### Writing and Research

*In grade 7, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by analyzing the contents of literary or informational sources at the 6-8<sup>th</sup> grade band level of complexity and content.

### Speaking and Listening

*In grade 7, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

*In grade 7, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Sentence structure
  - Form compound, complex... (Conventions Standard #1)
  - Place phrases and clauses... (Conventions Standard #2)
  - Vary sentence patterns... (Conventions Standard #12)

## Grade 8 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 8, students apply the reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on reading text at the 6-8 grade band level independently as well as on sustained practice with 9-10 grade band level “stretch” texts, which may require scaffolding.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 70% at the 6-8 grade band level, 30% at the 9-10 grade band level

70%

30%

### Writing and Research

*In grade 8, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by analyzing the contents of literary or informational sources at the 6-8<sup>th</sup> grade band level of complexity and content.

### Speaking and Listening

*In grade 8, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

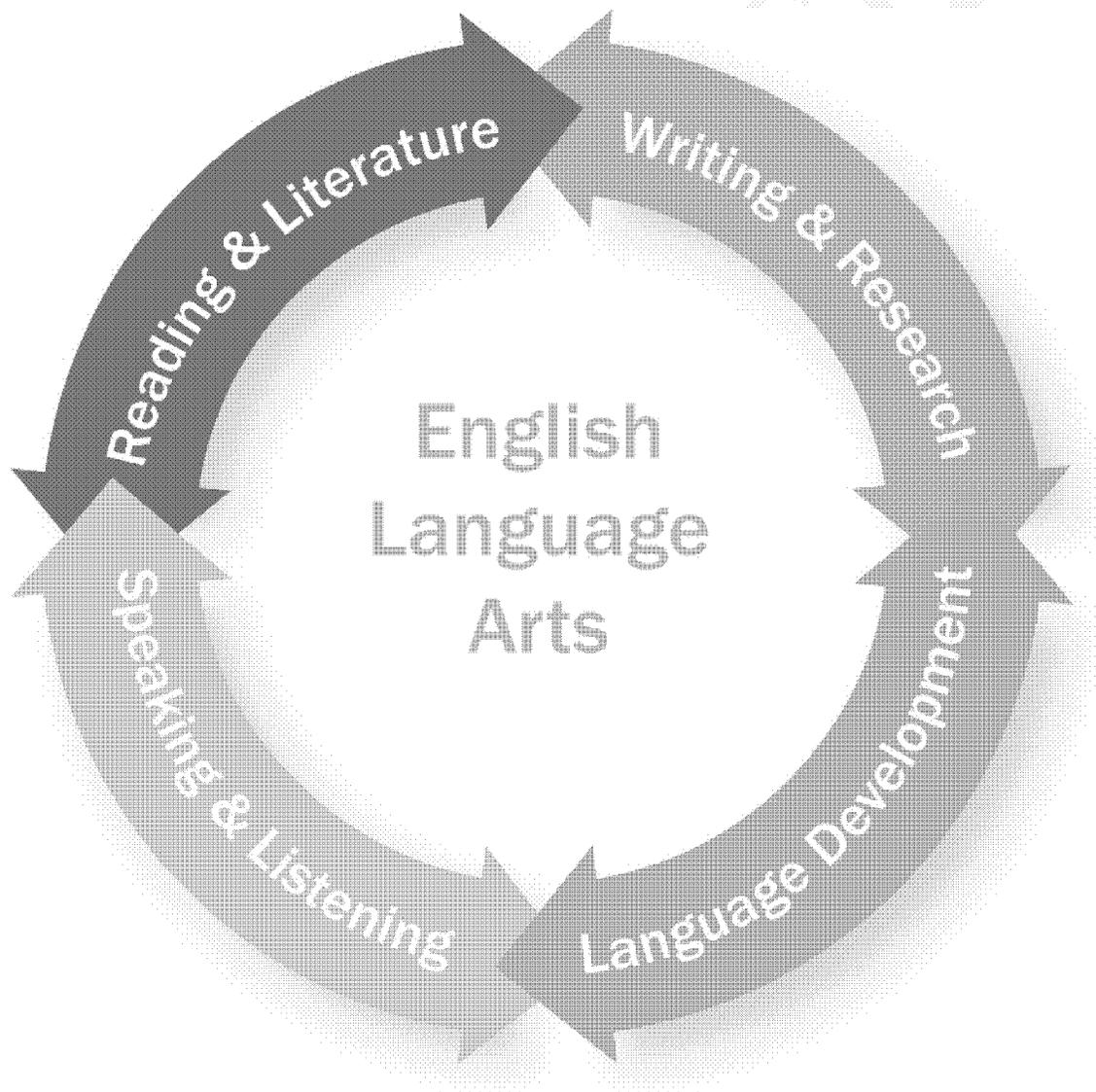
*In grade 8, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Verb voice and mood
  - Form and use verbs in the active and passive voice (Conventions Standard #6)
  - Form and use verbs in the indicative... (Conventions Standard #7)
  - Avoid inappropriate shifts... (Conventions Standard #8)
  - Use verbs in the ...voice ...mood... (Conventions standard #11)

# English Language Arts

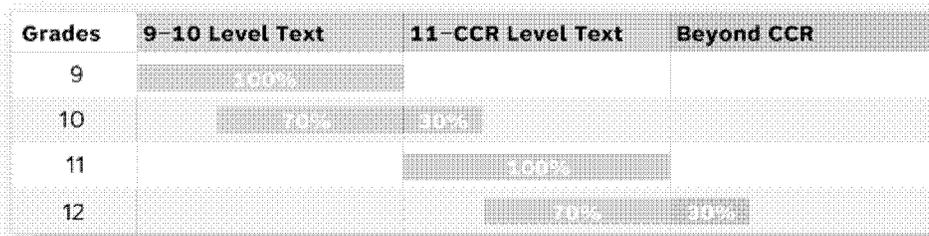
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## Grades 9–10



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade



While advancing through grades 9–10, students must engage with texts of steadily increasing complexity.

- **In grade 9**, students focus on reading texts in the 9–10 grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 10**, students focus on reading texts in the 9–10 grade band level (70 percent) independently and are introduced to texts in the 11–CCR grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 9–10<sup>27</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts   | Quantitative Measures of Texts  |
|---|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Implicit, subtle; graphic representations are essential to meaning; texts of increasing length</li> <li>• <i>Purpose</i>: Multiple; often implicit</li> <li>• <i>Style and Language</i>: Demanding; many literary devices; extensive use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness</i>: Several ideas/concepts; abstract</li> <li>• <i>Relationships</i>: Several connections; implicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle challenging themes, consider multiple perspectives, and understand experiences distinctly different from one’s own; cultural and historical knowledge useful for understanding characters, settings, and allusions; extensive discipline-specific content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences as well as their interests, motivations, and maturity level.</p>  |   |

<sup>27</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for 9–10

| Narratives   | Drama  | Poetry  | Informational Text  |
|--|--|---|---|
| <i>At this level, includes the subgenres of adventure stories, biographies, memoirs, historical fiction, mysteries, science fiction, mysteries, myths, science fiction, realistic fiction, allegories, parodies, satire, and graphic novels.</i> | <i>At this level, includes one-act and multi-act plays both in written form and on film.</i> | <i>At this level, includes the subgenres of narrative poems, lyrical poems, free verse, odes, ballads, and epics.</i> | <i>At this level, Includes such subgenres as exposition and argument in the form of essays, speeches, opinion pieces as well as other documents and digital media sources on a range of topics.</i> |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>28</sup>

*The Odyssey* by Homer (8<sup>th</sup> century B.C.E.) translated by Robert Fagles

*The Grapes of Wrath* by John Steinbeck (1939)

*The Killer Angels* by Michael Shaara (1975)

*In the Time of the Butterflies* by Julia Alvarez (1994)

*The Glass Menagerie* by Tennessee Williams (1944)

“Song” by John Donne (1635)

“The Raven” by Edgar Allen Poe (1845)

“Loveliest of Trees” by A.E. Houseman (1896)

“I Am Offering This Poem to You” by Jimmy Santiago Baca (1977)

#### Illustrative Informational Texts

“Second Inaugural Address” by Abraham Lincoln (1865)\*\*

“State of the Union Address” by Franklin Delano Roosevelt (1941)

“Remarks to the Senate in Support of a Declaration of Conscience” by Margaret Chase Smith (1950)

“Address at the March on Washington” by Martin Luther King, Jr. (1963)\*\*

“A Quilt of a Country” by Anna Quindlen (2001)

**\*\*Seminal historical texts that all students are expected to read**

<sup>28</sup> See Appendix B for other texts illustrative of Grades 9–10 text complexity.

## Reading and Literature Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to support analyses in discussion and in writing.
2. Articulate the theses and themes and summarize how they develop over the course of the text and how they are expressed by the key details.
3. Analyze in detail how complex and multifaceted events, ideas, and characters unfold and interact over the course of the text.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. draw on specific details to describe how the events, characters, or setting develops over the course of the drama, narrative poem, or story
- b. summarize the development of a theme and describe how that theme resonates throughout the text
- c. weave together the details of texts to form a comprehensive understanding of its characters, including their overlapping or competing motivations
- d. describe how the accumulation of specific phrases and images within poems contributes to a theme as a whole

##### Informational Text

- a. demonstrate a command of the precise details of the exposition or argument, drawing on specific points to support an understanding of a part or the text as a whole
- b. analyze the development of theses or explanations in texts and summarize succinctly the key relationships among ideas and supporting details

### Observing craft and structure

#### Core Standards — Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and explain how specific word choices shape the meaning and tone of the text.
5. Analyze the structure of complex text and its parts, including how specific sentences, paragraphs, and larger portions build on each other and contribute to the whole of the text.
6. Compare and contrast the content and style of two or more texts written on similar topics or themes.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

- a. analyze how the precise choice of words and phrases creates vivid images and sets the tone, mood, and theme of the text; compare the impact of words selected by the author to similar words with different connotations

- b. explain how authors manipulate time (e.g., flashbacks, foreshadowing, pacing) to create suspense, mystery, or humor
- c. evaluate how playwrights use soliloquies to portray the internal thinking and feeling of characters
- d. compare and contrast similarities and differences in styles and forms of poems on a similar theme or topic

#### Informational Text

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- a. analyze how the author uses specific words and metaphors to establish tone or to make illuminating comparisons in an argument, explanation, or description
- b. explain how the author structures information or an argument to emphasize key points and advance a point of view
- c. analyze how different authors organize and categorize similar information and describe the impact of those different approaches

### Integrating information and evaluating evidence

#### Core Standards — Students can and do:

- 7. Synthesize information presented graphically or visually in print, videos, or electronic texts with the information provided by the text.
- 8. Follow and evaluate the logic and reasoning of the text, including assessing whether the evidence provided is sufficient to support the claims.
- 9. Analyze the point of view or purpose represented in the text, assessing how it shapes the content, style, and tone.

#### Standards — Students can and do (by key text type):

##### Narratives, Drama, and Poetry

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- a. explain how a story unfolds when it is told by alternating or multiple narrators with different points of view
- b. analyze literature in terms of its connection to related historical and cultural events and contexts

##### Informational Text

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- a. interpret complex, multifaceted, quantitative, or technical information presented in maps, charts, illustrations, graphs, and time lines
- b. provide an account of an author's precise claims, including how specific assertions are defined and distinguished from opposing statements
- c. analyze the explicit and implicit premises of an argument and determine if the conclusions reached are logically justified by the evidence presented in the text
- d. compare how different authors construct and develop different points of views or perspectives on similar events or issues by assessing their assumptions, evidence, and reasoning

### Developing habits for reading complex text

#### Core Standards — Students can and do:

- 10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write informative and explanatory texts and arguments that match purpose to task and address familiar as well as more distant, unknown and general audiences (e.g., peers, elected officials and policy makers, community members).

### Conducting research

#### Core Standards — Students can and do:

2. Demonstrate proficiency at performing short, focused research projects as well as more sustained inquiries that demonstrate an increasing command of the subject under investigation.
3. Assemble evidence independently from authoritative and credible print and digital sources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered and determine the strengths and limitations of each source and avoiding over-reliance on any one source.
5. Represent and cite accurately the data, conclusions, and opinions of others, effectively incorporating them into one's own work while avoiding plagiarism.
6. Cite print or electronic sources correctly and document quotations, paraphrases, graphics, and other information using a standard format.

### Revising writing

#### Core Standards — Students can and do:

7. Strengthen writing through revision, editing, or beginning again to ensure to ensure logical organization, precision of word choice, and coherence.

### Using tools and technology

#### Core Standards — Students can and do:

8. Use technology and other tools to produce, revise, and distribute writing, as well as to interact online with others about writing, including responding to and providing feedback.

### Developing proficiency in a range of writing

9. Create writing over extended timeframes (time for reflection and revision) and shorter timeframes (a single sitting or a day or two), responding to specific sources.

Focus by grade level:

Grade 9: Analyzing the content of literary or informational sources at the 9-10 grade band level of text complexity and content

Grade 10: Comparing or evaluating the contents of literary or informational sources at the 9-10 grade band level of complexity and content

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## Standards — Students can and do (by key text type):<sup>29</sup>

### Narratives

By high school, students are most often using narrative writing as a technique embedded within other genres. They use narrative writing to inform and persuade. They may, for example, provide a brief anecdote to support a point made in an argument or a scenario to illustrate an explanation. In such cases, narrative writing is a technique rather than a form in itself.

### Informative and Explanatory Texts

- a. provide a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance
- b. develop a complex subject through relevant and specific facts, concrete details, quotations, or other information and examples
- c. organize complex information into categories that make clear distinctions and provide headings, figures, tables, and diagrams when useful
- d. employ discipline-specific and technical vocabulary and maintain a formal, objective style
- e. adapt strategies to present information and explanations (e.g., if/then, extended definitions, classification, comparison/contrast, and cause/effect) and employ them to manage the complexity of a topic
- f. link ideas with transitions and by varying sentence structures to express relationships between ideas and create cohesion
- g. emphasize the most significant information and confirm the accuracy of key points
- h. provide a conclusion that articulates the implications and significance of the information or explanation

### Arguments

- a. establish a substantive claim and distinguish it from alternate or opposing claims
- b. support claims with logical reasons
- c. provide relevant and sufficient evidence from credible sources in support of the reasons
- d. explain how the evidence links to the claim
- e. develop the argument in part based on knowledge of the audience (e.g., building bridges by opening with areas of agreement)
- f. convey relationships between reasons, as well as between reasons and evidence, and signal alternative claims using words, phrases, and clauses (e.g., *on the other hand*, *however*, *but*, *nevertheless*, *because*, *therefore*, *in addition*).
- g. maintain a formal style when appropriate to the discipline or context
- h. enhance the reliability of the argument by employing strategies such as paraphrasing or quoting explicitly from a credible, authoritative source
- i. provide a concluding statement or section that enhances the argument, using strategies such as articulating the implications, summing up the key factors, or weighing the evidence to support the claim

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## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively in a range of structured interactions—both interpersonally and in groups—exchanging information constructively and with confidence.

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<sup>29</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

2. Sustain concentration on complex information presented orally, visually, or multi-modally and confirm understanding by summarizing, analyzing, and elaborating on key ideas.

### **Standards — Students can and do (by key communication type):**

#### Classroom discussions and collaboration

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- a. come to discussions having researched, studied, and taken notes on topics or issues under study and draw upon that preparation in discussions
- b. determine the key ideas as well as the tone and mood of communications presented orally or through other media
- c. ask questions to test the evidence that supports a speaker’s claims and conclusions presented orally or through other media
- d. build on essential information from others’ input and respond constructively by making cogent and verifiable comments that aid in the furthering and deepening of discussions
- e. integrate multiple streams of data presented through a variety of multi-modal media into a cohesive, meaningful understanding of the information
- f. support productive teamwork by identifying the comments and claims made on all sides of an issue; evaluating the degree to which each claim is supported by evidence; sifting, summarizing, and putting to use the most important ideas developed by the group; and determining what additional information, research, and tasks are required in order to move the group towards its goals

#### Exchanging information and speaking effectively

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### **Core Standards — Students can and do:**

3. Present information and points of view, structuring and organizing comments to support their purposes and guide the listener.
4. Vary intonation and phrasing for emphasis and effect, demonstrating command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

### **Standards — Students can and do (by key communication type):**

#### Presentation of ideas and information

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- a. organize and present complex information about situations, topics, or texts so that listeners can follow the line of thought by grouping related ideas, using transitional markers, and clarifying one’s claims with evidence that is verifiable and accessible
- b. align verbal (tone, phrasing, pacing) and nonverbal strategies (gestures and facial expressions) for emphasis and effect
- c. make strategic use of multimedia elements and visual displays of data to enhance understanding
- d. perform dramatic readings of various prose and poetry, speaking with clarity, fidelity, and responsiveness to the text, reflecting on syntax and diction for cues regarding emphasis and rhythm

## **Language Development Standards**

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### **Conventions**

In high school, students gain a broad range of sophisticated language skills to enhance meaning, achieve stylistic effect, and create subtle links between and among ideas. They maintain parallel structure. They acquire a more conceptual understanding of usage and the limits of “rules.” They use a full range of punctuation, including ellipses, semicolons,

colons, and hyphens, and have a fuller understanding of how to employ commas and dashes. They make use of a wide range of phrases and clauses for effect. They maintain a consistent style and tone, using a style manual appropriate to the discipline in which they are working to help conventionalize their writing.

Key Terms: colon, ellipses, hyphen, semicolon, parallel structure, verbal

## Grammar and usage

### Core Standards — Students can and do:

1. Use parallel structure in writing.
2. Consult references (e.g., *Merriam-Webster's Dictionary of English Usage*) as needed to resolve particular usage issues, particularly when the usage is contested.

## Mechanics

### Core Standards — Students can and do:

3. Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie* but not *He wore a light[,] blue suit*).
4. Use a comma, ellipses, or dash to indicate a pause or break.
5. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.
6. Use a colon to introduce a list or a quotation.
7. Observe the conventions concerning using hyphens to join words.

## Word choice and style

### Core Standards — Students can and do:

8. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to add variety and interest to writing.
9. Maintain consistency in style and tone.
10. Write and edit work so that it conforms to the guidelines in a style manual.

### Focus by Grade-Level

Grade 9: Style (Conventions Standards #9, #10)

Grade 10: Advanced punctuation use (Conventions Standards #s 3-7)

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In high school, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering multiple levels of context (sentence, paragraph, and text levels) and the word's history. They habitually verify their inferences of word meanings. They interpret a wide range of figurative language found in what they read and consider its contribution to the text. Possessing a highly developed sense of the shadings among words with similar denotations,

they evaluate an author’s or speaker’s choice of words as well as alternatives to the words chosen. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly. This includes a continuing focus on “Tier 2” words and phrases (those that commonly appear in writing but not in spoken language), “Tier 3” words and phrases (those that are specific and important to particular disciplines).

### Determining the meaning of words

#### **Core Standards — Students can and do:**

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using knowledge of roots, prefixes, and suffixes
  - using context, including syntactic and semantic clues, at the sentence, paragraph, and text levels
  - consulting reference materials, including general and specialized dictionaries and thesauruses, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word’s meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).
4. Interpret figurative language and analyze its role within the text.

### Understanding the nuances of words (denotations and connotations)

#### **Core Standards — Students can and do:**

5. Assess and explain the merits of the choice of one word over another in reading, writing, speaking, and listening.
6. Gain a clearer sense of a word’s meaning and use by comparing it to other words with similar but not identical meanings (synonyms).

### Acquiring vocabulary

#### **Core Standards — Students can and do:**

7. Acquire and use a grade-appropriate vocabulary of Tier 2 words taught directly and gained through reading.
8. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.

## Grade 9 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 9, students apply the core reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read 9-10 grade band text independently, with scaffolding likely required for texts at the high end of the range.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 100% 9-10 Band Text

100%

### Writing and Research

*In grade 9, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus: Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by analyzing the contents of literary or informational sources at the 9-10<sup>th</sup> grade band level of complexity and content.

### Speaking and Listening

*In grade 9, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

*In grade 9, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus: Style**
  - Maintain consistency ... (Conventions Standard #9)
  - (Style manual)... (Conventions Standard #10)

## Grade 10 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 10, students apply the core reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read 9-10 grade band text independently as well as on sustained practice with 11-CCR band “stretch” texts, which will likely require scaffolding.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 70% 9-10 Band Text; 30% 11-CCR text

70%

30%

### Writing and Research

*In grade 10, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by analyzing the contents of literary or informational sources at the 9-10<sup>th</sup> grade band level of complexity and content.

### Speaking and Listening

*In grade 10, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

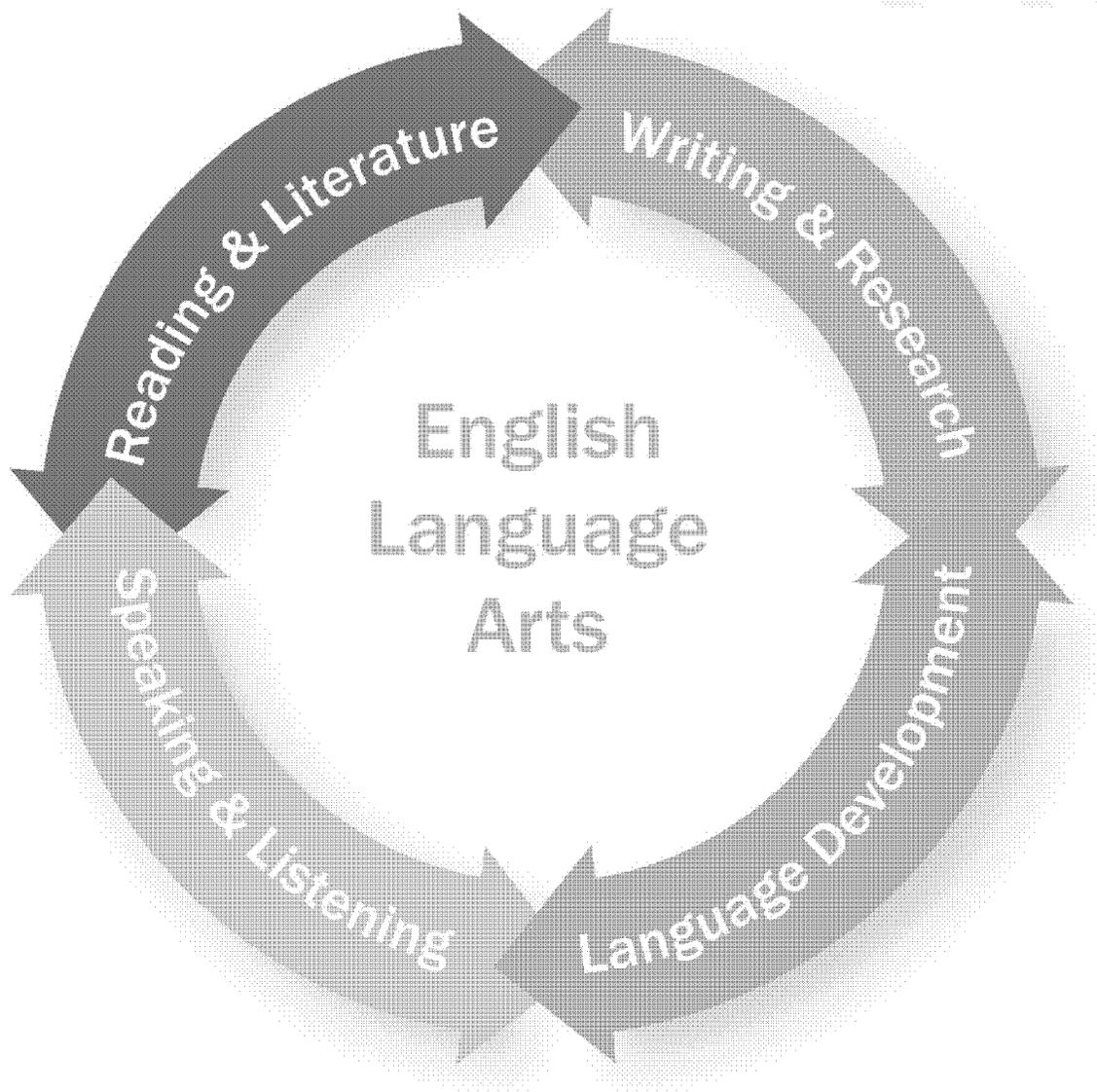
*In grade 10, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Advanced Punctuation Use
  - Coordinate adjectives ... (Conventions Standard #3)
  - Comma/dash/ellipsis... (Conventions Standard #4)
  - Semicolon ... (Conventions Standard #5)
  - Colon ... (Conventions Standard #6)
  - Hyphen ... (Conventions Standard #7)

# English Language Arts

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Grades 11–CCR



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grad

| Grades | 9–10 Level Text | 11–CCR Level Text | Beyond CCR |
|--------|-----------------|-------------------|------------|
| 9      | 100%            |                   |            |
| 10     | 70%             | 30%               |            |
| 11     |                 | 100%              |            |
| 12     |                 | 70%               | 30%        |

While advancing through grades 11-12, students must engage with texts of steadily increasing complexity.

- **In grade 11**, students focus on reading texts in the 11-CCR grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 12**, students focus on reading texts in the 11-CCR grade band level (70 percent) independently and are introduced to texts in the “Beyond CCR” grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 11–CCR<sup>30</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts   | Quantitative Measures of Texts  |
|---|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Implicit, complex, unconventional; sophisticated graphic representations are essential to meaning; texts are sufficiently long to address complex subjects</li> <li>• <i>Purpose</i>: Multiple; often implicit and may be hidden or obscure</li> <li>• <i>Style and Language</i>: Unfamiliar, demanding, complex; many literary devices; extensive use of Tier 2 and 3 words and figurative language; language may be intentionally or unintentionally ambiguous</li> <li>• <i>Richness</i>: Many ideas/concepts; highly abstract; high information density</li> <li>• <i>Relationships</i>: Many implicit, complex, interwoven connections</li> <li>• <i>Knowledge Demands</i>: Ability to handle one or more complex themes, consider multiple and unusual perspectives, and understand experiences distinctly different from one’s own; cultural and historical knowledge useful for understanding characters, settings, and allusions; extensive, perhaps specialized discipline-specific content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |
| <p>Professional Judgment that weighs students’ prior knowledge and life experiences, students’ interests, motivations, and maturity level.</p>  |   |

<sup>30</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

### Mix of Key Text Types for 11–CCR

| Narratives  | Drama   | Poetry   | Informational Text   |
|---|---|--|--|
| At this level, includes the subgenres of adventure stories, biographies, memoirs, historical fiction, mysteries, science fiction, mysteries, myths, science fiction, realistic fiction, allegories, parodies, satire, and graphic novels. | At this level, includes one-act and multi-act plays both in written form and on film. | At this level, includes the subgenres of narrative poems, lyrical poems, free verse, odes, ballads, and epics. | At this level, Includes such subgenres as exposition and argument in the form of essays, speeches, opinion pieces as well as other documents and digital media sources on a range of topics. |

#### Illustrative Texts for Narratives, Drama, and Poetry<sup>31</sup>

- Pride and Prejudice* by Jane Austen (1813)
- Black Boy* by Richard Wright (1945)
- Their Eyes Were Watching God* by Zora Neale Hurston (1937)
- The Bluest Eye* by Toni Morrison (1970)
- The Namesake* by Jhumpa Lahiri (2003)
- The Importance of Being Earnest* by Oscar Wilde (1895)
- Death of a Salesman* by Arthur Miller (1949)
- “Ode on a Grecian Urn” by John Keats (1820)
- “Because I Could Not Stop for Death” by Emily Dickinson (1890)

#### Illustrative Informational Texts

- The Declaration of Independence* by Thomas Jefferson (1776)\*\*
- The Crisis* by Thomas Paine (1776)
- Walden* by Henry David Thoreau (1854)
- “Politics and the English Language” by George Orwell (1946)
- “Letter from a Birmingham Jail” by Martin Luther King (1963)\*\*
- “Mother Tongue” by Amy Tan (1990)

**\*\*Seminal historical texts that all students are expected to read**

<sup>31</sup> See Appendix B for other texts illustrative of Grades 11–CCR text complexity.

# Reading and Literature Standards

## Grasping specific details and key ideas

### Core Standards – Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to defend and challenge analyses in discussion and in writing.
2. Articulate the text's theses and themes and provide a summary that clarifies the relationships among ideas and the connections between key details.
3. Analyze in detail how complex and multifaceted events, ideas, and characters unfold and influence one another over the course of the text.

### Standards – Students can and do (by key text type):

#### Narratives, Drama, and Poetry

- a. analyze where the author chooses to focus and which details the author chooses to emphasize
- b. analyze how multiple themes and ideas in the text interact and build on one another
- c. evaluate the extent to which setting shapes the course of events and sets the mood
- d. trace the origins and evolution of the traits, motivations, and relationships among characters and how they interact to influence the plot and its resolution
- e. describe how the poet develops a central image, preoccupation, or idea through the accumulation of specific phrases and images

#### Informational Text

- a. demonstrate an understanding of the precise elements of an author's explanation or argument, including the distinctions the author makes between different ideas or information
- b. scrutinize the details within specific portions of texts and connect the insights gained to develop an understanding of the text as a whole
- c. analyze how the text captures the interaction between complex ideas or multifaceted events

## Observing craft and structure

### Core Standards – Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and analyze how word choices have a significant effect on the meaning and tone of the text.
5. Analyze the ways the author chooses to structure the text, including how to present complex ideas and events and where to begin and end.
6. Compare and contrast the choices different authors make in treating similar topics or themes, including content, style, and tone.

## **Standards – Students can and do (by key text type):**

### Narratives, Drama, and Poetry

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- a. analyze how the author’s use of language impacts the text, including the degree of formality of the diction and how it is evocative of a particular setting (e.g., a courtroom, a rural town)
- b. evaluate how authors create meaningful ambiguity and multiple layers of meaning in poetry, drama, and other narratives
- c. analyze how an author choice of where to begin a story, poem, or drama impacts the overall plot structure
- d. contrast alternative treatments of the same dramatic work in different stage productions and evaluate how the directors’ different interpretations relate to evidence within the script
- e. analyze how the author draws upon and transforms fictional or historical source material (e.g., how Shakespeare draws on Plutarch or a story in Ovid)

### Informational Text

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- a. describe how the choice of a particular word, phrase, or series of words can impact significantly the meaning of a document (e.g., contract, court opinion, essay)
- b. evaluate how the author’s choice of structure contributes to the effectiveness of the exposition or argument
- c. compare and contrast presentations of the same topic in different media and describe the differences in focus, organization, and links to other sources

## **Integrating information and evaluating evidence**

### **Core Standards – Students can and do:**

7. Synthesize information presented graphically or visually in print, videos, or electronic texts and, when appropriate, note discrepancies of fact or interpretation (e.g., data in a table inconsistent with the author’s analysis).
8. Rigorously evaluate the logic and reasoning of the text, including assessing whether the evidence provided is relevant and sufficient.
9. Analyze how the point of view or purpose develops in the text and explain how it is revealed in the key details.

## **Standards – Students can and do (by key text type):**

### Narratives, Drama, and Poetry

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- a. compare points of view from which different stories are told and trace how they shift within a story and influence characterization and plot
- b. explain how dramatic irony created by the differences between what the audience or reader knows and what the characters know in a drama or narrative fiction creates suspense, anxiety, or humor

### Informational Text

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- a. synthesize ideas and data presented graphically and determine their purpose and relationship to the rest of the text (print or digital), noting any inconsistencies or discrepancies between the two
- b. evaluate the reasoning and rhetoric that support an argument or explanation, including assessing the sufficiency and relevance of the evidence as well as identifying any unsubstantiated statements or fallacious reasoning
- c. analyze documents of historical and literary significance for their premises, perspectives, and logical structure

## Developing habits for reading complex text

### **Core Standards – Students can and do:**

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

## Writing to reflect audience, purpose, and task

### **Core Standards – Students can and do:**

1. Write informative and explanatory texts and arguments that match purpose to task and are tailored to audiences with specific requirements (e.g., admissions officer, human resources officer, skeptical audience).

## Conducting research

### **Core Standards – Students can and do:**

2. Demonstrate proficiency at performing short, focused research projects as well as more sustained inquiries that synthesize multiple authoritative sources on a subject.
3. Analyze evidence independently gathered from multiple authoritative and credible print and digital sources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered and determine their usefulness and relevance for the specific audience, purpose, and task.
5. Represent and cite accurately the data, conclusions, and opinions of others, effectively incorporating them into one's own work while avoiding plagiarism.
6. Cite print or electronic sources correctly and document quotations, paraphrases, graphics, and other information using a standard format.

## Revising writing

### **Core Standards – Students can and do:**

7. Strengthen writing through revision, editing, or beginning again to ensure to ensure logical organization, precision of word choice, and coherence.

## Using tools and technology

### **Core Standards – Students can and do:**

8. Demonstrate command of technology and other tools to produce, revise, and distribute writing, as well as to interact online with others about writing, including responding to and providing feedback.

## Developing proficiency in a range of writing

9. Create writing over extended timeframes (time for reflection and revision) and shorter timeframes (a single sitting or a day or two), responding to specific sources.

Focus by grade level:

Grade 11: Analyzing the content of literary or informational sources at the 11-CCR grade band level of text complexity and content

Grade 12: Synthesizing or evaluating the contents of literary or informational sources at the 11-CCR grade band level of complexity and content

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## Standards – Students can and do (by key text type):<sup>32</sup>

### Narratives

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By high school, students are most often using narrative writing as a technique embedded within other genres. They use narrative writing to inform and persuade. They may, for example, provide a brief anecdote to support a point made in an argument or a scenario to illustrate an explanation. In such cases, narrative writing is a technique rather than a form in itself.

### Informative and Explanatory Texts

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- a. provide a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance
- b. develop complex subjects through judicious use of relevant and specific facts, details, quotations, examples, or other information
- c. organize and present information so that each new piece of information builds upon what precedes it to create a unified whole
- d. demonstrate command of discipline-specific and technical vocabulary when appropriate and adjust style as appropriate to the situation
- e. demonstrate control of a range of strategies to present complex information or explanations and employ them effectively to manage the complexity of the topic and accomplish the writer's purpose
- f. link ideas with transitions and by varying sentence structures to express the precise relationships among ideas and create cohesion
- g. provide a conclusion that articulates the implications and significance of the information or explanation

### Arguments

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- a. establish the importance of the issue, make a substantive claim, and distinguish it from alternate or opposing claims
- b. support claims with logical reasons
- c. provide relevant, sufficient, and convincing evidence from credible sources in support of the reasons
- d. make logical connections between the evidence and the claim
- e. develop the argument in part based on an awareness of the audience's values, knowledge of the issue, and possible biases
- f. convey relationships between reasons, as well as between reasons and evidence, and signal alternative claims using words, phrases and clauses (e.g., *on the other hand*, *however*, *but*, *nevertheless*, *because*, *therefore*, *in addition*)
- g. maintain a formal style when appropriate to the discipline or context
- h. enhance the credibility of the argument by demonstrating control of strategies, including paraphrasing or quoting from authoritative sources and citing logical consequences
- i. provide a concluding statement or section that enhances the argument, using strategies such as articulating the implications, summing up the key factors, or weighing the evidence to support the claim

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<sup>32</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

# Speaking and Listening Standards

## Listening closely and participating productively

### Core Standards – Students can and do:

1. Participate productively in a range of structured interactions—both interpersonally and in groups—exchanging information constructively and with confidence, adapting to different levels of formality.
2. Sustain concentration on complex information presented orally, visually, or multi-modally and confirm understanding by challenging or defending key ideas and supporting evidence.

### Standards – Students can and do (by key communication type):

#### Classroom discussions and collaboration

- a. come to discussions having formulated considered judgments on the topics or issues under study and draw upon that preparation in discussions
- b. evaluate the content and rhetoric of a speaker, noting when evidence is exaggerated or distorted
- c. ask questions that probe the reasoning and evidence that support the claims and conclusions made orally or through other media, including offering counter examples or other points of view
- d. propel conversations forward by providing essential information and sharing findings that clarify, accommodate, or challenge ideas
- e. synthesize information presented visually or digitally with other information presented orally, noting the effect on meaning of any discrepancies between the two presentations
- f. assist in the formulation and productive functioning of both formal and informal self-directed work groups by identifying and assigning tasks and maintaining conversational norms as well as evaluating the progress of the team towards its goals

## Exchanging information and speaking effectively

### Core Standards – Students can and do:

3. Present information clearly and persuasively to others, selecting the most appropriate way to structure comments for clarity and effect.
4. Adapt delivery, tone, and mood for emphasis and effect, demonstrating command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

### Standards – Students can and do (by key communication type):

#### Presentation of ideas and information

- a. organize and present complex information about topics, situations, or texts, providing reliable and credible evidence from authoritative sources in support of findings and claims such that the line of reasoning is clear and alternative perspectives are addressed
- b. shape delivery and message to the occasion and the audience's values, knowledge of the issue, and possible biases
- c. engage an audience and improve comprehension through visual aids in presentations, including multimedia platforms

- d. portray and explain various ways to perform dramatic readings of various prose and poetry, citing text evidence for the alternative readings

## Language Development Standards

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### Conventions

In high school, students gain a broad range of sophisticated language skills to enhance meaning, achieve stylistic effect, and create subtle links between and among ideas. They maintain parallel structure. They acquire a more conceptual understanding of usage and the limits of “rules.” They use a full range of punctuation, including ellipses, semicolons, colons, and hyphens, and have a fuller understanding of how to employ commas and dashes. They make use of a wide range of phrases and clauses for effect. They maintain a consistent style and tone, using a style manual appropriate to the discipline in which they are working to help conventionalize their writing.

Key Terms: colon, ellipses, hyphen, semicolon, parallel structure, verbal

### Grammar and usage

#### Core Standards – Students can and do:

11. Use parallel structure in writing.
12. Consult references (e.g., *Merriam-Webster’s Dictionary of English Usage*) as needed to resolve particular usage issues, particularly when the usage is contested.

### Mechanics

#### Core Standards – Students can and do:

13. Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie* but not *He wore a light[,] blue suit*).
14. Use a comma, ellipses, or dash to indicate a pause or break.
15. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.
16. Use a colon to introduce a list or a quotation.
17. Observe the conventions concerning using hyphens to join words.

### Word choice and style

#### Core Standards – Students can and do:

18. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to add variety and interest to writing.
19. Maintain consistency in style and tone.
20. Write and edit work so that it conforms to the guidelines in a style manual.

#### Focus by Grade-Level

Grade 11: Parallel structure and phrasing (Conventions Standards #1, #8)

Grade 12: Usage (Conventions Standard #2)

## Vocabulary

Key to students' vocabulary development is building rich and flexible word knowledge marked by multiple connections that link a word to similar words and to contexts and experiences that are related to that word—as compared to simply a definition. In high school, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering multiple levels of context (sentence, paragraph, and text levels) and the word's history. They habitually verify their inferences of word meanings. They interpret a wide range of figurative language found in what they read and consider its contribution to the text. Possessing a highly developed sense of the shadings among words with similar denotations, they evaluate an author's or speaker's choice of words as well as alternatives to the words chosen. They acquire new words through interactive language use, including informal talk, discussion, reading and responding to text as well as by being taught the words directly. This includes a continuing focus on "Tier 2" words and phrases (those that commonly appear in writing but not in spoken language), "Tier 3" words and phrases (those that are specific and important to particular disciplines).

### Determining the meaning of words

#### **Core Standards – Students can and do:**

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using knowledge of roots, prefixes, and suffixes
  - using context, including syntactic and semantic clues, at the sentence, paragraph, and text levels
  - consulting reference materials, including general and specialized dictionaries and thesauruses, both print and digital
  - using the word's history (etymology)
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).
4. Interpret figurative language and analyze its role within the text.

### Understanding the nuances of words (denotations and connotations)

#### **Core Standards – Students can and do:**

7. Assess and explain the merits of the choice of one word over another in reading, writing, speaking, and listening.
8. Gain a clearer sense of a word's meaning and use by comparing it to other words with similar but not identical meanings (synonyms).

### Acquiring vocabulary

#### **Core Standards – Students can and do:**

7. Acquire and use an extensive vocabulary of Tier 2 words taught directly and gained through reading.
8. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.

## Grade 11 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 11, students apply the core reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read 11-CCR grade band text independently, with scaffolding likely required for texts at the high end of the range.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 100% 11-CCR Band Text

100%

### Writing and Research

*In grade 11, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter timeframes, responding to specific sources by analyzing the contents of literary or informational sources at the 11-CCR grade band level of complexity and content.

### Speaking and Listening

*In grade 11, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

*In grade 11, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Parallel Structure and Phrasing
  - Use parallel structure in writing ... (Conventions Standard #1)
  - Use various types of phrases... (Conventions Standard #8)

## Grade 12 English Language Arts: Focus for Instruction

### Reading and Literature

*In grade 12, students apply the core reading standards to the following types of text: narratives, drama, poetry, and informational text. Students focus on learning to read 11-CCR grade band text independently as well as on sustained practice with Beyond CCR band “stretch” texts, which will likely require scaffolding.*

- Reading standards applied to different text types
- Mix of text types: Narratives, Drama, Poetry, Informational Text
- **Text Complexity focus:** 70% 11-CCR Band Text; 30% Beyond CCR text

70%

30%

### Writing and Research

*In grade 12, students apply the standards in writing to the following types of text: Narrative, Informative/Explanatory, and Argument. Students perform research, including short focused research tasks. They also write over various time frames in response to specific sources.*

- Writing standards applied to different text types: Narrative, Informative/Explanatory, Argument
- Research, including short focused research tasks
- **Grade-specific focus:** Students create writing over extended and shorter time frames, responding to specific sources by synthesizing or evaluating the contents of literary or informational sources of 11-CCR grade band level complexity and content.

### Speaking and Listening

*In grade 12, students apply the core speaking and listening standards in different contexts.*

- Speaking and listening standards applied in different contexts: classroom discussion and collaboration as well as in presentations of ideas and information.

### Language Development

*In grade 12, students apply the language development standards by applying the core vocabulary standards to determine word meaning, understand word nuances, and acquire vocabulary and to produce writing and speaking that observes appropriate conventions.*

- Vocabulary standards applied to reading, writing, speaking and listening
- **Grade-specific conventions focus:** Usage
  - Consult references ... (Conventions Standard #2)



## APPENDIX A

# Text Complexity Next Steps

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A key requirement of the Core Standards in Reading is that all students engage with texts of steadily increasing complexity as they advance through school. The Core Standards' model of *text complexity*—in the simplest terms, how easy or difficult a text is to read—blends qualitative and quantitative measures of inherent text difficulty with educators' knowledge of their students. All three elements should be considered together when evaluating a text's appropriateness for particular students.

*Qualitative dimensions* are aspects of text best measured by readers applying trained judgment to the evaluation task. These dimensions include the text's structure, format, and length; its purpose; its style and language; the quality, nature, and density of its ideas, concepts, and information; relationships among ideas, information, and characters in it; and the knowledge and experience demands it places upon readers.

*Quantitative dimensions* include not only those aspects of text traditionally measured by readability formulas—word length and sentence length—but also computer-assessable aspects of text cohesion. These include referential cohesion (the degree to which a text refers back to previous points) and word frequency.

The qualitative and quantitative measures of a text are balanced in the model by educators' *professional judgment* of the appropriateness of the text for particular students given their background knowledge, interests, and motivation. Harder texts may be appropriate for highly knowledgeable or motivated students, and easier texts may be suitable as a means for building struggling readers' skills up to required levels.

While the tools included in this draft and the forthcoming ones described below represent an important advance over those previously available, no measure or set of measures is perfectly accurate. The mandate is that the body of works that students study in a given year represent an appropriate level of complexity as defined by these standards.

### Current and next steps

A qualitative rubric, derived from prior studies and refined through feedback from trained teacher-raters, is included in this draft to define some ways in which text complexity should increase as students move through the grades. The rubric can be used (in conjunction with forthcoming quantitative measures) to place individual texts into grade bands by complexity. The qualitative dimensions are best understood, however, as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; assigning a text to a grade band is therefore a matter of "best fit," or determining which grade band's set of descriptors most accurately describes the text.

The Core Standards work team is presently conducting a study with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity. Graphically, these three elements will appear together in a "label" defining complexity for a given text.

Following the completion of that study in early 2010, the work team will oversee the development of a Web site designed to make the text complexity tools more user-friendly and broadly available. The site will contain a database of complexity information for a range of widely used texts, including links to texts and test passages of similar complexity. Educators will be able to input additional texts for evaluation and comment on the suitability of particular texts for particular groups of students. The overarching goal is to make text complexity a vital and easy-to-incorporate element of reading instruction.

## Text Complexity Qualitative Scheme

| Dimension of Text  |  | Grade Span  |   |  |  |  |
|--------------------|--|---|---|--|--|--|
|                    |  | 2-3   | 4-5   | 6-8  | 9-10   | 11-12  |
| Structure          |  | Explicit, simple, conventional; simple graphic representations are supplementary to meaning; texts are relatively short | Largely explicit and direct; graphic representations are supplementary to meaning; texts are of increasing length                       | Largely implicit and subtle; graphic representations are essential to meaning; texts are of increasing length      | Implicit, subtle; graphic representations are essential to meaning; texts are of increasing length                                   | Implicit, complex, unconventional; sophisticated graphic representations are essential to meaning; texts are sufficiently long to address complex subjects |
| Purpose            |  | Single; explicitly stated   | Single or twofold; clearly indicated  | Single or multiple; subtly stated  | Multiple; often implicit   | Multiple; often implicit and may be hidden or obscure  |
| Style and Language | Style  | Familiar, accessible, plain; few literary devices   | Moderately accessible; some literary devices  | Moderately demanding; several literary devices   | Demanding; many literary devices   | Unfamiliar, demanding, complex; many literary devices  |
|                    | Language   | Mostly clear, everyday language; limited use of Tier 2 and 3 words and figurative language                              | Some everyday language; some use of Tier 2 and 3 words and figurative language  | Consistent use of Tier 2 and 3 words and figurative language   | Extensive use of Tier 2 and 3 words and figurative language  | Extensive use of Tier 2 and 3 words and figurative language; language may be intentionally or unintentionally ambiguous                                    |
| Richness           |  | A few ideas/concepts; concrete; low information density   | Some ideas/concepts; mostly concrete; moderate information density  | Several ideas/concepts; mostly abstract; moderate information density  | Several ideas/concepts; abstract; high information density   | Many ideas/concepts; highly abstract; high information density   |
| Relationships      |  | A few connections; explicit; simple   | Some connections; largely explicit  | Several connections; largely implicit  | Several connections; implicit  | Many connections; implicit; complex and interwoven   |
| Knowledge Demands  | Life experiences (literary texts)                          | Ability to handle simple themes and fantastical elements as well as draw upon common, everyday experiences              | Ability to handle fairly simple themes, consider a perspective somewhat different from one's own, and understand unfamiliar experiences | Ability to handle fairly challenging themes, consider multiple perspectives, and understand unfamiliar experiences | Ability to handle challenging themes, consider multiple perspectives, and understand experiences distinctly different from one's own | Ability to handle one or more complex themes, consider multiple and unusual perspectives, and understand experiences distinctly different from one's own   |
|                    | Cultural/literary knowledge (chiefly literary texts)       | General background knowledge and familiarity with genre conventions required  |   | Cultural and historical knowledge useful for understanding characters, settings, and allusions                     |  |  |
|                    | Content/discipline knowledge (chiefly informational texts) | Some everyday and general content knowledge   | Some general and discipline-specific content knowledge  | Some discipline-specific content knowledge   | Extensive discipline-specific content knowledge  | Extensive, perhaps specialized discipline-specific content knowledge   |

Adapted from ACT, Inc. (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissett, Conrad, & Harris-Sharpley (1996); and Hess and Biggam (2004)

The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

#### Structure

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- Explicit, simple, conventional → Implicit, complex, unconventional
- Simple graphic representations → Sophisticated graphic representations
- Graphic representations supplementary to meaning → Graphic representations essential to meaning
- Relatively short texts → Texts sufficiently long to address complex subjects

#### Purpose

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- Single purpose → Multiple purposes
- Explicitly stated → Often implicit and may be hidden or obscure

#### Style

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- Familiar, accessible, plain → Unfamiliar, demanding, complex
- Few literary devices → Many literary devices

#### Language

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- Mostly everyday language → Extensive use of Tier 2 and 3 words
- Limited use of figurative language → Extensive use of figurative language
- Clear language → Potentially ambiguous language

#### Richness

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- A few ideas/concepts → Many ideas/concepts
- Concrete ideas/concepts → Abstract ideas/concepts
- Low information density → High information density

#### Relationships

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- A few connections → Many connections
- Explicit connections → Implicit connections
- Simple connections → Complex, interwoven connections

#### Knowledge Demands: Life Experiences

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- Simple themes → Complex themes
- Single theme → Multiple themes
- Common, everyday experiences and fantastical elements → Experiences distinctly different from one’s own
- Single perspective like one’s own → Multiple and unusual perspectives

#### Knowledge Demands: Cultural Knowledge

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- General background knowledge and familiarity with genre conventions required → Cultural and historical knowledge useful

#### Knowledge Demands: Content/Discipline Knowledge

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- Some everyday and general content knowledge → Extensive, perhaps specialized discipline-specific content knowledge

# Definitions of Key Writing Types

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## Narrative

Narrative writing is organized by time. Time is central because narrative writing depicts events, whether real or imagined. Narrative writing is fundamental to novels, short stories, biographies, autobiographies, historical accounts, and plays. With practice, students' repertoire of narrative strategies expands and their control of them increases. Students learn to provide visual details of scenes, objects, or people; to depict specific actions (movements, gestures, postures, and expressions); to use dialogue and interior monologue in order to provide insight into the narrator's and characters' personalities and motives; and to manipulate pace in order to highlight the significance of certain events and create tension and suspense. Narrative writing serves a variety of purposes; frequently it is embedded in other kinds of writing, such as writing intended to inform, instruct, or persuade.

## Informative/Explanatory Text

Informative/explanatory writing conveys information accurately. This kind of writing can serve one or more of several closely related purposes: to increase readers' knowledge of a subject, to help readers better understand a procedure or process, or to enhance readers' comprehension of a concept. Informative/explanatory writing addresses questions, such as questions about types (What are the different types of whales?), about components (What are the parts of a motor?), about aspects of a subject such as its size, function, or behavior (How big is the United States? What is an x-ray used for? How do penguins find food?), about how things work (How does a camera work?), and about why things happen (Why is Earth warming?). To produce this kind of writing, students draw on what they already know and on primary and secondary sources. With practice, students become better able to develop a controlling idea that supports coherence and focus, and they can select examples, facts, and details that are relevant. They are also able to employ a variety of techniques that writers use to convey information, such as naming, describing, or differentiating different types or parts; comparing or contrasting one subject with another; and relating an anecdote or scenario to illustrate a point.

## Argument

The purpose of argument is to persuade in order to change the reader's point of view or to bring about some action on the reader's part. There are many techniques employed by writers to persuade readers—for example, appeals to emotions, appeals to common beliefs, and the creation of a believable authorial voice. However, the core of argument is logic and evidence. A logical argument convinces its audience of the merit and reasonableness of the claims and the proof offered in support of the claims. Writers of logical arguments provide credible evidence (facts and details) to support their assertions. Although young children are not able to produce fully developed logical arguments, they are developing a variety of ways to extend and elaborate their work around opinions or judgments. They provide examples, they offer reasons for their assertions, and they explain cause and effect. These kinds of expository structures are steps on the road to argument.

# Conventions

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Three goals undergird the Conventions standards:

- (1) Students should have a carefully specified range of broadly useful terms in order to be precise in their discussions about language. Such key terms (noted below) should be defined in grade-appropriate ways for younger students and fleshed out more fully in later grades. (For guidance on this matter, see, for example, Brock Haussamen with Amy Benjamin, Martha Kolln, and Rebecca S. Wheeler, *Grammar Alive!: A Guide for Teachers* [Urbana, IL: NCTE, 2003] and Amy Benjamin with Tom Oliva, *Engaging Grammar: Practical Advice for Real Classrooms* [Urbana, IL: NCTE, 2007].) Additional terminology may be helpful in particular instructional situations; avoiding terminology altogether may be appropriate in others.
- (2) Students must be able to observe the conventions of standard English in their formal writing and speaking for the sake of having their efforts widely understood and taken seriously.
- (3) Students need to understand that effective language use is more than simply observing a series of rules but also about making careful choices among alternatives, considering those choices in relation to task, purpose, audience, occasion, and discipline.

Many conventions-related issues are likely to arise in students' writing and speaking prior to their formal appearance in the sequence below. For example, students in kindergarten are expected to know what a complete sentence is even though the concept of a fragment is not mentioned specifically in the standards until grade 3.

Conversely, many skills and understandings introduced at lower grades will require continued attention as students advance in the grades. Students in grade 3, for instance, can ensure subject-verb agreement in simple situations, such as when the subject and verb appear next to each other in a sentence. As students' writing and speaking become more complex, however, new agreement challenges arise, such as intervening phrases suggesting a different number for the verb than the subject calls for. "Errors" with applying previously mastered skills and understandings are thus often a sign of progress in that students are stretching their ability to communicate. "Relearning" is then a matter of students becoming able to apply old skills and understandings in new, more sophisticated ways.

While all the Conventions standards should be considered cumulative, certain ones, noted with an asterisk (\*), are particularly likely to need to be revisited by older students as they convey ever more elaborate ideas in writing and speech.

## ELA Conventions Progressive Skills: By Standard

The following standards, marked with an asterisk (\*) in the standards document, are skills and understandings that require continued attention in higher grades (after their introduction in lower grades) as they are applied to increasingly sophisticated writing and speaking.

**Grade 3**                      **Grades 4–5**                      **Grades 6–8**                      (Grade/band in which the standard is introduced)

- 3.1 Generate complete sentences, avoiding sentence fragments, comma splices, and run-ons.
- 3.2 Ensure subject-verb and pronoun-antecedent agreement.
- 3.7 Choose words for effect.

- 4–5.2 Recognize and correct inappropriate shifts in verb tense.
- 4–5.3 Form and choose between adjectives and adverbs (including comparative and superlative forms), placing them appropriately within the sentence.
- 4–5.4 Correctly use frequently confused words.
- 4–5.5 Use idiomatic language.
- 4–5.7 Use punctuation to separate items in a series.
- 4–5.11 Spell grade-appropriate words correctly, consulting references as needed.
- 4–5.12 Use specialized, topic-specific language to convey ideas precisely.
- 4–5.13 Use figurative language to create images or make comparisons and connections between people, objects, or ideas.
- 4–5.14 Use punctuation for effect.
- 4–5.15 Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.

- 6-8.2 Place phrases and clauses within a sentence, avoiding misplaced and dangling modifiers.
- 6-8.4 Recognize and correct inappropriate shifts in pronoun number and person.
- 6.8.5 Recognize and correct vague pronouns with unclear or ambiguous antecedents.
- 6-8.8 Recognize and correct inappropriate shifts in verb voice and mood.
- 6-8.9 Set off nonrestrictive/parenthetical elements with commas, parentheses, or dashes.
- 6-8.12 Vary sentence patterns for meaning, reader/listener interest, and style.
- 6-8.13 Choose words and phrases to express ideas precisely and concisely, avoiding redundancy and wordiness.

# Vocabulary Instruction

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Words are not just words. They are the nexus — the interface — between communication and thought. When we read, it is through words that we build, refine, and modify our knowledge. What makes vocabulary valuable and important is not the words themselves so much as the understandings they afford.

Marilyn Adams<sup>33</sup>

The importance of students acquiring a rich and varied vocabulary cannot be overstated. Research suggests that if students are going to grasp and retain words and comprehend text, they need incremental, repeated exposure to words they are trying to learn in a variety of contexts. When students make multiple connections between new words and their own experiences they develop a nuanced and flexible understanding of the word. In this way, students learn not only what a word means, but how to use that word in a variety of contexts and apply appropriate senses of the word's meaning in order to understand different contexts.<sup>34</sup>

Initially children readily learn words from oral conversation because oral conversations are context rich in ways that aid in vocabulary acquisition: in discussion a small set of words (accompanied by gesture and intonation) is used with great frequency to talk about a narrow range of situations children are exposed to on a day to day basis. Yet as children reach school age, new words are less frequently introduced in conversation, and consequently vocabulary acquisition eventually stagnates by fourth or fifth grade unless students acquire additional words from written context.<sup>35</sup>

Written language, by contrast, contains hundreds of times as many different words as are typically used in conversational language. Yet writing lacks the interactive opportunities and nonverbal context provided by oral conversation so it presents a special challenge towards successful vocabulary acquisition without purposeful and ongoing concentration on vocabulary.<sup>36</sup> In fact, at most, between five and fifteen percent of new words encountered when reading are retained.<sup>37</sup> The weaker a student's vocabulary is, the slighter the gain.<sup>38</sup> Yet research shows that if students are going to understand what they read, they must understand upward of 95 percent of the words.<sup>39</sup>

As this "tipping point" for lexical dexterity is quite challenging for students to reach, every classroom needs to focus on providing students with high quality contextual encounters with vocabulary words that epitomize what they encounter in written texts. The aim should be to expose students to words that have the widest application— concepts that students are likely to meet again and again not just in classroom settings but outside the school walls as well. Some of these highly transferable academic words, often referred to as Tier 2 words, such as qualifying adjectives and adverbs (e.g., important, typically) are used broadly across domains and indeed in contexts that

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<sup>33</sup> Adams, M. (2009). "The Challenge of Advanced Texts: The Interdependence of Reading and Learning," in Hiebert (Ed.), *Reading more, reading better: Are American students reading enough of the right stuff?*, New York: Guilford Publications.

<sup>34</sup> Landauer, TK, McNamara, DS, Dennis, S and Kintsch, W (2007) *Handbook of Latent Semantic Analysis*; Landauer, T. K., & Dumais, S. T. (1997). A solution to Plato's problem: The latent semantic analysis theory of acquisition, induction, and representation of knowledge. *Psychological Review*, 104(2), 211-240; Nagy, W. E., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly*, 20, 233-253.

<sup>35</sup> Hayes, D and Ahrens, M: "Vocabulary simplification for children: A special case of "motherese?" *Journal of Child Language*. Vol 15(2), Jun 1988, 395-410

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> Daneman & Green, 1986; Herman, Anderson, Person & Nagy, 1987; Sternberg & Powell

<sup>39</sup> Betts, E. A. (1946). *Foundations of reading instruction*. New York, NY: American Book Company; Carver, R. P. (1994). Percentage of unknown vocabulary words in text as a function of the relative difficulty of the text: Implications for instruction. *Journal of Reading Behavior*, 26, 413-437; Hu, M., & Nation, P. (2000). Unknown vocabulary density and reading comprehension. *Reading in a Foreign Language*, 13(1), 403-430; Laufer, B. (1988). What percentage of text-lexis is essential for comprehension. In C. Lauren & M. Nordmann (Eds.), *Special language: From humans to thinking machines*, pp. 316-323. Clevedon, UK: Multilingual Matters.

transcend the classroom.<sup>40</sup> However, the meanings of most words are specific to their domains—often referred to as Tier 3 words—including those that arise in multiple domains (e.g., chemical constituents, constituent voting patterns). To learn words, students have to read multiple selections from multiple authors within key domains of learning.

The problem is that, in any given instance, it is not the entire spectrum of a word's history, meanings, usages, and features that matters, but only those aspects that are relevant to the surrounding context. That means, first, that the reader's internal representation of the word must be sufficiently complete and well-articulated so that the intended meaning is available and, second, that the reader must understand the context well enough to select the intended meaning – which, in turn, depends on good understanding of the surrounding words of the passage.

Key to students' vocabulary development is building rich and flexible word knowledge. Students need plentiful opportunities to use and respond to the words they learn, through playful informal talk, discussion, and reading or being read to and responding to what is read. Along with attention to academic (Tier 2 words) and content-specific words (Tier 3 words), students benefit from instruction about the connections and patterns in language. Developing in students an analytical attitude toward the logic and sentence structure of their texts alongside an awareness of word parts, word origins, and word relationships provides students with a sense of how language works so that syntax, morphology and etymology can become useful cues to word in building meaning as students encounter new words and concepts in their reading.<sup>41</sup> As students are exposed to and interact with language throughout their school careers, they are able to acquire understandings of word meanings, build awareness of the workings of language, and apply word meanings to comprehend and produce language.

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<sup>40</sup> Indeed, the fact that these words transcend specific disciplines argues for them being taught and used across the curriculum by all teachers.

<sup>41</sup> Beck, I. L., McKeown, M. & Kucan, L. (2008). *Creating robust vocabulary: Frequently asked questions and extended examples*.

## APPENDIX B

# Exemplars of Reading Text Complexity and Quality, ELA K–12

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### Selecting Text Samples

The following text samples primarily serve to exemplify the level of complexity and quality that the *Standards* require all students in a given grade band to engage with while additionally suggesting the breadth of text types that students should encounter. The choices should serve as useful guideposts in helping educators select texts of similar **complexity**, **quality**, and **breadth** for their own classrooms. The process of text selection was guided by these criteria in the following fashion:

- *Complexity.* Appendix A describes in detail a three-part model of measuring text complexity based on qualitative and quantitative indices of inherent text difficulty balanced with educators' professional judgment. In selecting texts to serve as exemplars, the work group began by soliciting contributions from teachers, educational leaders, and researchers who have experience working with students in the grades for which the texts have been selected. These contributors were asked to propose texts that they or their colleagues have used successfully with students in a given grade band. The work group made final selections based in part on whether qualitative and quantitative measures identified by the *Standards* indicated that the proposed texts were of sufficient complexity for the grade band. For those types of texts—particularly poetry and multimedia sources—for which these measures are not as well suited, professional judgment necessarily played a greater role in selection.
- *Quality.* While it is possible to have high-complexity texts of low inherent quality, the work group solicited only texts of recognized value. From the pool of submissions gathered from outside contributors, the work group selected classic or historically significant texts as well as contemporary works of comparable literary merit, cultural significance, and/or content richness.
- *Breadth.* After identifying texts of appropriate complexity and quality, the work group applied a range of secondary criteria to ensure that the samples presented in each band represented as broad a range of sufficiently complex, high-quality texts as possible. Among the factors considered were initial publication date, authorship, and subject matter.

### Copyright and Permissions

For those exemplar texts not in the public domain, the work group is seeking permission from the rights holders for limited use by the Common Core State Standards Initiative of the National Governors Association.

While we await permissions grants from the rights holders, we will make use of texts under a conservative interpretation of Fair Use, which allows limited, partial use of copyrighted text for a nonprofit, educational purpose as long as that purpose does not impair the rights holder's ability to seek a fair return for his or her work.

Please note that these texts are included solely as exemplars in support of the *Standards*. Any additional use of those texts that are not in the public domain, such as for classroom use or curriculum development, requires independent permission from the rights holders. The texts may not be copied or distributed in any way other than as part of the overall Common Core Standards Initiative document.

### Organization and Excerpting

Texts are organized first by category, with narrative texts followed by drama and poetry and then the informational texts. Within each category, the texts are organized by date, usually of first publication, beginning with the oldest and ending with the most recent. In some cases, the date of any given work may be open to debate.

The excerpts given here are meant to stand in for the full work in most instances. Works that are not in the public domain may be represented by short excerpts or snippets while the work group awaits permission from the rights holders for full use.

### **Media Texts**

Selected excerpts are accompanied by annotated links to related media texts available online at the time of the publication of this document.

## **Kindergarten to Grade 1 Exemplar Texts**

### **Narratives**

*Little Bear* by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)

*Are You My Mother?* by P. D. Eastman (1960)

*The Fire Cat* by Esther Averill (1960)

*Green Eggs and Ham* by Dr. Seuss (1960)

*Put Me in the Zoo* by Robert Lopshire (1960)

*Frog and Toad Together* by Arnold Lobel (1971)

*Owl at Home* by Arnold Lobel (1975)

*Henry and Mudge: The First Book of Their Adventures* by Cynthia Rylant, illustrated by Suçie Stevenson (1987)

*Poppleton in Winter* by Cynthia Rylant, illustrated by Mark Teague (2001)

*Cowgirl Kate and Cocoa* by Erica Silverman, illustrated by Betsy Lewin (2005)

### **Poetry**

“Mix a Pancake” by Christina G. Rossetti (1893)

“Singing-Time” by Rose Fyleman (1919)

“Halfway Down” by A. A. Milne (1924)

“As I Was Going to St. Ives” by Unknown, collected by Peter and Iona Opie (1951)

“Drinking Fountain” by Marchette Chute (1957)

“Poem” by Langston Hughes (1958)

“Wouldn't You?” by John Ciardi (1961)

“In the Falling Snow” by Richard Wright (1973)

“Covers” by Nikki Giovanni (1980)

“It Fell in the City” by Eve Merriam (1985)

“Celebration” by Alonzo Lopez (1993)

“Two Tree Toads” by Jon Agee (2009)

### **Informational Texts**

*A Tree Is a Plant* by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)

*My Five Senses* by Alike (1962)

*Starfish* by Edith Thacher Hurd, illustrated by Robin Brickman (1962)

*What Do You Do With a Tail Like This?* by Steve Jenkins & Robin Page (2003)

*From Seed to Pumpkin* by Wendy Pfeffer, illustrated by James Graham Hale (2004)

*Mouse in a Meadow* by John Himmelman (2005)

*Petting Zoo* by Dorling Kindersley (2005)

*Meet the Meerkat* by Darrin Lunde, illustrated by Patricia J. Wynne (2007)

“The Forest in Spring” in *National Geographic Young Explorer!* April 2009 (2009)

“Our Good Earth” in *National Geographic Young Explorer*, April 2009 (2009)

### **Read-Aloud Narratives**

*The Wonderful Wizard of Oz* by L. Frank Baum (1900)

*Little House in the Big Woods* by Laura Ingalls Wilder, illustrated by Garth Williams (1932)

*Mr. Popper’s Penguins* by Richard Atwater (1938)

*Finn Family Moomintroll* by Tove Jansson, translated by Elizabeth Portch (1948)

*A Story A Story* by Gail E. Haley (1970)

*The Paper Crane* by Molly Bang (1985)

### **Read-Aloud Poetry**

“The Owl and the Pussycat” by Edward Lear (1871)

“April Rain Song” by Langston Hughes (1932)

“The Fox’s Foray” – Traditional rhyme in Opie / *The Oxford Nursery Rhyme Book* (1955)

*Over in the Meadow* by John Langstaff, illustrated by Feodor Rojankovsky (1957)

*Zin! Zin! Zin! a Violin* by Lloyd Moss, illustrated by Marjorie Priceman (1995)

### **Read-Aloud Informational Texts**

*The Year at Maple Hill Farm* by Alice and Martin Provensen (1978)

*Fire! Fire!* by Gail Gibbons (1984)

*Follow the Water from Brook to Ocean* by Arthur Dorros (1991)

*Amazing Whales!* by Sarah L. Thomson (2005)

*Living Sunlight: How Plants Bring the Earth to Life* by Molly Bang & Penny Chisholm, illustrated by Molly Bang (2009)

### **Grades 2–3 Exemplar Texts**

#### **Narratives**

*My Father's Dragon* by Ruth Stiles Gannett, illustrated by Ruth Chrisman Gannett (1948)

*Crow Boy* by Taro Yashima (1955)

*Amos & Boris* by William Steig (1971)

*The Treasure* by Uri Shulevitz (1978)

*The Stories Julian Tells* by Ann Cameron (1981)

*Sarah, Plain and Tall* by Patricia MacLachlan (1985)

*Tops and Bottoms* by Janet Stevens (1995)

*The Raft* by Jim LaMarche (2000)

*The Lighthouse Family: The Storm* by Cynthia Rylant, illustrated by Preston McDaniels (2002)

*The One-Eyed Giant (Book One of Tales from the Odyssey)* by Mary Pope Osborne (2002)

#### **Poetry**

“Autumn” by Emily Dickinson (1893)

“Who Has Seen the Wind” by Christina G. Rossetti (1893)

“Afternoon on a Hill” by Edna St. Vincent Millay (1917)

“Stopping by Woods on a Snowy Evening” by Robert Frost (1923)

“Something Told the Wild Geese” by Rachel Field (1934)

“Grandpa’s Stories” by Langston Hughes (1958)

“A Bat Is Born” by Randall Jarrell (1964)

“Knoxville, Tennessee” by Nikki Giovanni (1968)

“Weather” by Eve Merriam (1969)

“Eating While Reading” by Gary Soto (1995)

### **Informational Texts**

*A Medieval Feast* by Aliko (1983)

*Maps & Globes* by Jack Knowlton, pictures by Harriet Barton (1985)

*Sunshine Makes the Seasons* by Franklyn M. Branley (1985)

*From Seed to Plant* by Gail Gibbons (1991)

*Throw Your Teeth on the Roof: Tooth Traditions Around the World* by Selby B. Beeler, illustrated by  
G. Brian Karas (1998)

*So You Want to Be President?* By Judith St. George, illustrated by David Small (2000)

*Boy, Were We Wrong About Dinosaurs* by Kathleen V. Kudlinski, illustrated by S.D. Schindler (2005)

*Bat Loves the Night* by Nicola Davies, illustrated by Sarah Fox-Davies (2008)

*Moonshot: The Flight of Apollo 11* by Brian Floca (2009)

*Where Do Polar Bears Live?* by Sarah L. Thomson, illustrated by Jason Chin (2010)

### **Read-Aloud Narratives**

“How the Camel Got His Hump” in *Just So Stories* by Rudyard Kipling (1902)

*The Thirteen Clocks* by James Thurber (1950)

*The Cricket in Times Square* by George Selden, illustrated by Garth Williams (1960)

*The Search for Delicious* by Natalie Babbitt (1969)

*Bud, Not Buddy* by Christopher Paul Curtis (1999)

### **Read-Aloud Poetry**

“The Jumblies” by Edward Lear (1871)

“The Pied Piper of Hamelin” by Robert Browning (1888)

“Your World” by Georgia Douglas Johnson (1918)

“The Song of the Jellicles” by T.S. Eliot (1939)

“Fireflies” by Paul Fleischman, illustrated by Eric Beddows (1988)

### **Read-Aloud Informational Texts**

*Lincoln: A Photobiography* by Russell Freedman (1987)

*A Drop of Water: A Book of Science and Wonder* by Walter Wick (1997)

*The Museum Book: A Guide to Strange and Wonderful Collections* by Jan Mark, illustrated by  
Richard Holland (2007)

*What the World Eats* by Faith D’Aluisio, photographed by Peter Menzel (2008)

*Wild Tracks! A Guide to Nature’s Footprints* by Jim Arnosky (2008)

### **Grades 4–5 Exemplar Texts**

#### **Narratives**

*Alice in Wonderland* by Lewis Carroll (1865)

*The Secret Garden* by Frances Hodgson Burnett (1911)

*The Black Stallion* by Walter Farley (1941)

*The Little Prince* by Antoine de Saint-Exupery (1943)

*Tuck Everlasting* by Natalie Babbitt (1975)

“Zlateh the Goat” by Isaac Bashevis Singer (1984)

*M. C. Higgins, the Great* by Virginia Hamilton (1993)

*The Birchbark House* by Louise Erdrich (1999)

*Bud, Not Buddy* by Christopher Paul Curtis (1999)

[Also a read-aloud narrative at Grades 2–3]

*Where the Mountain Meets the Moon* by Grace Lin (2009)

#### **Poetry**

“The Echoing Green” from *Songs of Innocence* by William Blake (1789)

“The New Colossus” by Emma Lazarus (1883)

“Casey at the Bat” by Ernest Lawrence Thayer (1888)

“A Bird Came Down the Walk” by Emily Dickinson (1893)

“Fog” by Carl Sandburg (1916)

"Dust of Snow" by Robert Frost (1923)

"Little Red Riding Hood and the Wolf" by Roald Dahl (1982)

"They Were My People" by Grace Nichols (1988)

"Words Free As Confetti" by Pat Mora (1996)

## **Informational Texts**

*Discovering Mars* by Melvin Berger (1992)

*Let's Investigate Marvelously Meaningful Maps* by Madelyn Wood Carlisle (1992)

*Hurricanes: Earth's Mightiest Storms* by Patricia Lauber (1996)

*The Kid's Guide to Money* by Steve Otfinoski (1996)

*Toys: Amazing Stories behind Some Great Inventions* by Don Wulffson (2000)

"Good Pet, Bad Pet" by Elizabeth Schleichert from *Ranger Rick* (2002)

"Ancient Mound Builders" by E. Barrie Kavash from *Cobblestone* (2003)

*About Time: A First Look at Time and Clocks* by Bruce Koscielniak (2004)

*England the Land* by Erinn Banting (2004)

*A History of US* by Joy Hakim (2005)

*My Librarian Is a Camel* by Margriet Ruurs (2005)

*Horses* by Seymour Simon (2006)

*Quest for the Tree Kangaroo* by Sy Montgomery (2006)

*Volcanoes* by Seymour Simon (2006)

*We Are the Ship: The Story of Negro League Baseball* by Kadir Nelson (2008)

"Kenya's Long Dry Season" by Nellie Gonzalez Cutler from *Time for Kids* (2009)

"Seeing Eye to Eye" by Leslie Hall from *National Geographic Explorer* (2009)

"Computer" from *Britannica Junior Encyclopedia* (2010)

"Telescopes" by Ronan, Colin A. from *The New Book of Knowledge* (2010)

"Underground Railroad" by Henrietta Buckmaster from *The New Book of Knowledge* (2010)

## **Grades 6–8 Exemplar Texts**

### **Narratives**

*Little Women* by Louisa May Alcott (1869)

*The Adventures of Tom Sawyer* by Mark Twain (1876)

*A Wrinkle in Time* by Madeline L'Engle (1962)

*The Dark is Rising* by Susan Cooper (1973)

*Dragonwings* by Laurence Yep (1975)

*Roll of Thunder, Hear My Cry* by Mildred Taylor (1976)

"The People Could Fly" from *The People Could Fly: American Black Folktales* by Virginia Hamilton (1985)

*The Tale of the Mandarin Ducks* by Katherine Paterson (1990)

"Eleven" from *Woman Hollering Creek: And Other Stories* by Sandra Cisneros (1992)

*Black Ships Before Troy: The Story of the Iliad* by Rosemary Sutcliff (1993)

### **Drama**

*A Midsummer Night's Dream* by William Shakespeare (1596)

*The Diary of Anne Frank* by Frances Goodrich and Albert Hackett (1958)

### **Poetry**

"Paul Revere's Ride" by Henry Wadsworth Longfellow (1861)

"O Captain, My Captain" by Walt Whitman (1865)

"Jabberwocky" by Lewis Carroll (1872)

"Twelfth Song of Thunder" from *The Mountain Chant: A Navajo Ceremony* Navajo tradition (1887)

"The Railway Train" by Emily Dickinson (1893)

"The Song of Wandering Aengus" by W. B. Yeats (1899)

"Chicago" from *Chicago Poems* (1914) by Carl Sandburg

"Stopping by a Wood on a Snowy Evening" by Robert Frost (1923)

"I, Too" by Langston Hughes (1925)

"The Book of Questions" by Pablo Neruda (1973) translated by William O'Daly

"Oranges" from *Black Hair* (1985) by Gary Soto

"A Poem for My Librarian, Mrs. Long" from *Acolytes* (2007) by Nikki Giovanni

### **Informational Texts (English Language Arts)**

"Allegory of the Cave" from *The Republic* by Plato (380 BCE) translated by G.M.A. Grube

“Letter on Thomas Jefferson” by John Adams (1822)

*Narrative of the Life of Frederick Douglass an American Slave* by Frederick Douglass (1845)

“Gettysburg Address” by Abraham Lincoln (1863)

“Lee Surrenders to Grant” by Horace Porter (1865)

“Blood, Toil, Tears and Sweat” by Winston Churchill (1940)

*Travels with Charley: In Search of America* by John Steinbeck (1962)

“Address to the Nation on Civil Rights” by John F. Kennedy (1963)

*I Know Why the Caged Bird Sings* by Maya Angelou (1969)

“Address to Students at Moscow State University” by Ronald Reagan (1988)

## **Grades 9-10 Exemplar Texts**

### **Narratives**

*The Odyssey* by Homer (8<sup>th</sup> century B.C.E.) translated by Robert Fagles

“The Nose” by Nikolai Gogol (1836) translated by Ronald Wilks

“The Gift of the Magi” by O. Henry (1906)

*The Grapes of Wrath* by John Steinbeck (1939)

*Fahrenheit 451* by Ray Bradbury (1953)

“I Stand Here Ironing” by Tillie Olsen (1956)

*The Killer Angels* by Michael Shaara (1975)

*The Joy Luck Club* by Amy Tan (1989)

*In the Time of the Butterflies* by Julia Alvarez (1994)

*The Book Thief* by Marcus Zusak (2005)

### **Drama**

*The Tragedy of Romeo and Juliet* by William Shakespeare (1592)

*The Glass Menagerie* by Tennessee Williams (1944)

*Rhinoceros* by Eugene Ionesco (1959) translated by Derek Prouse

*Master Harold... and the Boys* by Athol Fugard (1982)

### **Poetry**

“Song” by John Donne (1635)

“Ozymandias” by Percy Bysshe Shelley (1810)

“The Raven” by Edgar Allan Poe (1845)

“We Grow Accustomed to the Dark” by Emily Dickinson (1893)

“Loveliest of Trees” by A. E. Houseman (1896)

“Lift Ev’ry Voice and Sing” by James Weldon Johnson (1900)

“Domination of Black” by Wallace Stevens (1916)

“Yet Do I Marvel” by Countee Cullen (1925)

“Women” by Alice Walker (1970)

“I Am Offering This Poem to You” by Jimmy Santiago Baca (1977)

### **Informational Texts (English Language Arts)**

“Preface to Lyrical Ballads” by William Wordsworth (1800)

“Speech to the Second Virginia Convention” by Patrick Henry (1775)

“Second Inaugural Address” by Abraham Lincoln (1865)

“State of the Union Address” by Franklin Delano Roosevelt (1941)

“I Am an American Day Address” by Learned Hand (1944)

“Remarks to the Senate in Support of a Declaration of Conscience” by Margaret Chase Smith (1950)

“Address at the March on Washington” by Martin Luther King, Jr. (1963)

“Nobel Prize Acceptance Speech” by Elie Wiesel (1986)

“A Quilt of a Country” by Anna Quindlen (2001)

### **Grades 11-12 Exemplar Texts**

#### **Narratives**

*Pride and Prejudice* by Jane Austen (1813)

*Jane Eyre* by Charlotte Brontë (1848)

“At Home” by Anton Chekov (1887) translated by Constance Garnett

*The Great Gatsby* by F. Scott Fitzgerald (1925)

*As I Lay Dying* by William Faulkner (1930)

*Their Eyes Were Watching God* by Zora Neale Hurston (1937)

*Black Boy* by Richard Wright (1945)

*The Adventures of Augie March* by Saul Bellow (1949)

*The Bluest Eye* by Toni Morrison (1970)

*Dreaming in Cuban* by Cristina García (1992)

*The Namesake* by Jhumpa Lahiri (2003)

## **Drama**

*Macbeth* by William Shakespeare (c1611)

*The Importance of Being Earnest* by Oscar Wilde (1895)

*Death of a Salesman* by Arthur Miller (1949)

*A Raisin in the Sun* by Lorraine Hansberry (1959)

## **Poetry**

“A Valediction Forbidding Mourning” by John Donne (1633)

“Ode on a Grecian Urn” by John Keats (1820)

“Song of Myself” from *Leaves of Grass* by Walt Whitman (c1860)

“Because I Could Not Stop for Death” by Emily Dickinson (1890)

“Mending Wall” by Robert Frost (1914)

“Ode to My Suit” by Pablo Neruda (1954) translated by Margaret Sayers Peden

“Sestina” by Elizabeth Bishop (1983)

“The Latin Deli: An Ars Poetica” by Judith Ortiz Cofer (1988)

“Demeter’s Prayer to Hades” by Rita Dove (1995)

“Man Listening to Disc” by Billy Collins (2001)

## **Informational Texts (English Language Arts)**

*The Declaration of Independence* by Thomas Jefferson (1776)

*The Crisis* by Thomas Paine (1776)

*Walden* by Henry David Thoreau (1854)

“Society and Solitude” by Ralph Waldo Emerson (1857)

“The Fallacy of Success” by G.K. Chesterton (1909)

*The American Language* by H.L. Mencken (1938)

“Politics and the English Language” by George Orwell (1946)

“Abraham Lincoln and the Self-Made Myth” by Richard Hofstadter (1948)

“Letter from Birmingham City Jail” by Martin Luther King, Jr. (1963)

“Mother Tongue” by Amy Tan (1990)

“Take the Tortillas Out of Your Poetry” by Rudolfo Anaya (1995)

## Exemplars of Reading Text Complexity and Quality, K–5

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### Selecting Text Samples

The following text samples primarily serve to exemplify the level of complexity and quality that the *Standards* require all students in a given grade band to engage with while additionally suggesting the breadth of text types that students should encounter. The choices should serve as useful guideposts in helping educators select texts of similar **complexity**, **quality**, and **breadth** for their own classrooms. The process of text selection was guided by these criteria in the following fashion:

- *Complexity*. Appendix A describes in detail a three-part model of measuring text complexity based on qualitative and quantitative indices of inherent text difficulty balanced with educators' professional judgment. In selecting texts to serve as exemplars, the work group began by soliciting contributions from teachers, educational leaders, and researchers who have experience working with students in the grades for which the texts have been selected. These contributors were asked to propose texts that they or their colleagues have used successfully with students in a given grade band. The work group made final selections based in part on whether qualitative and quantitative measures identified by the *Standards* indicated that the proposed texts were of sufficient complexity for the grade band. For those types of texts—particularly poetry and multimedia sources—for which these measures are not as well suited, professional judgment necessarily played a greater role in selection.
- *Quality*. While it is possible to have high-complexity texts of low inherent quality, the work group solicited only texts of recognized value. From the pool of submissions gathered from outside contributors, the work group selected classic or historically significant texts as well as contemporary works of comparable literary merit, cultural significance, and/or content richness.
- *Breadth*. After identifying texts of appropriate complexity and quality, the work group applied a range of secondary criteria to ensure that the samples presented in each band represented as broad a range of sufficiently complex, high-quality texts as possible. Among the factors considered were initial publication date, authorship, and subject matter.

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### Organization and Excerpting

Texts are organized first by category, with narrative texts followed by drama and poetry and then the informational texts. Within each category, the texts are organized by date, usually of first publication, beginning with the oldest and ending with the most recent. In some cases, the date of any given work may be open to debate.

The excerpts given here are meant to stand in for the full work in most instances. Works that are not in the public domain may be represented by short excerpts or snippets while the work group awaits permission from the rights holders for full use.

### **Media Texts**

Selected excerpts are accompanied by annotated links to related media texts available online at the time of the publication of this document.

## Kindergarten to Grade 1 Exemplar Texts

### Narratives

|  |    |
|--|----|
| <i>Little Bear</i><br>by Else Holmelund Minarik,<br>illustrated by Maurice Sendak (1957)                               | 11 |
| <i>Are You My Mother?</i><br>by P. D. Eastman (1960)   | 13 |
| <i>The Fire Cat</i><br>by Esther Averill (1960)  | 14 |
| <i>Green Eggs and Ham</i><br>by Dr. Seuss (1960)   | 16 |
| <i>Put Me in the Zoo</i><br>by Robert Lopshire (1960)  | 17 |
| <i>Frog and Toad Together</i><br>by Arnold Lobel (1971)  | 18 |
| <i>Owl at Home</i><br>by Arnold Lobel (1975)   | 20 |
| <i>Henry and Mudge: The First Book of Their Adventures</i><br>by Cynthia Rylant, illustrated by Suçie Stevenson (1987) | 21 |
| <i>Poppleton in Winter</i><br>by Cynthia Rylant, illustrated by Mark Teague (2001)                                     | 22 |
| <i>Cowgirl Kate and Cocoa</i><br>by Erica Silverman, illustrated by Betsy Lewin (2005)                                 | 23 |

### Poetry

|   |    |
|---|----|
| “Mix a Pancake”<br>by Christina G. Rossetti (1893)                                  | 24 |
| “Singing-Time”<br>by Rose Fyleman (1919)  | 25 |
| “Halfway Down”<br>by A. A. Milne (1924)   | 26 |
| “As I Was Going to St. Ives”<br>by Unknown, collected by Peter and Iona Opie (1951) | 27 |
| “Drinking Fountain”<br>by Marchette Chute (1957)                                    | 28 |
| “Poem”<br>by Langston Hughes (1958)   | 29 |
| “Wouldn’t You?”<br>by John Ciardi (1961)  | 30 |
| “In the Falling Snow”<br>by Richard Wright (1973)                                   | 31 |

|   |    |
|---|----|
| “Covers”<br>by Nikki Giovanni (1980)  | 32 |
| “It Fell in the City”<br>by Eve Merriam (1985)  | 33 |
| “Celebration”<br>by Alonzo Lopez (1993)   | 34 |
| “Two Tree Toads”<br>by Jon Agee (2009)  | 35 |
| <b>Informational Texts</b>  |    |
| <i>A Tree Is a Plant</i><br>by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)               | 36 |
| <i>My Five Senses</i><br>by Alike (1962)  | 37 |
| <i>Starfish</i><br>by Edith Thacher Hurd,<br>illustrated by Robin Brickman (1962)                     | 38 |
| <i>What Do You Do With a Tail Like This?</i><br>by Steve Jenkins & Robin Page (2003)                  | 39 |
| <i>From Seed to Pumpkin</i><br>by Wendy Pfeffer,<br>illustrated by James Graham Hale (2004)           | 41 |
| <i>Mouse in a Meadow</i><br>by John Himmelman (2005)  | 42 |
| <i>Petting Zoo</i><br>by Dorling Kindersley (2005)  | 43 |
| <i>Meet the Meerkat</i><br>by Darrin Lunde, illustrated by Patricia J. Wynne (2007)                   | 44 |
| “The Forest in Spring”<br>in National Geographic Young Explorer! April 2009 (2009)                    | 45 |
| “Our Good Earth”<br>in National Geographic Young Explorer, April 2009 (2009)                          | 46 |
| <b>Read-Aloud Narratives</b>  |    |
| <i>The Wonderful Wizard of Oz</i><br>by L. Frank Baum (1900)  | 47 |
| <i>Little House in the Big Woods</i><br>by Laura Ingalls Wilder, illustrated by Garth Williams (1932) | 48 |
| <i>Mr. Popper’s Penguins</i><br>by Richard Atwater (1938)   | 50 |
| <i>Finn Family Moomintroll</i><br>by Tove Jansson, translated by Elizabeth Portch (1948)              | 51 |
| <i>A Story A Story</i>  | 52 |

|   |    |
|---|----|
| by Gail E. Haley (1970)   |    |
| <i>The Paper Crane</i>  | 53 |
| by Molly Bang (1985)  |    |
| <b>Read-Aloud Poetry</b>  |    |
| “The Owl and the Pussycat”  | 54 |
| by Edward Lear (1871)   |    |
| “April Rain Song”   | 55 |
| by Langston Hughes (1932)   |    |
| “The Fox’s Foray” – Traditional rhyme                               | 56 |
| in Opie / <i>The Oxford Nursery Rhyme Book</i> (1955)               |    |
| <i>Over in the Meadow</i>   | 58 |
| by John Langstaff, illustrated by Feodor Rojankovsky (1957)         |    |
| <i>Zin! Zin! Zin! a Violin</i>                                      | 59 |
| by Lloyd Moss, illustrated by Marjorie Priceman (1995)              |    |
| <b>Read-Aloud Informational Texts</b>                               |    |
| <i>The Year at Maple Hill Farm</i>                                  | 60 |
| by Alice and Martin Provensen (1978)                                |    |
| <i>Fire! Fire!</i>  | 61 |
| by Gail Gibbons (1984)  |    |
| <i>Follow the Water from Brook to Ocean</i>                         | 62 |
| by Arthur Dorros (1991)   |    |
| <i>Amazing Whales!</i>  | 63 |
| by Sarah L. Thomson (2005)  |    |
| <i>Living Sunlight: How Plants Bring the Earth to Life</i>          | 64 |
| by Molly Bang & Penny Chisholm,<br>illustrated by Molly Bang (2009) |    |

## Grades 2–3 Exemplar Texts

### Narratives

|   |    |
|---|----|
| <i>My Father’s Dragon</i><br>by Ruth Stiles Gannett,<br>illustrated by Ruth Chrisman Gannett (1948)   | 65 |
| <i>Crow Boy</i><br>by Taro Yashima (1955)   | 66 |
| <i>Amos &amp; Boris</i><br>by William Steig (1971)  | 67 |
| <i>The Treasure</i><br>by Uri Shulevitz (1978)  | 69 |
| <i>The Stories Julian Tells</i><br>by Ann Cameron (1981)  | 71 |
| <i>Sarah, Plain and Tall</i><br>by Patricia MacLachlan (1985)   | 73 |
| <i>Tops and Bottoms</i><br>by Janet Stevens (1995)  | 74 |
| <i>The Raft</i><br>by Jim LaMarche (2000)   | 75 |
| <i>The Lighthouse Family: The Storm</i><br>by Cynthia Rylant, illustrated by Preston McDaniels (2002) | 76 |
| <i>The One-Eyed Giant (Book One of Tales from the Odyssey)</i><br>by Mary Pope Osborne (2002)         | 78 |
| <b>Poetry</b>   |    |
| “Autumn”<br>by Emily Dickinson (1893)   | 79 |
| “Who Has Seen the Wind”<br>by Christina G. Rossetti (1893)  | 80 |
| “Afternoon on a Hill”<br>by Edna St. Vincent Millay (1917)  | 81 |
| “Something Told the Wild Geese”<br>by Rachel Field (1934)   | 83 |
| “Grandpa’s Stories”<br>by Langston Hughes (1958)  | 84 |
| “A Bat Is Born”<br>by Randall Jarrell (1964)  | 85 |
| “Knoxville, Tennessee”<br>by Nikki Giovanni (1968)  | 86 |
| “Weather”<br>by Eve Merriam (1969)  | 87 |
| “Eating While Reading”  | 88 |

by Gary Soto (1995)

### **Informational Texts**

|   |    |
|---|----|
| <i>A Medieval Feast</i><br>by Aliko (1983)  | 89 |
| <i>Maps &amp; Globes</i><br>by Jack Knowlton, pictures by Harriet Barton (1985)   | 90 |
| <i>Sunshine Makes the Seasons</i><br>by Franklyn M. Branley (1985)  | 91 |
| <i>From Seed to Plant</i><br>by Gail Gibbons (1991)   | 92 |
| <i>Throw Your Teeth on the Roof: Tooth Traditions Around the World</i><br>by Selby B. Beeler, illustrated by<br>G. Brian Karas (1998) | 93 |
| <i>So You Want to Be President?</i><br>by Judith St. George, illustrated by David Small (2000)  | 94 |
| <i>Boy, Were We Wrong About Dinosaurs</i><br>by Kathleen V. Kudlinski, illustrated by S.D. Schindler (2005)                           | 95 |
| <i>Bat Loves the Night</i><br>by Nicola Davies, illustrated by Sarah Fox-Davies (2008)  | 96 |
| <i>Moonshot: The Flight of Apollo 11</i><br>by Brian Floca (2009)   | 97 |
| <i>Where Do Polar Bears Live?</i><br>by Sarah L. Thomson, illustrated by Jason Chin (2010)  | 98 |

### **Read-Aloud Narratives**

|  |     |
|--|-----|
| “How the Camel Got His Hump”<br>in <i>Just So Stories</i> by Rudyard Kipling (1902)          | 99  |
| <i>The Thirteen Clocks</i><br>by James Thurber (1950)  | 100 |
| <i>The Cricket in Times Square</i><br>by George Selden, illustrated by Garth Williams (1960) | 101 |
| <i>The Search for Delicious</i><br>by Natalie Babbitt (1969)                                 | 102 |
| <i>Bud, Not Buddy</i><br>by Christopher Paul Curtis (1999)                                   | 103 |

### **Read-Aloud Poetry**

|  |     |
|--|-----|
| “The Jumblies”<br>by Edward Lear (1871)                  | 105 |
| “The Pied Piper of Hamelin”<br>by Robert Browning (1888) | 107 |
| “Your World”   | 108 |

|  |     |
|--|-----|
| by Georgia Douglas Johnson (1918)  |     |
| “The Song of the Jellicles”<br>by T.S. Eliot (1939)  | 109 |
| “Fireflies”<br>by Paul Fleischman, illustrated by Eric Beddows (1988)  | 110 |
| <b>Read-Aloud Informational Texts</b>  |     |
| <i>Lincoln: A Photobiography</i><br>by Russell Freedman (1987)   | 111 |
| <i>A Drop of Water: A Book of Science and Wonder</i><br>by Walter Wick (1997)  | 112 |
| <i>The Museum Book: A Guide to Strange and Wonderful Collections</i><br>by Jan Mark, illustrated by Richard Holland (2007) | 113 |
| <i>What the World Eats</i><br>by Faith D’Aluisio, photographed by Peter Menzel (2008)                                      | 115 |
| <i>Wild Tracks! A Guide to Nature’s Footprints</i><br>by Jim Arnosky (2008)  | 116 |

## Grades 4–5 Exemplar Texts

### Narratives

|   |     |
|---|-----|
| <i>Alice in Wonderland</i><br>by Lewis Carroll (1865)   | 117 |
| <i>The Secret Garden</i><br>by Frances Hodgson Burnett (1911)   | 118 |
| <i>The Black Stallion</i><br>by Walter Farley (1941)  | 119 |
| <i>The Little Prince</i><br>by Antoine de Saint-Exupery (1943)  | 120 |
| <i>Tuck Everlasting</i><br>by Natalie Babbitt (1975)  | 122 |
| “Zlateh the Goat”<br>by Isaac Bashevis Singer (1984)  | 124 |
| <i>M. C. Higgins, the Great</i><br>by Virginia Hamilton (1993)  | 125 |
| <i>The Birchbark House</i><br>by Louise Erdrich (1999)  | 126 |
| <i>Bud, Not Buddy</i><br>by Christopher Paul Curtis (1999)<br>[Also a read-aloud narrative at Grades 2–3] | 127 |
| <i>Where the Mountain Meets the Moon</i><br>by Grace Lin (2009)   | 129 |
| <b>Poetry</b>   |     |
| “The Echoing Green” from <i>Songs of Innocence</i><br>by William Blake (1789)                             | 130 |
| “The New Colossus”<br>by Emma Lazarus (1883)  | 131 |
| “Casey at the Bat”<br>by Ernest Lawrence Thayer (1888)  | 132 |
| “A Bird Came Down the Walk”<br>by Emily Dickinson (1893)  | 134 |
| “Fog”<br>by Carl Sandburg (1916)  | 135 |
| “Dust of Snow”<br>by Robert Frost (1923)  | 136 |
| “Little Red Riding Hood and the Wolf”<br>by Roald Dahl (1982)   | 137 |
| “They Were My People”<br>by Grace Nichols (1988)  | 138 |
| “Words Free As Confetti”  | 139 |

|   |     |
|---|-----|
| by Pat Mora (1996)  |     |
| <b>Informational Texts</b>                                      |     |
| <i>Discover Mars</i>  | 140 |
| by Melvin Berger (1992)   |     |
| <i>Let's Investigate Marvelously Meaningful Maps</i>            | 141 |
| by Madelyn Wood Carlisle (1992)                                 |     |
| <i>Hurricanes: Earth's Mightiest Storms</i>                     | 142 |
| by Patricia Lauber (1996)                                       |     |
| <i>The Kid's Guide to Money</i>                                 | 143 |
| by Steve Otfinoski (1996)                                       |     |
| <i>Toys: Amazing Stories behind Some Great Inventions</i>       | 145 |
| by Don Wulffson (2000)  |     |
| "Good Pet, Bad Pet"   | 146 |
| by Elizabeth Schleichert from <i>Ranger Rick</i> (2002)         |     |
| "Ancient Mound Builders"  | 147 |
| by E. Barrie Kavash from <i>Cobblestone</i> (2003)              |     |
| <i>About Time: A First Look at Time and Clocks</i>              | 148 |
| by Bruce Koscielniak (2004)                                     |     |
| <i>England the Land</i>   | 149 |
| by Erinn Banting (2004)   |     |
| <i>A History of US</i>  | 150 |
| by Joy Hakim (2005)   |     |
| <i>My Librarian Is a Camel</i>                                  | 151 |
| by Margriet Ruurs (2005)  |     |
| <i>Horses</i>   | 152 |
| by Seymour Simon (2006)   |     |
| <i>Quest for the Tree Kangaroo</i>                              | 153 |
| by Sy Montgomery (2006)   |     |
| <i>Volcanoes</i>  | 154 |
| by Seymour Simon (2006)   |     |
| <i>We Are the Ship: The Story of Negro League Baseball</i>      | 155 |
| by Kadir Nelson (2008)  |     |
| "Kenya's Long Dry Season"                                       | 156 |
| by Nellie Gonzalez Cutler from <i>Time for Kids</i> (2009)      |     |
| "Seeing Eye to Eye"   | 157 |
| by Leslie Hall from <i>National Geographic Explorer</i> (2009)  |     |
| "Computer"  | 159 |
| from <i>Britannica Junior Encyclopedia</i> (2010)               |     |
| "Telescopes"  | 161 |
| by Ronan, Colin A. from <i>The New Book of Knowledge</i> (2010) |     |
| "Underground Railroad"  | 162 |

by Henrietta Buckmaster  
from *The New Book of Knowledge* (2010)

## Kindergarten to Grade 1

### Kindergarten to Grade 1: Narratives

*Little Bear* by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)

“Birthday Soup”

“Mother Bear, Mother Bear, Where are you?” calls Little Bear.

“Oh, dear, Mother Bear is not here, and today is my birthday.

“I think my friends will come, but I do not see a birthday cake. My goodness – no birthday cake. What can I do?

The pot is by the fire. The water in the pot is hot. If I put something in the water, I can make Birthday Soup. All my friends like soup.

Let me see what we have. We have carrots and potatoes, peas and tomatoes; I can make soup with carrots, potatoes, peas and tomatoes.”

So Little Bear begins to make soup in the big black pot. First, Hen comes in. “Happy Birthday, Little Bear,” she says. “Thank you, Hen,” says Little Bear.

Hen says, “My! Something smells good here. Is it in the big black pot?”

“Yes,” says Little Bear, “I am making Birthday Soup. Will you stay and have some?”

“Oh, yes, thank you,” says Hen. And she sits down to wait.

Next, Duck comes in. “Happy Birthday, Little bear,” says Duck. “My, something smells good. Is it in the big black pot?”

“Thank you, Duck,” says Little Bear. “Yes, I am making Birthday Soup. Will you stay and have some with us?”

“Thank you, yes, thank you,” says Duck. And she sits down to wait.

Next, Cat comes in.

“Happy Birthday, Little Bear,” he says.

“Thank you, Cat,” says Little Bear. “I hope you like Birthday Soup. I am making Birthday Soup.

Cat says, “Can you really cook? If you can really make it, I will eat it.”

“Good,” says Little Bear. “The Birthday Soup is hot, so we must eat it now. We cannot wait for Mother Bear. I do not know where she is.”

“Now, here is some soup for you, Hen,” says Little Bear. “And here is some soup for you, Duck, and here is some soup for you, Cat, and here is some soup for me. Now we can all have some Birthday Soup.”

Cat sees Mother Bear at the door, and says, “Wait, Little Bear. Do not eat yet. Shut your eyes, and say one, two, three.”

Little Bear shuts his eyes and says, “One, two, three.”

Mother Bear comes in with a big cake.

“Now, look,” says Cat.

“Oh, Mother Bear,” says Little Bear, “what a big beautiful Birthday Cake! Birthday Soup is good to eat, but not as good as Birthday Cake. I am so happy you did not forget.”

“Yes, Happy Birthday, Little Bear!” says Mother Bear. “This Birthday Cake is a surprise for you. I never did forget your birthday, and I never will.”

***Are You My Mother?* by P. D. Eastman (1960)**

A mother bird sat on her egg.

The egg jumped.

“Oh oh!” said the mother bird. “My baby will be here! He will want to eat.”

“I must get something for my baby bird to eat!” she said. “I will be back!”

So away she went.

The egg jumped. It jumped, and jumped, and jumped!

Out came the baby bird!

“Where is my mother?” he said.

He looked for her.

He looked up. He did not see her.

He looked down. He did not see her.

“I will go and look for her,” he said.

So away he went.

Down, out of the tree he went.

Down, down, down! It was a long way down.

The baby bird could not fly.

He could not fly, but he could walk. “Now I will go and find my mother,” he said.

He did not know what his mother looked like. He went right by her. He did not see her.

He came to a kitten. “Are you my mother?” he said to the kitten.

The kitten just looked and looked. It did not say a thing.

The kitten was not his mother, so he went on.

Then he came to a hen. “Are you my mother?” he said to the hen. “No,” said the hen.

The kitten was not his mother. The hen was not his mother. So the baby bird went on.

[...]

***The Fire Cat* by Esther Averill (1960)**

“The Fire Cat”

Joe took Pickles to the Chief, who was sitting at his desk.

“Oh!” said the Chief. “I know this young cat. He is the one who chases little cats.”

“How do you know?” asked Joe.

The Chief answered, “A Fire Chief knows many things.”

Just then the telephone began to ring. “Hello,” said the Chief. “Oh, hello, Mrs. Goodkind. Yes, Pickles is here. He came with Joe. What did you say? You think Pickles would like to live in our firehouse? Well, we shall see. Thank you, Mrs. Goodkind. Good-bye.”

The Chief looked at Pickles and said, “Mrs. Goodkind says you are not a bad cat. And Joe likes you. I will let you live here IF you will learn to be a good firehouse cat.”

Pickles walked quietly up the stairs after Joe. Joe and Pickles went into a room where the firemen lived.

The men were pleased to have a cat. They wanted to play with Pickles. But suddenly the fire bell rang. All the firemen ran to a big pole and down they went. The pole was the fast way to get to their trucks. Pickles could hear the trucks start up and rush off to the fire.

Pickles said to himself, “I must learn to do what the firemen do, I must learn to slide down the pole.”

He jumped and put his paws around the pole. Down he fell with a BUMP.

“Bumps or no bumps, I must try again,” said Pickles. Up the stairs he ran. Down the pole he came – and bumped. But by the time the firemen came back from the fire, Pickles could slide down the pole.

“What a wonderful cat you are!” said the firemen. The Chief did not say anything.

Pickles said to himself, “I must keep learning everything I can.” So he learned to jump up on one of the big trucks. And he learned to sit up straight on the seat while the truck raced to a fire.

“What a wonderful cat you are!” said the firemen. The Chief did not say anything.

Pickles said to himself, “Now I must learn to help the firemen with their work.”

At the next fire, he jumped down from the truck. He ran to a big hose, put his paws around it, and tried to help a fireman shoot water at the flames.

“What a wonderful cat you are!” said the firemen. The Chief did not say anything.

The next day the Chief called all the firemen to his desk. Then he called for Pickles. Pickles did not know what was going to happen. He said to himself, “Maybe the Chief does not like the way I work. Maybe he wants to send me back to my old yard.” But Pickles went to the Chief.

At the Chief’s desk stood all the firemen – and Mrs. Goodkind!

The Chief said to Pickles, “I have asked Mrs. Goodkind to come because she was your first friend. Pickles, jump up on my desk. I have something to say to you.”

Pickles jumped up on the desk and looked at the Chief. Out of the desk the Chief took – a little fire hat!

“Pickles,” said the Chief, “I have watched you at your work. You have worked hard. The time has come for you to know that you are now our Fire Cat.”

And with these words, the Chief put the little hat on Pickles’ head.

*Green Eggs and Ham* by Dr. Seuss (1960)

[...]

Do you like green eggs and ham?

I do not like them, Sam-I-am. I do not like green eggs and ham.

Would you like them here or there?

I would not like them here or there. I would not like them anywhere. I do not like green eggs and ham. I do not like them, Sam-I-am.

Would you like them in a house? Would you like them with a mouse?

I would not like them in a house. I do not like them with a mouse. I do not like them here or there. I do not like them anywhere. I do not like green eggs and ham. I do not like them, Sam-I-am.

Would you eat them in a box? Would you eat them with a fox?

Not in a box. Not with a fox. Not in a house. Not with a mouse. I would not eat them here or there. I would not eat them anywhere. I would not eat green eggs and ham. I do not like them, Sam-I-am.

Would you? Could you? In a car? Eat them! Eat them! Here they are.

I would not, could not in a car.

You may like them. You will see. You may like them in a tree!

I would not, could not in a tree. Not in a car! You let me be.

I do not like them in a box. I do not like them with a fox. I do not like them in a house. I do not like them with a mouse. I do not like them here or there. I do not like them anywhere. I do not like green eggs and ham. I do not like them, Sam-I-am.

[...]

***Put Me in the Zoo* by Robert Lopshire (1960)**

I will go into the zoo. I want to see it. Yes, I do.

I would like to live this way. This is where I want to stay.

Will you keep me in the zoo? I want to stay in here with you.

We do not want you in the zoo. Out you go! Out! Out with you.

Why did they put me out this way? I should be in. I want to stay.

Why should they put you in the zoo? What good are you? What can you do?

What good am I? What can I do? Now here is one thing I can do.

Look! Now all his spots are blue!

And now his spots are orange! Say! He looks very good that way.

Now look at this! What do you see?

Green spots! As green as green can be!

Violet spots! Say! You are good! Do more! Do more! We wish you would.

I can do more. Look! This is new. Blue, orange, green, and violet, too.

Oh! They would put me in the zoo, if they could see what I can do.

[...]

***Frog and Toad Together* by Arnold Lobel (1971)**

“The Garden”

Frog was in his garden. Toad came walking by.

“What a fine garden you have, Frog,” he said.

“Yes,” said Frog. “It is very nice, but it was hard work.”

“I wish I had a garden,” said Toad.

“Here are some flower seeds. Plant them in the ground,” said Frog, “and soon you will have a garden.”

“How soon?” asked Toad.

“Quite soon,” said Frog.

Toad ran home. He planted the flower seeds.

“Now seeds,” said Toad, “start growing.”

Toad walked up and down a few times. The seeds did not start to grow. Toad put his head close to the ground and said loudly, “Now seeds, start growing!” Toad looked at the ground again. The seeds did not start to grow.

Toad put his head very close to the ground and shouted, “NOW SEEDS, START GROWING!”

Frog came running up the path. “What is all this noise?” he asked. “My seeds will not grow,” said Toad. “You are shouting too much,” said Frog. “These poor seeds are afraid to grow.”

“My seeds are afraid to grow?” asked Toad.

“Of course,” said Frog. “Leave them alone for a few days. Let the sun shine on them, let the rain fall on them. Soon your seeds will start to grow.”

That night, Toad looked out of his window. “Drat!” said Toad. “My seeds have not started to grow. They must be afraid of the dark.”

Toad went out to his garden with some candles. “I will read the seeds a story,” said Toad. “Then they will not be afraid.” Toad read a long story to his seeds.

All the next day Toad sang songs to his seeds.

And all the next day Toad read poems to his seeds.

And all the next day Toad played music for his seeds.

Toad looked at the ground. The seeds still did not start to grow. “What shall I do?” cried Toad. “These must be the most frightened seeds in the whole world!”

Then Toad felt very tired and he fell asleep.

“Toad, Toad, wake up,” said Frog. “Look at your garden!”

Toad looked at his garden. Little green plants were coming up out of the ground.

“At last,” shouted Toad, “my seeds have stopped being afraid to grow!”

“And now you will have a nice garden too,” said Frog.

“Yes,” said Toad, “but you were right, Frog. It was very hard work.”

***Owl at Home* by Arnold Lobel (1975)**

“Owl and the Moon”

One night Owl went down to the seashore. He sat on a large rock and looked out at the waves. Everything was dark. Then a small tip of the moon came up over the edge of the sea.

Owl watched the moon. It climbed higher and higher into the sky. Soon the whole, round moon was shining. Owl sat on the rock and looked up at the moon for a long time. “If I am looking at you, moon, then you must be looking back at me. We must be very good friends.”

The moon did not answer, but Owl said, “I will come back and see you again, moon. But now I must go home.” Owl walked down the path. He looked up at the sky. The moon was still there. It was following him.

“No, no, moon,” said Owl. “It is kind of you to light my way. But you must stay up over the sea where you look so fine.” Owl walked on a little farther. He looked at the sky again. There was the moon coming right along with him. “Dear moon,” said Owl, “you really must not come home with me. My house is small. You would not fit through the door. And I have nothing to give you for supper.”

Owl kept on walking. The moon sailed after him over the tops of the trees. “Moon,” said Owl, “I think that you do not hear me.” Owl climbed to the top of a hill. He shouted as loudly as he could, “Good-bye, moon!”

The moon went behind some clouds. Owl looked and looked. The moon was gone. “It is always a little sad to say good-bye to a friend,” said Owl.

Owl came home. He put on his pajamas and went to bed. The room was very dark. Owl was still feeling sad. All at once, Owl’s bedroom was filled with silver light. Owl looked out of the window. The moon was coming from behind the clouds. “Moon, you have followed me all the way home. What a good, round friend you are!” said Owl.

Then Owl put his head on the pillow and closed his eyes. The moon was shining down through the window. Owl did not feel sad at all.

***Henry and Mudge: The First Book of Their Adventures* by Cynthia Rylant, illustrated by  
Suçie Stevenson (1987)**

“Henry and Mudge”

Every day when Henry woke up, he saw Mudge’s big head. And every day when Mudge woke up, he saw Henry’s small face.

They ate breakfast at the same time; they ate supper at the same time.

And when Henry was at school, Mudge just lay around and waited. Mudge never went for a walk without Henry again. And Henry never worried that Mudge would leave.

Because sometimes, in their dreams, they saw long silent roads, big wide fields, deep streams, and pine trees.

In those dreams, Mudge was alone and Henry was alone. So when Mudge woke up and knew Henry was with him, he remembered the dream and stayed closer.

And when Henry woke up and knew Mudge was with him, he remembered the dream  
and the looking  
and the calling  
and the fear  
and he knew he would never lose Mudge again.

[...]

***Poppleton in Winter* by Cynthia Rylant, illustrated by Mark Teague (2001)**

“The Sleigh Ride”

It was a very snowy day and Poppleton felt like a sleigh ride. He called his friend Cherry Sue.

“Would you like to go for a sleigh ride?” Poppleton asked.

“Sorry, Poppleton, I’m making cookies,” said Cherry Sue.

Poppleton called his friend Hudson.

“Would you like to go for a sleigh ride?” Poppleton asked.

“Sorry,” said Hudson, “I’m baking a cake.”

Poppleton called his friend Fillmore.

“Would you like to go for a sleigh ride?” Poppleton asked.

“Sorry,” said Fillmore. “I’m stirring some fudge.”

Poppleton was disappointed. He couldn’t find one friend for a sleigh ride. And besides that, they were all making such good things to eat!

He sat in front of his window, feeling very sorry for himself. Suddenly the doorbell rang.

“SURPRISE!”

There stood all of Poppleton’s friends! With cookies and cake and fudge and presents! “HAPPY BIRTHDAY, POPPLETON!”

He had forgotten his own birthday! Everyone ate and laughed and played games with Poppleton.

Then, just before midnight, they all took him on a sleigh ride.

The moon was full and white. The stars twinkled. The owls hooted in the trees. Over the snow went the sleigh filled with Poppleton and all of his friends.

Poppleton didn’t even make a birthday wish. He had everything already.

***Cowgirl Kate and Cocoa* by Erica Silverman, illustrated by Betsy Lewin (2005)**

Chapter 1 – A Story for Cocoa

Cowgirl Kate rode her horse, Cocoa, out to the pasture.

“It’s time to herd cows,” said Cowgirl Kate.

“I am thirsty,” said Cocoa.

He stopped at the creek and took a drink.

“Are you ready now?” asked Cowgirl Kate.

“No,” said Cocoa. “Now I am hungry.”

Cowgirl Kate gave him an apple. He ate it in one bite. Then he sniffed the saddlebag.

Cowgirl Kate gave him another apple. He ate that in one bite, too. He sniffed the saddlebag again.

“You are a pig,” said Cowgirl Kate.

“No,” said Cocoa. “I am a horse.”

“A cowhorse?” she asked.

“Of course,” he said.

“But a cowhorse herds cows,” she said.

“Just now, I am too full,” he said.

Cowgirl Kate smiled. “Then I will tell you a story.”

*“Once there was a cowgirl who needed a cowhorse. She went to a ranch and saw lots and lots of horses. Then she saw a horse whose coat was the color of chocolate. His tail and mane were the color of caramel. ‘Yum,’ said the cowgirl, ‘you are the colors of my favorite candy.’ The horse looked at her. He sniffed her.”*

*“‘Are you a real cowgirl?’ he asked. ‘I am a cowgirl from the boots up,’ she said. ‘Well, I am a cowhorse from the mane down,’ he said. ‘Will you work hard every day?’ the cowgirl asked. The horse raised his head high. ‘Of course,’ he said, ‘a cowhorse always does his job.’ ‘At last,’ said the cowgirl, ‘I have found my horse.’”*

“That was a good story,” said Cocoa. He raised his head high. “And now I am ready to herd cows.”

## Kindergarten to Grade 1: Poetry

### “Mix a Pancake” by Christina Rossetti (1893)

Mix a pancake,  
Stir a pancake,  
Pop it in the pan;  
Fry the pancake,  
Toss the pancake—  
Catch it if you can.

**“Singing-Time” by Rose Fyleman (1919)**

I wake in the morning early  
And always, the very first thing,  
I poke out my head and I sit up in bed  
And I sing and I sing and I sing.

**“Halfway Down” by A. A. Milne (1924)**

Halfway down the stairs

Is a stair

Where I sit.

There isn't any

Other stair

Quite like

It.

[...]

**“As I Was Going to St. Ives” by Unknown**

from *The Oxford Dictionary of Nursery Rhymes*, edited by Iona and Peter Opie (1951)

As I was going to St. Ives,  
I met a man with seven wives,  
Each wife had seven sacks,  
Each sack had seven cats,  
Each cat had seven kits:  
Kits, cats, sacks, and wives,  
How many were there going to St. Ives?

**“Drinking Fountain” by Marchette Chute (1957)**

When I climb up  
To get a drink,  
It doesn't work  
The way you'd think.

[...]

**“Poem” by Langston Hughes (1958)**

I loved my friend.  
He went away from me.

[...]

**“Wouldn’t You?” by John Ciardi (1961)**

If I  
Could go  
As high  
And low  
As the wind

[...]

**“In the Falling Snow” by Richard Wright (1973)**

In the falling snow

[...]

**“Covers” by Nikki Giovanni (1980)**

Glass covers windows  
to keep the cold away

[...]

**“It Fell in the City” by Eve Merriam (1985)**

It fell in the city,  
It fell through the night,  
And the black rooftops  
All turned white.

[...]

**“Celebration” by Alonzo Lopez (1993)**

I shall dance tonight.  
When the dusk comes crawling,

[...]

**“Two Tree Toads” by Jon Agee (2009)**

A three-toed tree toad tried to tie  
A two-toed tree toad’s shoe.

[...]

## Kindergarten to Grade 1: Informational Texts

*A Tree Is a Plant* by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)

A tree is a plant. A tree is the biggest plant that grows. Most kinds of trees grow from seeds the way most small plants do. There are many kinds of trees. Here are a few of them. How many do you know? *[illustration is labeled with Maple, Conifer, Persimmon, Palms, Lemon, Willow]*

This tree grows in the country. It might grow in your yard, too. Do you know what kind it is? This is an apple tree.

This apple tree came from a seed. The seed was small. It grew inside an apple. Have you ever seen an apple seed? Ask an adult to help you cut an apple in two. The seeds are in the center. They look like this.

Most apple trees come from seeds that are planted. Sometimes an apple tree grows from a seed that falls to the ground. The wind blows leaves over the seed. The wind blows soil over the seed.

All winter the seed lies under the leaves and the soil. All winter the seed lies under the ice and snow and is pushed into the ground. Spring comes. Rain falls. The sun comes out and warms the earth. The seed begins to grow.

At first the young plant does not look like a tree. The tree is very small. It is only a stem with two leaves. It has no apples on it. A tree must grow up before it has apples on it. Each year the tree grows. It grows tall. In seven years it is so tall that you can stand under its branches. In the spring there are blossoms on the tree. Spring is apple-blossom time.

[...]

We cannot see the roots. They are under the ground. Some of the roots are large. Some of them are as small as hairs. The roots grow like branches under the ground. A tree could not live without roots.

Roots hold the trunk in the ground. Roots keep the tree from falling when the wind blows. Roots keep the rain from washing the tree out of the ground.

Roots do something more. They take water from the ground. They carry the water into the trunk of the tree. The trunk carries the water to the branches. The branches carry the water to the leaves.

Hundreds and hundreds of leaves grow on the branches. The leaves make food from water and air. They make food when the sun shines. The food goes into the branches. It goes into the trunk and roots. It goes to every part of the tree.

Fall comes and winter is near. The work of the leaves is over. The leaves turn yellow and brown. The leaves die and fall to the ground.

Now the tree is bare. All winter it looks dead. But the tree is not dead. Under its coat of bark, the tree is alive.

[...]

*My Five Senses* by Aliki (1962)

I can see! I see with my eyes.

I can hear! I hear with my ears.

I can smell! I smell with my nose.

I can taste! I taste with my tongue.

I can touch! I touch with my fingers.

I do all this with my senses.

I have five senses.

When I see the sun or a frog or my baby sister, I use my sense of sight. I am seeing.

When I hear a drum or a fire engine or a bird, I use my sense of hearing. I am hearing.

When I smell soap or a pine tree or cookies just out of the oven, I use my sense of smell. I am smelling.

When I drink my milk and eat my food, I use my sense of taste. I am tasting.

When I touch a kitten or a balloon or water, I use my sense of touch. I am touching.

Sometimes I use all my senses at once.

Sometimes I use only one.

I often play a game with myself.

I guess how many senses I am using at that time.

When I look at the moon and the stars, I use one sense. I am seeing.

When I laugh and play with my puppy, I use four senses. I see, hear, smell, and touch.

When I bounce a ball, I use three senses. I see, hear, touch.

Sometimes I use more of one sense and less of another.

But each sense is very important to me, because it makes me aware.

To be aware is to see all there is to see...

hear all there is to hear...

smell all there is to smell...

taste all there is to taste...

touch all there is to touch.

Wherever I go, whatever I do, every minute of the day, my senses are working.

They make me aware.

***Starfish* by Edith Thacher Hurd, illustrated by Robin Brickman (1962)**

Starfish live in the sea. Starfish live deep down in the sea. Starfish live in pools by the sea.

Some starfish are purple. Some starfish are pink.

This is the sunflower starfish. It is the biggest of all. Starfish have many arms. The arms are called rays. Starfish have arms, but no legs.

Starfish have feet, but no toes. They glide and slide on tiny tube feet. They move as slowly as a snail.

The basket star looks like a starfish, but it is a little different. It doesn't have tube feet. It moves with its rays. It has rays that go up and rays that go down.

Tiny brittle stars are like the basket star. They hide under rocks in pools by the sea.

The mud star hides in the mud. It is a starfish. It has tiny tube feet.

A starfish has no eyes. A starfish has no ears or nose. Its tiny mouth is on its underside. When a starfish is hungry, it slides and it glides on its tiny tube feet.

It hunts for mussels and oysters and clams. It feels for the mussels, It feels for the oysters. It feels for the clams. It feels for something to eat.

The starfish crawls over a clam. Its rays go over it. Its rays go under it. Its rays go all over the clam. The starfish pulls and pulls. It pulls the shells open. It eats the clam inside.

Sometimes a starfish loses a ray. A crab may pull it off. A rock may fall on it. But this does not hurt. It does not bother the starfish. The starfish just grows another ray.

In the spring when the sun shines warm, and the sea grows warm, starfish lay eggs. Starfish lay eggs in the water. They lay many, many, many tiny eggs. The eggs look like sand in the sea. The tiny eggs float in the water. They float up and down. They move with the waves and the tide, up and down, up and down.

[...]

*What Do You Do With a Tail Like This?* by Steve Jenkins & Robin Page (2003)

What do you do with a nose like this?

If you're a platypus, you use your nose to dig in the mud.

If you're a hyena, you find your next meal with your nose.

If you're an elephant, you use your nose to give yourself a bath.

If you're a mole, you use your nose to find your way underground.

If you're an alligator, you breathe through your nose while hiding in the water.

What do you do with ears like these?

If you're a jackrabbit, you use your ears to keep cool.

If you're a bat you "see" with your ears.

If you're a cricket, you hear with ears that are on your knees.

If you're a humpback whale, you hear sounds hundreds of miles away.

If you're a hippopotamus, you close your ears when you're under water.

What do you do with a tail like this?

If you're a giraffe, you brush off pesky flies with your tail.

If you're a skunk, you lift your tail to warn that a stinky spray is on the way.

If you're a lizard, you break off your tail to get away.

If you're a scorpion, your tail can give a nasty sting.

If you're a monkey, you hang from a tree by your tail.

What do you do with eyes like these?

If you're an eagle, you spot tiny animals from high in the air.

If you're a chameleon, you look two ways at once.

If you're a four-eye fish, you look above and below the water at the same time.

If you're a bush baby, you use your large eyes to see clearly at night.

If you're a horned lizard, you squirt blood out of your eyes.

What do you do with feet like these?

If you're a chimpanzee, you feed yourself with your feet.

If you're a water strider, you walk on water.

If you're a blue-footed booby, you do a dance.

If you're a gecko, you use your sticky feet to walk on the ceiling.

If you're a mountain goat, you leap from ledge to ledge.

What do you do with a mouth like this?

If you're a pelican, you use your mouth as a net to scoop up fish.

If you're an egg-eating snake, you use your mouth to swallow eggs larger than your head.

If you're a mosquito, you use your mouth to suck blood.

If you're an anteater, you capture termites with your long tongue.

If you're an archerfish, you catch insects by shooting them down with a stream of water.

***From Seed to Pumpkin* by Wendy Pfeffer, illustrated by James Graham Hale (2004)**

When spring winds warm the earth, a farmer plants hundreds of pumpkin seeds.

Every pumpkin seed can become a baby pumpkin plant. Underground, covered with dark, moist soil, the baby plants begin to grow.

As the plants get bigger, the seeds crack open. Stems sprout up. Roots dig down. Inside the roots are tubes. Water travels up these tubes the way juice goes up a straw.

In less than two weeks from planting time, green shoots poke up through the earth.

These shoots grow into tiny seedlings. Two leaves, called seed leaves, uncurl on each stem. They reach up toward the sun.

Sunlight gives these leaves energy to make food. Like us, plants need food to grow. But green plants do not eat food as we do. Their leaves make it.

To make food, plants need light, water, and air. Leaves catch the sunlight. Roots soak up rainwater. And little openings in the leaves let air in. Using energy from the sun, the leaves mix the air with water from the soil to make sugar. This feeds the plant.

Soon broad, prickly leaves with jagged edges unfold on the stems.

The seed leaves dry up. Now the new leaves make food for the pumpkin plant.

Each pumpkin stem has many sets of tubes. One tube in each set takes water from the soil up to the leaves so they can make sugar. The other tube in each set sends food back down so the pumpkin can grow.

The days grow warmer. The farmer tends the pumpkin patch to keep weeds out. Weeds take water from the soil. Pumpkin plants need that water to grow.

[...]

***Mouse in a Meadow* by John Himmelman (2005)**

A mouse is in a meadow.

The mouse nibbles on nutsedge nutlets.

A leafhopper resting in the nutsedge jumps to a patch of grass.

A snake is hunting there.

The snake startles a moth, who flies away.

The moth lands in a spider's web.

A meadowlark beats her to it. No meal for the spider.

The spider repairs her web.

An ambush bug waits in a yarrow flower.

A butterfly lands on the flower and is caught.

A young artist draws the scene.

The artist brushes a beetle off his picture.

The beetle flies to a milkweed plant.

A frog hops under the plant. Coneheads jump out of its way.

One conehead lands in a spittlebug's bubbles.

The spittlebug makes more bubbles to hide again.

A bobolink watches. Either insect would taste good.

The bobolink hears a rustle.

A weasel is looking for something to eat.

It knows there is a mouse hiding in the meadow.

***Petting Zoo* by Dorling Kindersley (2005)**

We are at the petting zoo. What kind of animal do you see here? [*pictures of goats*]

We are petting a drowsy donkey.

We are walking two baby llamas.

I am brushing a pony's coat.

I am picking up a little pink pig.

I am carrying a soft yellow chick.

I am holding a green stick insect.

I am watching a beady-eyed frog.

It is mealtime now. I give the woolly lamb some milk.

I am feeding a hungry rabbit.

This fluffy guinea pig is nibbling a leaf.

The white goose wants a snack.

This long-horned goat is eating his lunch.

Goodbye, animals! It's time to go home.

***Meet the Meerkat* by Darrin Lunde, illustrated by Patricia J. Wynne (2007)**

Hello, little animal. What is your name?  
My name is Little Meerkat. I am a kind of mongoose.

Little Meerkat, what do you look like?  
I am long and thin. I have a pointy face. I am the size of a squirrel.

Little Meerkat, where do you live?  
I live in the African desert. I like the hot sun.

Little Meerkat, do you live alone?  
I live with my brothers and sisters. We all live in the same den.

Little Meerkat, what do you do all day?  
In the morning I warm up in the sun. Then I run with my brothers and sisters to find food.

Little Meerkat, what do you eat?  
I eat insects, spiders, and scorpions. I smell them with my nose. Then I dig them up with my feet.

Little Meerkat, do you make any sounds?  
I make funny sounds all day long. *Cluck...murmur, murmur...peep!* I say *waauk-waauk* when I see something dangerous.

Little Meerkat, what do you fear?  
I am afraid of eagles and jackals. These animals try to eat me. I take turns with my brothers and sisters to watch for danger.

Little Meerkat, when do you sleep?  
I return to my den just before dark.

Good night, Little Meerkat!

Meerkats do not like cold mornings. They are most active during the warm part of the day.

There is not much food where meerkats live. They have to travel far to find enough to eat.

Meerkats live in groups of ten or more. They like to be around other meerkats. They care for other meerkats who are sick or hurt. They sometimes even hug each other.

**“The Forest in Spring” in *National Geographic Young Explorer*, April 2009 (2009)**

Leaves turn green. Babies are born. It’s spring, and the forest changes.

A weasel’s fur is thinner now. Its fur turns from white to brown.

Baby woodpeckers hatch. They are hungry. Their mother brings them food.

Black bear cubs leave their winter dens. This cub climbs up a tree!

The weather gets warmer. Frozen wood frogs thaw. This one hops on a mushroom. In spring, the forest comes alive!

**“Our Good Earth” in *National Geographic Young Explorer*, April 2009 (2009)**

We need water, land, and air to live. Earth has all these things.

Water covers much of Earth. Most of this water is not safe to drink. Many people are running out of fresh drinking water.

You can help by using less water. Take shorter showers. Turn off the water when you brush your teeth.

Land covers the rest of Earth. Soil is part of some land. That’s where food crops grow. Rain and wind can wear away soil.

You can help by saving soil. Plant trees and flowers. The plants and their roots will keep soil in place.

Air is all around us. Cars can make air dirty. Fewer cars on the road help keep air clean. Try to use other ways to get to school.

## Kindergarten to Grade 1: Read-Aloud Narratives

### *The Wonderful Wizard of Oz* by L. Frank Baum (1900)

From Chapter 1 “The Cyclone”

Dorothy lived in the midst of the great Kansas prairies, with Uncle Henry, who was a farmer, and Aunt Em, who was the farmer's wife. Their house was small, for the lumber to build it had to be carried by wagon many miles. There were four walls, a floor and a roof, which made one room; and this room contained a rusty looking cookstove, a cupboard for the dishes, a table, three or four chairs, and the beds. Uncle Henry and Aunt Em had a big bed in one corner, and Dorothy a little bed in another corner. There was no garret at all, and no cellar--except a small hole dug in the ground, called a cyclone cellar, where the family could go in case one of those great whirlwinds arose, mighty enough to crush any building in its path. It was reached by a trap door in the middle of the floor, from which a ladder led down into the small, dark hole.

When Dorothy stood in the doorway and looked around, she could see nothing but the great gray prairie on every side. Not a tree nor a house broke the broad sweep of flat country that reached to the edge of the sky in all directions. The sun had baked the plowed land into a gray mass, with little cracks running through it. Even the grass was not green, for the sun had burned the tops of the long blades until they were the same gray color to be seen everywhere. Once the house had been painted, but the sun blistered the paint and the rains washed it away, and now the house was as dull and gray as everything else.

When Aunt Em came there to live she was a young, pretty wife. The sun and wind had changed her, too. They had taken the sparkle from her eyes and left them a sober gray; they had taken the red from her cheeks and lips, and they were gray also. She was thin and gaunt, and never smiled now. When Dorothy, who was an orphan, first came to her, Aunt Em had been so startled by the child's laughter that she would scream and press her hand upon her heart whenever Dorothy's merry voice reached her ears; and she still looked at the little girl with wonder that she could find anything to laugh at.

Uncle Henry never laughed. He worked hard from morning till night and did not know what joy was. He was gray also, from his long beard to his rough boots, and he looked stern and solemn, and rarely spoke.

It was Toto that made Dorothy laugh, and saved her from growing as gray as her other surroundings. Toto was not gray; he was a little black dog, with long silky hair and small black eyes that twinkled merrily on either side of his funny, wee nose. Toto played all day long, and Dorothy played with him, and loved him dearly.

Today, however, they were not playing. Uncle Henry sat upon the doorstep and looked anxiously at the sky, which was even grayer than usual. Dorothy stood in the door with Toto in her arms, and looked at the sky too. Aunt Em was washing the dishes.

[...]

*Little House in the Big Woods* by Laura Ingalls Wilder, illustrated by Garth Williams (1932)

From “Two Big Bears”

[...]

The Story of Pa and the Bear in the Way

When I went to town yesterday with the furs I found it hard walking in the soft snow. It took me a long time to get to town, and other men with furs had come in earlier to do their trading. The storekeeper was busy, and I had to wait until he could look at my furs.

Then we had to bargain about the price of each one, and then I had to pick out the things I wanted to take in trade.

So it was nearly sundown before I could start home.

I tried to hurry, but the walking was hard and I was tired, so I had not gone far before night came. And I was alone in the Big Woods without my gun.

There were still six miles to walk, and I came along as fast as I could. The night grew darker and darker, and I wished for my gun, because I knew that some of the bears had come out of their winter dens. I had seen their tracks when I went to town in the morning.

Bears are hungry and cross at this time of year; you know they have been sleeping in their dens all winter long with nothing to eat, and that makes them thin and angry when they wake up. I did not want to meet one.

“I hurried along as quick as I could in the dark. By and by the stars gave a little light. It was still black as pitch where the woods were thick, but in the open places I could see, dimly. I could see the snowy road ahead a little way, and I could see the dark woods standing all around me. I was glad when I came into an open place where the stars gave me this faint light.

All the time I was watching, as well as I could, for bears. I was listening for the sounds they make when they go carelessly through the bushes.

Then I came again into an open place, and there, right in the middle of my road, I saw a big black bear.

He was standing up on his hind legs, looking at me. I could see his eyes shine. I could see his pig-snout. I could even see one of his claws, in the starlight.

My scalp prickled, and my hair stood straight up. I stopped in my tracks, and stood still. The bear did not move. There he stood, looking at me.

I knew it would do no good to try to go around him. He would follow me into the dark woods, where he could see better than I could. I did not want to fight a winter-starved bear in the dark. Oh, how I wished for my gun!

I had to pass that bear, to get home. I thought that if I could scare him, he might get out of the road and let me go by. So I took a deep breath, and suddenly I shouted with all my might and ran at him, waving my arms.

He didn't move.

I did not run very far towards him, I tell you! I stopped and looked at him, and he stood looking at me. Then I shouted again. There he stood. I kept on shouting and waving my arms, but he did not budge.

Well, it would do me no good to run away. There were other bears in the woods. I might meet one any time. I might as well deal with this one as with another. Besides, I was coming home to Ma and you girls. I would never get here, if I ran away from everything in the woods that scared me.

So at last I looked around, and I got a good big club, a solid, heavy branch that had been broken from a tree by the weight of snow in the winter.

I lifted it up in my hands, and I ran straight at that bear. I swung my club as hard as I could and brought it down, bang! on his head.

And there he still stood, for he was nothing but a big, black, burned stump!

I had passed it on my way to town that morning. It wasn't a bear at all. I only thought it was a bear, because I had been thinking all the time about bears and being afraid I'd meet one."

[...]

***Mr. Popper's Penguins* by Richard and Florence Atwater, illustrated by Robert Lawson (1938)**

From Chapter 1: "Stillwater"

It was an afternoon in late September. In the pleasant little city of Stillwater, Mr. Popper, the house painter was going home from work.

He was carrying his buckets, his ladders, and his boards so that he had rather a hard time moving along. He was spattered here and there with paint and calcimine, and there were bits of wallpaper clinging to his hair and whiskers, for he was rather an untidy man.

The children looked up from their play to smile at him as he passed, and the housewives, seeing him, said, "Oh dear, there goes Mr. Popper. I must remember to ask John to have the house painted over in the spring."

No one knew what went on inside of Mr. Popper's head, and no one guessed that he would one day be the most famous person in Stillwater.

He was a dreamer. Even when he was busiest smoothing down the paste on the wallpaper, or painting the outside of other people's houses, he would forget what he was doing. Once he had painted three sides of a kitchen green, and the other side yellow. The housewife, instead of being angry and making him do it over, had liked it so well that she had made him leave it that way. And all the other housewives, when they saw it, admired it too, so that pretty soon everybody in Stillwater had two-colored kitchens.

The reason Mr. Popper was so absent-minded was that he was always dreaming about far-away countries. He had never been out of Stillwater. Not that he was unhappy. He had a nice little house of his own, a wife whom he loved dearly, and two children, named Janie and Bill. Still, it would have been nice, he often thought, if he could have seen something of the world before he met Mrs. Popper and settled down. He had never hunted tigers in India, or climbed the peaks of the Himalayas, or dived for pearls in the South Seas. Above all, he had never seen the Poles.

That was what he regretted most of all. He had never seen those great shining white expanses of ice and snow. How he wished that he had been a scientist, instead of a house painter in Stillwater, so that he might have joined some of the great Polar expeditions. Since he could not go, he was always thinking about them.

Whenever he heard that a Polar movie was in town, he was the first person at the ticket-window, and often he sat through three shows. Whenever the town library had a new book about the Arctic or the Antarctic—the North Pole or the South Pole—Mr. Popper was the first to borrow it. Indeed, he had read so much about Polar explorers that he could name all of them and tell you what each had done. He was quite an authority on the subject.

[...]

***Finn Family Moomintroll* by Tove Jansson, translated by Elizabeth Portch (1948)**

Preface

One grey morning the first snow began to fall in the Valley of the Moomins. It fell softly and quietly, and in a few hours everything was white.

Moomintroll stood on his doorstep and watched the valley nestle beneath its winter blanket. “Tonight,” he thought, “we shall settle down for our long winter’s sleep.” (All Moomintrolls go to sleep about November. This is a good idea, too if you don’t like the cold and the long winter darkness.) Shutting the door behind him, Moomintroll stole in to his mother and said:

“The snow has come!”

“I know,” said Moominmamma. “I have already made up all your beds with the warmest blankets. You’re to sleep in the little room under the eaves with Sniff.”

“But Sniff snores so horribly,” said Moomintroll. “Couldn’t I sleep with Snufkin instead?”

“As you like, dear,” said Moominmamma. “Sniff can sleep in the room that faces east.”

So the Moomin family, their friends, and all their acquaintances began solemnly and with great ceremony to prepare for the long winter. Moominmamma laid the table for them on the verandah but they only had pine-needles for supper. (It’s important to have your tummy full of pine if you intend to sleep all the winter.) When the meal was over, and I’m afraid it didn’t taste very nice, they all said good-night to each other, rather more cheerfully than usual, and Moominmamma encouraged them to clean their teeth.

The Moominpappa went round and shut all the doors and shutters and hung a mosquito net over the chandelier so that it wouldn’t get dusty.

Then everyone crept into his bed and, making a cosy nest for himself, pulled his blanket over his ears and thought of something nice. But Moomintroll sighed a little and said:

“I’m afraid we shall waste an awful lot of time.”

“Don’t worry,” answered Snufkin, “we shall have wonderful dreams, and when we wake up it’ll be spring.”

“Mm-m,” mumbled Moomintroll sleepily, but he had already drifted away into a hazy dream world.

Outside the snow fell, thick and soft. It already covered the steps and hung heavily from the roofs and eaves. Soon Moominhouse would be nothing but a big, round snowball. The clocks stopped ticking one by one. Winter had come.

*A Story A Story* by Gail E. Haley (1970)

Once, oh small children round my knee, there were no stories on earth to hear. All the stories belonged to Nyame, the Sky God. He kept them in a golden box next to his royal stool.

Ananse, the Spider Man, wanted to buy the Sky God's stories. So he spun a web up to the sky.

When the Sky God heard what Ananse wanted, he laughed: "Twe, twe, twe. The price of my stories is that you bring me Osebo the leopard-of-the-terrible-teeth, Mmboro the hornet who-stings-like-fire, and Mmoatia the fairy whom-men-never-see."

Ananse bowed and answered: "I shall gladly pay the price."

"Twe, twe, twe," chuckled the Sky God. "How can a weak old man like you, so small, so small, so small, pay my price?"

But Ananse merely climbed down to earth to find the things that the Sky God demanded.

Ananse ran along the jungle path — yiridi, yiridi, yiridi — till he came to Osebo the leopard-of-the-terrible-teeth.

"Oho, Ananse," said the leopard, "you are just in time to be my lunch."

Ananse replied: "As for that, what will happen will happen. But first let us play the binding binding game."

The leopard, who was fond of games, asked: "How is it played?"

"With vine creepers," explained Ananse. "I will bind you by your foot and foot. Then I will untie you, and you can tie me up."

"Very well," growled the leopard, who planned to eat Ananse as soon as it was his turn to bind him.

So Ananse tied the leopard

by his foot

by his foot

by his foot

by his foot, with the vine creeper.

Then he said: "Now, Osebo, you are ready to meet the Sky God." And he hung the tied leopard in a tree in the jungle.

[...]

### ***The Paper Crane* by Molly Bang (1985)**

A man once owned a restaurant on a busy road. He loved to cook good food and he loved to serve it. He worked from morning until night, and he was happy.

But a new highway was built close by. Travelers drove straight from one place to another and no longer stopped at the restaurant. Many days went by when no guests came at all. The man became very poor, and had nothing to do but dust and polish his empty plates and tables.

One evening a stranger came into the restaurant. His clothes were old and worn, but he had an unusual gentle manner.

Though he said he had not money to pay for food, the owner invited him to sit down. He cooked the best meal he could make and served him like a king. When the stranger had finished, he said to his host, "I cannot pay you with money, but I would like to thank you in my own way."

He picked up a paper napkin from the table and folded it into the shape of a crane. "You have only to clap your hands," he said, "and this bird will come to life and dance for you. Take it, and enjoy it while it is with you." With these words the stranger left.

It happened just as the stranger had said. The owner had only to clap his hands and the paper crane became a living bird, flew down to the floor, and danced.

Soon word of the dancing crane spread, and people came from far and near to see the magic bird perform.

The owner was happy again, for his restaurant was always full of guests. He cooked and served and had company from morning until night.

The weeks passed. And the months.

One evening a man came into the restaurant. His clothes were old and worn, but had an unusual, gentle manner. The owner knew him at once and was overjoyed.

The stranger, however, said nothing. He took a flute from his pocket, raised it to his lips, and began to play.

The crane flew down from its place on the shelf and danced as it had never danced before.

The stranger finished playing, lowered the flute from his lips, and returned it to his pocket. He climbed on the back of the crane, and they flew out of the door and away.

The restaurant still stands by the side of the road, and guests still come to eat the good food and hear the story of the gentle stranger and the magic crane made from a paper napkin. But neither the stranger nor the dancing crane has ever been seen again.

## Kindergarten to Grade 1: Read-Aloud Poetry

### “The Owl and the Pussycat” by Edward Lear (1871)

The Owl and the Pussy-cat went to sea  
In a beautiful pea-green boat,  
They took some honey, and plenty of money,  
Wrapped up in a five-pound note.  
The Owl looked up to the stars above,  
And sang to a small guitar,  
'O lovely Pussy! O Pussy, my love,  
What a beautiful Pussy you are,  
You are,  
You are!  
What a beautiful Pussy are!'

Pussy said to the Owl, 'You elegant fowl!  
How charmingly sweet you sing!  
O let us be married! Too long we have tarried:  
But what shall we do for a ring?'  
They sailed away, for a year and a day,  
To the land where the Bong-tree grows  
And there in a wood a Piggy-wig stood  
With a ring at the end of his ose,  
His nose,  
His nose,  
With a ring at the end of his nose.

'Dear Pig, are you willing to sell for one shilling  
Your ring?' Said the Piggy, 'I will.'  
So they took it away, and were married next day  
By the turkey who lives on the hill.  
They dined on mince, and slices of quince,  
Which they ate with a runcible spoon;  
And hand in hand, on the edge of the sand,  
They danced by the light of the moon,  
The moon,  
The moon,  
They danced by the light of the moon.

**“April Rain Song” by Langston Hughes (1932)**

Let the rain kiss you.

Let the rain beat upon your head with silver  
liquid drops.

[...]

**“The Fox’s Foray” – Traditional rhyme**  
**From *The Oxford Nursery Rhyme Book*, edited by Peter and Iona Opie (1955)**

A fox jumped out one winter’s night,  
And begged the moon to give him light.  
For he’d many miles to trot that night  
Before he reached his den O!  
    Den O! Den O!  
For he’d many miles to trot that night before he reached his den O!

The first place he came to was a farmer’s yard,  
Where the ducks and the geese declared it hard  
That their nerves should be shaken and their rest so marred  
By a visit from Mr. Fox O!  
    Fox O! Fox O!  
That their nerves should be shaken and their rest so marred  
By a visit from Mr. Fox O!

He took the grey goose by the neck,  
And swung him right across his back;  
The grey goose cried out, Quack, quack, quack,  
With his legs hanging dangling down O!  
    Down O! Down O!  
The grey goose cried out, Quack, quack, quack,  
With his legs hanging dangling down O!

Old Mother Slipper Slopper jumped out of bed,  
And out of the window she popped her head:  
Oh, John, John, the grey goose is gone,  
And the fox is off to his den O!  
    Den O! Den O!  
Oh, John, John, the grey goose is gone,  
And the fox is off to his den O!

John ran up to the top of the hill.  
And blew his whistle loud and shrill;  
Said the fox, That is very pretty music still –  
I’d rather be in my den O!  
    Den O! Den O!  
Said the fox, That is very pretty music still –  
I’d rather be in my den O!

The fox went back to his hungry den,  
And his dear little foxes, eight, nine, ten;  
Quoth they, Good daddy, you must go there again,  
If you bring such god cheer from the farm O!  
    Farm O! Farm O!  
Quoth they, Good daddy, you must go there again,  
If you bring such god cheer from the farm O!

The fox and his wife, without any strife,  
Said they never ate a better goose in all their life:  
They did very well without fork or knife,  
And the little ones chewed on the bones O!  
    Bones O! Bones O!  
They did very well without fork or knife,  
And the little ones chewed on the bones O!

***Over in the Meadow* by John Langstaff, illustrated by Feodor Rojankovsky (1957)**

[...]

Over in the meadow in a new little hive  
Lived an old mother queen bee and her honeybees five.  
“Hum,” said the mother,  
“We hum,” said the five;  
So they hummed and were glad in their new little hive.

Over in the meadow in a dam built of sticks  
Lived an old mother beaver and her little beavers six.  
“Build,” said the mother,  
“We build,” said the six;  
So they built and were glad in the dam built of sticks.

Over in the meadow in the green wet bogs  
Lived an old mother froggie and her seven polliwogs.  
“Swim,” said the mother.  
“We swim,” said the ‘wogs;  
So they swam and were glad in the green wet bogs.

Over in the meadow as the day grew late  
Lived an old mother owl and her little owls eight.  
“Wink,” said the mother,  
“We wink,” said the eight;  
So they winked and were glad as the day grew late.

[...]

***Zin! Zin! Zin! a Violin* by Lloyd Moss, illustrated by Marjorie Priceman (1995)**

With mournful moan and silken tone,  
Itself alone comes ONE TROMBONE.  
Gliding, sliding, high notes go low;  
ONE TROMBONE is playing SOLO.

[...]

## Kindergarten to Grade 1: Read-Aloud Informational Texts

### *The Year at Maple Hill Farm* by Alice and Martin Provensen (1978)

The Year

This is a book about farm animals,  
And what happens during one year on a farm.

The year is divided into twelve months,  
The months are divided into weeks,  
The weeks into days,  
The days into minutes, and on a farm something is happening every minute.

Animals don't know there is such a thing as a year,  
But they do know about seasons.  
Animals know when the cold will come,  
And they grow heavy overcoats.  
They know when it is summer,  
And they shed them.  
When it is hot, they look for shade,  
And in winter, they look for shelter.

People have names for what they call the months of the year.  
We could start with any month as far as the animals are concerned,  
But it is usual to begin with January.

January is a winter month. The ground is covered with snow. It is a cold, grey time of year and night falls early.

Cows stay in the barnyard when the ground is frozed. So do the chickens, but not many eggs are laid in January. The days are too short and dark. The horses don't mind the cold. Neither do the sheep with their heavy winter coats.

All the farm animals stay close to the barn where they are fed. There is hay and grain to eat. Even the wild deer come nearer the farm, hoping to find a little salt or a windfall apple under the snow.

February follows January. The forest pond is frozen solid, all but a marshy place where the spring water feeds the pond.

The children are having a skating party. When they are cold, they sit by the fire and toast their toes and noses. The geese play in the icy water all winter. You'd think their bare feet would freeze but they never do.

The noisy rooks are having a circus. They toss and tumble on the trapezes of bare branches. Rooks like winter. Under the ice, in a tunnel in the frozen ground, the water rat is napping. He won't be up until spring.

[...]

***Fire! Fire!* by Gail Gibbons (1984)**

From “Fire! Fire! In the city...”

In an apartment house, a breeze has blown a towel up into the flame of a hot stove. A fire begins. The smoke alarm screams.

A phone call alerts the fire-dispatch center. Instantly, a dispatcher calls the firehouse nearest the fire.

A loudspeaker blares out the address of the fire, and the firefighters go into action. They slide down brass poles to the ground floor, where the fire engines are, and hurry into their fire-fighting gear. Then they take their positions on their engines.

The big trucks roar out of the firehouse. Sirens scream and lights flash.

The fire engines arrive at the scene. The fire is bigger now. The fire chief is in charge. He decides the best way to fight this fire.

Hoses are pulled from the trucks. Each separate fire truck is called a “company.” Each separate company has an officer in charge. The fire chief tells each officer in charge what he wants the firefighters to do.

Firefighters are ordered to search the building to make sure no one is still inside. A man is trapped. A ladder tower is swung into action. The man is rescued quickly.

At the same time, an aerial ladder is taking other firefighters to the floor above the fire. Inside, the firefighters attach a hose to the building’s standpipe. Water is sprayed onto the fire to keep it from moving up through the apartment house.

Now the aerial ladder is swung over to the roof of the burning building. Firefighters break holes in the roof and windows to let out poisonous gases, heat, and smoke before they can cause a bad explosion. There’s less danger now for the firefighters working inside the building.

Firefighters are battling the blaze from the outside of the building, too. Fire hoses carry water from the fire hydrants to the trucks.

Pumps in the fire trucks control the water pressure and push the water up through the discharge hoses. Streams of water hit the burning building and buildings next door to keep the fire from spreading.

The fire is under control.

The fire is out. The firefighters clean up the rubble. Back at the firehouse, they clean their equipment and make an official report on the fire.

[...]

*Follow the Water from Brook to Ocean* by Arthur Dorros (1991)

After the next big rain storm, put your boots on and go outside. Look at the water dripping from your roof. Watch it gush out of the drainpipes. You can see water flowing down your street too.

Water is always flowing. It trickles in the brook near your house.

Sometimes you see water rushing along in a stream or in a big river.

Water always flows downhill. It flows from high places to low places, just the way you and your skateboard move down a hill.

Sometimes water collects in a low spot in the land – a puddle, a pond, or a lake. The water’s downhill journey may end there. Most of the time, though, the water will find a way to keep flowing downhill. Because water flows downhill, it will keep flowing until it can’t go any lower. The lowest parts of the earth are the oceans. Water will keep flowing until it reaches an ocean.

Where does the water start? Where does the water in a brook or a stream or a river come from? The water comes from rain. And it comes from melting snow. The water from rain and melting snow runs over the ground. Some of it soaks into the ground, and some water is soaked up by trees and other plants. But a lot of the water keeps traveling over the ground, flowing downhill.

The water runs along, flowing over the ground. Trickles of water flow together to form a brook. A brook isn’t very deep or wide. You could easily step across a brook to get to the other side.

The brook flows over small stones covered with algae. Algae are tiny plants. They can be green, red, or brown. Green algae make the water look green. *Plop!* A frog jumps into the brook. A salamander wiggles through leafy water plants. *Slap!* A trout’s tail hits the water. Lots of creatures live in the moving water.

[...]

***Amazing Whales!* by Sarah L. Thomson (2005)**

A blue whale is as long as a basketball court. Its eyes are as big as softballs. Its tongue weighs as much as an elephant.

It is the biggest animal that has ever lived on Earth – bigger than any dinosaur.

But not all whales are this big. A killer whale is about as long as a fire truck. Dolphins and porpoises are whales too, very small whales. The smallest dolphin is only five feet long. That’s probably shorter than your mom.

There are about 80 kinds of whales. All of them are mammals. Dogs and monkeys and people are mammals, too. They are warm-blooded. This means that their blood stays at the same temperature even if the air or water around them gets hot or cold.

Mammal babies drink milk from their mothers. Whale babies are called calves.

And mammals breathe air. A whale must swim to the ocean’s surface to breathe or it will drown. After a whale calf is born, its mother may lift it up for its first breath of air.

A whale uses its blowholes to breathe. It can have one blowhole or two. The blowholes are on the top of its head. When a whale breathes out, the warm breath makes a cloud called a blow. Then the whale breathes in. Its blowholes squeeze shut. The whale dives under the water. It holds its breath until it comes back up.

When sperm whales hunt, they dive deeper than any other whale. They can hold their breath for longer than an hour and dive down more than a mile.

Deep in the ocean, where the water is dark and cold, sperm whales hunt for giant squid and other animals.

Some whales, like sperm whales, have teeth to catch their food. They are called toothed whales. Other whales have not teeth. They are called baleen whales. (Say it like this: bay-LEEN.) Blue whales and humpback whales are baleen whales. They have strips of baleen in their mouths. Baleen is made of the same stuff as your fingernails. It is strong but it can bend.

A baleen whale fills its mouth with water. In the water there might be fish or krill. Krill are tiny animals like shrimp. The whale closes its mouth. The water flows back out between the strips of baleen.

The fish or krill are trapped inside its mouth for the whale to eat.

Some whales, like killer whales, hunt in groups to catch their food. These groups are called pods. A whale mother and her children, and even her grandchildren sometimes live in one pod.

[...]

***Living Sunlight: How Plants Bring the Earth to Life* by Molly Bang & Penny Chisholm, illustrated by Molly Bang (2009)**

Listen to me. Do this one thing: Lay your hand over your heart, and feel. Feel your heart pump, pump, and pump. Feel how warm you are. That is my light, alive inside of you.

I am your sun, your golden star. I burn. My light-energy explodes in all directions. Most fades into endless space. But some tiny, tiny part of my light falls on your small planet Earth.

I warm your land and seas, melt your glaciers, create your winds. I do all this. But I do far, far more...

My light becomes the energy for all life on Earth. All living things—including YOU—pulse with my light and keep it circling round and round on Earth.

How do living things do this? What is your secret?

Your secret starts in plants—green plants. Plants suck up water—H<sub>2</sub>O—from the Earth. In daylight, green plants catch my energy with their chlorophyll. Then...

KAZAP! Plants use my energy to break apart the water—break the H<sub>2</sub>O into H and O<sub>2</sub>, hydrogen and oxygen. But as plants break apart the water, they trap my energy as little packets.

Meanwhile, plants are breathing. (Yes, plants breathe!) they breathe out the oxygen they broke off from the water and breathe in carbon dioxide—CO<sub>2</sub>—from the air.

Now plants use the packets of my energy and the carbon dioxide from the air to build... CHUNKA-CHUNKA-CHUNKA...

...sugar! And with this sugar, plants build all their parts. All the leaves and stems and juices, all the seeds and fruit and flowers of all the plants on Earth are built with sugar made from air and water using my light energy.

This is photosynthesis – making life with sunlight, my light. This is my gift of energy to you.

But wait! *You* are not green! *You* have no leaves, no chlorophyll. *You* cannot catch my light. And neither can your parents, or your friends, your teachers, or any reptile, insect, fish, bird, or mammal in the whole wide world.

So...how do YOU get my energy? Do you know?

Yes, you eat plants. When you eat their leaves and stems and juices, when you eat their seeds and fruit and flowers, you eat my energy, my living light.

[...]

## Grades 2–3

### Grades 2–3: Narratives

*My Father’s Dragon* by Ruth Stiles Gannett, illustrated by Ruth Chrisman Gannett (1948)

From Chapter Seven: “My Father Meets a Lion”

[...]

“Who are you?” the lion yelled at my father.

“My name is Elmer Elevator.”

“Where do you think you are going?”

“I’m going home,” said my father.

“That’s what you think!” said the lion. “Ordinarily I’d save you for afternoon tea, but I happen to be upset enough and hungry enough to eat you right now.” And he picked up my father in his front paws to feel how fat he was.

My father said, “Oh, please, Lion, before you eat me, tell me why you are so particularly upset today.”

“It’s my mane,” said the lion, as he was figuring out how many bites a little boy would make. “You see what a dreadful mess it is, and I don’t seem to be able to do anything about it. My mother is coming over on the dragon this afternoon, and if she sees me this way I’m afraid she’ll stop my allowance. She can’t stand messy manes! But I’m going to eat you now, so it won’t make any difference to you.”

“Oh, wait a minute,” said my father, “and I’ll give you just the things you need to make your mane a tidy and beautiful. I have them here in my pack.”

“You do?” said the lion, “Well, give them to me, and perhaps I’ll save you for afternoon tea after all,” and he put my father down on the ground.”

My father opened the pack and took out the comb and the brush and the seven hair ribbons of different colors.

“Look,” he said, “I’ll show you what to do on your forelock, where you can watch me. First you brush a while, and then you comb, and then you brush again until all the twigs and snarls are gone. Then you divide it up into three and braid it like this and tie a ribbon around the end.”

As my father was doing this, the lion watched very carefully and began to look much happier. When my father tied the ribbon he was all smiles. “Oh, that’s wonderful, really wonderful!” said the lion. “Let me have the comb and brush and see if I can do it.” So my father gave him the comb and brush and the lion began busily grooming his mane. As a matter of fact, he was so busy that he didn’t even know when my father left.

[...]

***Crow Boy* by Taro Yashima (1955)**

On the first day of our village school in Japan, there was a boy missing.  
He was found hidden away in the dark space underneath the schoolhouse floor.  
None of use knew him. He was nicknamed Chibi because he was very small. Chibi means “tiny boy.”

This strange boy was afraid of our teacher and could not learn a thing.  
He was afraid of the children and could not make friends with them at all.

He was left alone in the study time.

He was left alone in the play time.

He was always at the end of the line, always at the foot of the class, a forlorn little tag-along.

Soon Chibi began to make his eyes cross eyed so that he was not able to see whatever he did not want to see.

And Chibi found many ways, one after another, to kill time and amuse himself.

Just the ceiling was interesting enough for him to watch for hours.

The wooden top of his desk was another interesting thing to watch.

A patch of cloth on a boy’s shoulder was something to study.

Of course the window showed him many things all year round.

Even when it was raining the window had surprising things to show him .

On the playground, if he closed his eyes and listened, Chibi could hear many different sounds, near and far.

And Chibi could hold and watch insects and grubs that most of us wouldn’t touch or even look it.

So that not only the children in our class but the older ones and even the younger ones called him stupid and slowpoke.

But, slowpokes or not, day after day Chibi came trudging to school.

He always carried the same lunch, a rice ball wrapped in a radish leaf.

Even when it rained or stormed he still came trudging along, wrapped in a raincoat made from dried zebra grass.

And so, day by day, five years went by, and we were in the sixth grade, the last class in school.

[...]

### *Amos & Boris* by William Steig (1971)

[...]

The *Rodent*, for that was the boat's name, proved to be very well made and very well suited to the sea. And Amos, after one miserable day of seasickness, proved to be a natural sailor, very well suited to the ship.

He was enjoying his trip immensely. It was beautiful weather. Day and night he moved up and down, up and down, on waves as big as mountains, and he was full of wonder, full of enterprise, and full of love for life.

One night, in a phosphorescent sea, he marveled at the sight of some whales spouting luminous water; and later, lying on the deck of his boat gazing at the immense, starry sky, the tiny mouse Amos, a little speck of a living thing in the vast living universe, felt thoroughly akin to it all. Overwhelmed by the beauty and mystery of everything, he rolled over and over and right off the deck of his boat and into the sea.

"Help!" he squeaked as he grabbed desperately at the *Rodent*. But it evaded his grasp and went bowling along under full sail, and he never saw it again.

And there he was! Where? In the middle of the immense ocean, a thousand miles from the nearest shore, with no one else in sight as far as the eye could see and not even so much as a stick of driftwood to hold on to. "Should I try to swim home?" Amos wondered. "Or should I just try to stay afloat?" He might swim a mile, but never a thousand. He decided to just keep afloat, treading water and hoping that something — who knows what? — would turn up to save him. But what if a shark, or some big fish, a horse mackerel, turned up? What was he supposed to do to protect himself? He didn't know.

Morning came, as it always does. He was getting terribly tired. He was a very small, very cold, very wet and worried mouse. There was still nothing in sight but the empty sea. Then, as if things weren't bad enough, it began to rain.

At last the rain stopped and the noonday sun gave him a bit of cheer and warmth in the vast loneliness; but his strength was giving out. He began to wonder what it would be like to drown. Would it take very long? Would it feel just awful? Would his soul go to heaven? Would there be other mice there?

As he was asking himself these dreadful questions, a huge head burst through the surface of the water and loomed up over him. It was a whale. "What sort of fish are you?" the whale asked. "You must be one of a kind!"

"I'm not a fish," said Amos. "I'm a mouse, which is a mammal, the highest form of life. I live on land."

"Holy clam and cuttlefish!" said the whale. "I'm a mammal myself, though I live in the sea. Call me Boris," he added.

Amos introduced himself and told Boris how he came to be there in the middle of the ocean. The whale said he would be happy to take Amos to the Ivory Coast of Africa, where he happened to be headed anyway, to attend a meeting of whales from all the seven seas. But Amos said he'd had enough adventure to last him a while. He wanted only to get back home and hoped the whale wouldn't mind going out his way to take him there.

"Not only would I not mind," said Boris, "I would consider it a privilege. What other whale in the all the world ever had the chance to get to know such a strange creature as you! Please climb aboard." And Amos got on Boris's back.

"Are you sure you're a mammal?" Amos asked. "You smell more like a fish." Then Boris the whale went swimming along, with Amos the mouse on his back.

[...]

***The Treasure* by Uri Shulevitz (1978)**

There was once a man and his name was Isaac.

He lived in such poverty that again and again he went to bed hungry.

One night, he had a dream.

In his dream, a voice told him to go to the capital city and look for a treasure under the bridge by the Royal Palace. "It is only a dream," he thought when he woke up, and he paid no attention to it.

The dream came back a second time.  
And Isaac still paid no attention to it.

When the dream came back a third time, he said, "Maybe it's true," and so he set out on his journey.

Now and then, someone gave him a ride, but most of the way he walked.

He walked through forests.

He crossed over mountains.

Finally he reached the capital city.

But when he came to the bridge by the Royal Palace, he found that it was guarded day and night.

He did not dare to search for the treasure.  
Yet he returned to the bridge every morning and wandered around it until dark.

One day, the captain of the guards asked him, "Why are you here?"

Isaac told him the dream. The captain laughed.

"You poor fellow," he said, "what a pity you wore your shoes out for a dream! Listen, if I believed a dream I once had, I would go right now to the city you came from, and I'd look for a treasure under the stove in the house of a fellow named Isaac."  
And he laughed again.

Isaac bowed to the captain and started on his long way home.

He crossed over mountains.

He walked through forests.

Now and then, someone gave him a ride, but most of the way he walked.

At last he reached his own town.

When he got home, he dug under his stove, and there he found the treasure.

In thanksgiving, he built a house of prayer, and in one of its corners he put an inscription: Sometimes one must travel far to discover what is near.

Isaac sent the captain of the guards a priceless ruby.  
And for the rest of his days he lived in contentment and he was never poor again.

*The Stories Julian Tells* by Ann Cameron (1981)

From “A Day When Frogs Wear Shoes”

My little brother, Huey, my best friend, Gloria, and I were sitting on our front steps. It was one of those hot summer days when everything stands still. We didn’t know what to do. We were watching the grass grow. It didn’t grow fast.

“You know something?” Gloria said. “This is a slow day.”

“It’s so slow the dogs don’t bark,” Huey said.

“It’s so slow the flies don’t fly,” Gloria said.

“It’s so slow ice cream wouldn’t melt,” I said.

“If we had any ice cream,” Huey said.

“But we don’t,” Gloria said.

We watched the grass some more.

“We’d better do something,” I said.

“Like what?” Gloria asked.

“We could go visit Dad,” Huey said.

“That’s a terrible idea,” I said.

“Why?” Huey asked. “I like visiting Dad.”

My father has a shop about a mile from our house where he fixes cars. Usually it is fun to visit him. If he has customers, he always introduces us as if we were important guests. If he doesn’t have company, sometimes he lets us ride in the cars he puts up on the lift. Sometimes he buys us treats.

“Huey,” I said, “Usually, visiting Dad is a good idea. Today, it’s a dangerous idea.”

“Why?” Gloria asked.

“Because we’re bored,” I said. “My dad hates it when people are bored. He says the world is so interesting nobody should ever be bored.”

“I see,” Gloria said, as if she didn’t.

“So we’ll go see him,” Huey said, “and we just won’t tell him we’re bored. We’re bored, but we won’t tell him.”

“Just so you remember that!” I said.

“Oh, I’ll remember,” Huey said.

Huey was wearing his angel look. When he has that look you know he’ll never remember anything.

[...]

***Sarah, Plain and Tall* by Patricia MacLachlan (1985)**

[...]

I wiped my hands on my apron and went to the window. Outside, the prairie reached out and touched the places where the sky came down. Though the winter was nearly over, there were patches of snow everywhere. I looked at the long dirt road that crawled across the plains, remembering the morning that Mama had died, cruel and sunny. They had come for her in a wagon and taken her away to be buried. And then the cousins and aunts and uncles had come and tried to fill up the house. But they couldn't.

Slowly, one by one, they left. And then the days seemed long and dark like winter days, even though it wasn't winter. And Papa didn't sing.

[...]

***Tops and Bottoms* by Janet Stevens (1995)**

Once upon a time there lived a very lazy bear who had lots of money and lots of land. His father had been a hard worker and a smart business bear, and he had given all of his wealth to his son.

But all Bear wanted to do was sleep.

Not far down the road lived a hare. Although Hare was clever, he sometimes got into trouble. He had once owned land, too, but now he had nothing. He had lost a risky bet with a tortoise and had sold off all of his land to Bear to pay off the debt.

Hare and his family were in very bad shape.

“The children are so hungry father bear! We must think of something!” Mrs. Hare cried one day. So Hare and Mrs. Hare put their heads together and cooked up a plan.

[...]

Bear stared at his pile. “But, Hare, all the best parts are in your half!”

“You chose the tops, Bear,” Hare said.

“Now, Hare, you’ve tricked me. You plant this field again—and this season I want the bottoms!”

Hare agreed. “It’s a done deal, Bear.”

[...]

***The Raft by Jim LaMarche (2000)***

[...]

Somehow, on the river, it seemed like summer would never end. But of course it did.

On my last day, I got up extra early and crept down to the dock. The air was cool and a low pearly fog hung over the river. I untied the raft and quietly drifted downstream.

Ahead of me, through the fog, I saw two deer moving across the river, a doe and a fawn. When they reached the shore, the doe leaped easily up the steep bank, then turned to wait for her baby. But the fawn was in trouble. It kept slipping down the muddy bank, The doe returned to the water to help, but the more the fawn struggled, the deeper it got stuck in the mud.

I pushed off the river bottom and drove the raft hard onto the muddy bank, startling the doe. Then I dropped into the water. I was ankle-deep in mud.

You're okay," I whispered to the fawn, praying that the raft would calm it. "I won't hurt you."

Gradually the fawn stopped struggling, as if it understood that I was there to help. I put my arms around it and pulled. It barely moved. I pulled again, then again. Slowly the fawn eased out of the mud, and finally it was free. Carefully I carried the fawn up the bank to its mother.

Then, quietly, I returned to the raft. From there I watched the doe nuzzle and clean her baby, and I knew what I had to do. I pulled the stub of a crayon from my pocket, and drew the fawn, in all its wildness, onto the old gray boards of the raft. When I had finished, I knew it was just right.

[...]

***The Lighthouse Family: The Storm* by Cynthia Rylant, illustrated by Preston McDaniels (2002)**

In a lonely lighthouse, far from city and town, far from the comfort of friends, lived a kindhearted cat named Pandora.

She had been living in this lighthouse all alone for four long years, and it was beginning to wear. She found herself sighing long, deep, lonely sighs. She sat on the rocks overlooking the waves far too long. Sometimes her nose got a sunburn.

And at night, when she tried to read by the lantern light, her mind wandered and she would think for hours on her childhood when she had friends and company.

Why did Pandora accept this lonely lighthouse life?

Because a lighthouse had once saved her.

When Pandora was but a kitten, she and her father had gone sailing aboard a grand schooner, bound for a new country. Pandora's mother had stayed behind, with the baby, to join them later.

And while they were at sea, Pandora and her father were shaken from their beds one night by an awful twisting of the ship's great bow.

"Stay here, Pandora!" her father had commanded. "Stay here and wait until I come for you!"

They were in a terrible storm. The wind was howling, and the waves crashed hard upon them. Worse, a deep fog had spread itself all over the water, and it is fog that will bring a ship to its end. Fog that will blind a sailor's eyes until his ship has hit the jagged shore and torn itself to pieces.

Pandora's father knew this as he worked with the others to keep the ship's sails aloft and his daughter trembled in her bed. He knew what somber danger they were in.

But Pandora's father was a brave cat and he would not give up hope. He would hold tight to the riggings with the others until help, in whatever form might come to them.

In time, the winds began to settle and the waves grew smaller. But the dense fog refused to lift.

The ship's captain was clearly worried. For he knew these waters they sailed in. He knew the long history of ships gone down.

And he carried little hope that help might come to them, that someone might lead them away from the deadly shore. For only a lighthouse might show them the way, and there had been no working light on these waters for a hundred years.

So it was with much bewilderment, and amazement, and overwhelming *joy* that he heard, first, the deep, clear sound of a foghorn, then saw before him a *light*. Yes, a light! And it was not the light of another ship or small boat. Only a very powerful lamp could make itself seen through a fog like this. Only the lamp of a lighthouse.

"Pull leeward!" cried the captain. "Away from the light!"

And everyone pulled hard on the riggings to make the ship turn, turn away from the dangerous shore. [...]

***The One-Eyed Giant (Book One of Tales from the Odyssey) by Mary Pope Osborne (2002)***

From Chapter Five: “The One-Eyed Giant”

A hideous giant lumbered into the clearing. He carried nearly half a forest’s worth of wood on his back. His monstrous head jutted from his body like a shaggy mountain peak. A single eye bulged in the center of his forehead.

The monster was Polyphemus. He was the most savage of all the Cyclopes, a race of fierce one-eyed giants who lived without laws or leader. The Cyclopes were ruthless creatures who were known to capture and devour any sailors who happened near their shores.

Polyphemus threw down his pile of wood. As it crashed to the ground, Odysseus and his men fled to the darkest corners of the cave.

Unaware that the Greeks were hiding inside, Polyphemus drove his animals into the cave. Then he rolled a huge boulder over its mouth to block out the light of day and imprison his flock inside.

*Twenty-four wagons could not haul that rock away, Odysseus thought desperately. How will we escape this monster?*

Odysseus’ men trembled with terror as the giant made a small fire and milked his goats in the shadowy light. His milking done, he threw more wood on his fire. The flame blazed brightly, lighting up the corners of the cave where Odysseus and his men were hiding.

“What’s this? Who are you? From where do you come?” the giant boomed. He glared at the Greeks with his single eye. “Are you pirates who steal the treasure of others?”

Odysseus’ men were frozen with terror. But Odysseus hid his own fear and stepped toward the monster.

“We are not pirates,” he said, “We are Greeks blown off course by storm winds. Will you offer us the gift of hospitality like a good host? If you do, mighty Zeus, king of the gods, will be pleased. Zeus is the guardian of all strangers.”

“Fool!” the giant growled. “Who are you to tell me to please Zeus? I am a son of Poseidon, god of the seas! I am not afraid of Zeus!”

Odysseus men cowered in fear.

Polyphemus moved closer to Odysseus. He spoke in a soft, terrible voice. “But tell me, stranger, where is your ship? Near or far from shore?”

Odysseus knew Polyphemus was trying to trap him. “Our ship was destroyed in the storm,” he lied. “It was dashed against the rocks. With these good men I escaped, I ask you again, will you welcome us?”

[...]

### Grades 2-3: Poetry

#### “Autumn” by Emily Dickinson (1893)

The morns are meeker than they were.  
The nuts are getting brown;  
The berry's cheek is plumper,  
The rose is out of town.

The maple wears a gayer scarf,  
The field a scarlet gown.  
Lest I should be old-fashioned,  
I'll put a trinket on.

**“Who Has Seen the Wind” by Christina G. Rossetti (1893)**

Who has seen the wind?

Neither I nor you;

But when the leaves hang trembling

The wind is passing through.

Who has seen the wind?

Neither you nor I;

But when the trees bow down their heads

The wind is passing by.

**“Afternoon on a Hill” by Edna St. Vincent Millay (1917)**

I will be the gladdest thing  
Under the sun!  
I will touch a hundred flowers  
And not pick one.

I will look at cliffs and clouds  
With quiet eyes,  
Watch the wind bow down the grass,  
And the grass rise.

And when lights begin to show  
Up from the town,  
I will mark which must be mine,  
And then start down!



**“Something Told the Wild Geese” by Rachel Field (1934)**

Something told the wild geese

It was time to go.

Though the fields lay golden

Something whispered, “Snow.”

[...]

**“Grandpa’s Stories” by Langston Hughes (1958)**

The pictures on the television  
Do not make me dream as well  
As the stories without pictures  
Grandpa knows how to tell.

[...]

**“A Bat Is Born” by Randall Jarrell (1964)**

A bat is born  
Naked and blind and pale.  
His mother makes a pocket of her tail  
And catches him. He clings to her long fur  
By his thumbs and toes and teeth.  
And then the mother dances through the night  
Doubling and looping, soaring, somersaulting—  
Her baby hangs on underneath.

[...]

**“Knoxville, Tennessee” by Nikki Giovanni (1968)**

I always like summer  
best  
you can eat fresh corn  
from daddy’s garden

[...]

**“Weather” by Eve Merriam (1969)**

Dot a dot dot     dot a dot dot  
Spotting the windowpane.  
Spack a spack speck     flick a flack fleck  
Freckling the window pane

[...]

**“Eating While Reading” by Gary Soto (1995)**

What is better  
Than this book  
And the churn of candy  
In your mouth,

[...]

## Grades 2–3 Informational Texts

### *A Medieval Feast by Alikì (1983)*

I was announced from the palace that the King would soon make a long journey.

On the way to his destination, the King and his party would spend a few nights at Camdenton Manor. The lord of the manor knew what this meant. The king traveled with his Queen, his knights, squires, and other members of his court. There could be a hundred mouths to feed!

Preparations for the visit began at once. The lord and lady of the manor had their serfs to help them. The serfs lived in huts provided for them on the lord's estate, each with its own plot of land. In return, they were bound to serve the lord. They farmed his land, managed his manor house, and if there was a war, they had to go to battle with the lord and the King.

But now they prepared.

*The manor had its own church, which was attended by everyone on the estate.*

The manor house had to be cleaned, the rooms readied, tents set up for the horsemen, fields fenced for the horses. And above all, provisions had to be gathered for the great feast.

*The Royal Suite was redecorated.*

*Silk was spun, new fabric was woven.*

*The Royal Crest was embroidered on linen and painted on the King's chair.*

The lord and his party went hunting and hawking for fresh meat.

*Hunting was a sport for the rich only. The wild animals that lived on the lord's estate belonged to him. Anyone caught poaching—hunting illegally—was severely punished.*

*Falcons and hawks were prized pets. They were trained to attack birds for their masters to capture.*

They trapped rabbits and birds of all kinds, and fished for salmon and eels and trout.

*Serfs hid in bushes and caught birds in traps. They set ferrets in burrows to chase out rabbits.*

There were fruits and vegetables growing in the garden, herbs and flowers for sauces and salads, and bees made honey for sweetening.

[...]

***Maps & Globes* by Jack Knowlton, pictures by Harriet Barton (1985)**

**Thousands of years ago, our ancestors invented the map.**

Ancient maps were crude but very useful tools. They helped people find food, clean water, and the way back home—even when home was a cave.

**As civilizations grew, better maps were needed.**

The oldest existing maps are from the ancient kingdom of Babylonia. These maps were etched on tablets of damp clay that soon baked rock hard in the midday sun.

Early Chinese mapmakers painted beautiful maps of their empire on pure silk cloth. People in every part of the world cleverly used local materials to make maps they wanted and needed.

***Charts* are maps used to sail the wide oceans.**

The Polynesian Islanders sailed the vast Pacific Ocean using *stick chart* maps. These charts were woven with reeds and palm leaves that showed the ocean's currents and wave directions. Seashells were attached to each chart to indicate the larger islands.

[...]

***Sunshine Makes the Seasons* by Franklyn M. Branley (1985)**

Sunshine warms the earth.

If the sun stopped shining, the earth would get colder and colder. We would freeze. The whole earth would freeze.

The sun shines all through the year. But we are warmer in summer than in winter. The amount of sunshine makes the difference.

The earth spins around, or rotates, once in twenty-four hours. That's why we have a day and night. When we are on the sun side of the earth, there is daylight. As the earth rotates, we turn away from the sun. There is sunset and then night.

At the same time that the earth spins, it goes around the sun. The earth takes a year to make one trip around the sun.

During a year the length of our day changes. In winter the days are short. It may be dark by the time you get home from school. It is cold because we don't get many hours of sunshine.

As we move into spring, days become longer, By summer they are even longer.

The days may be so long that it is still light when you go to bed. It is warm because we get many hours of sunshine. After the long days of summer, the days begin to get shorter and cooler. It is fall and time to go back to school.

All through the year the earth had been rotating once in twenty-four hours, giving us day and night. And all through the year the lengths of darkness and daylight have been changing. The seasons have been changing too.

[...]

***From Seed to Plant* by Gail Gibbons (1991)**

[...]

“A ‘From Seed to Plant’ Project”

How to raise bean plants

1. Find a clean glass jar. Take a piece of black construction paper and roll it up.
2. Slide the paper into the jar. Fill the jar with water.
3. Wedge the bean seeds between the black paper and the glass. Put the jar in a warm place.
4. In a few days the seeds will begin to sprout. Watch the roots grow down. The shoots will grow up.
5. Put dirt into a big clay pot.
6. Carefully remove the small plants from the glass jar. Place them in the soil, covering them up to the base of their shoots.
7. Water them ...and watched them grow.

[...]

***Throw Your Teeth on the Roof: Tooth Traditions Around the World* by Selby B. Beeler,  
illustrated by G. Brian Karas (1998)**

Has this ever happened to you?  
You find a loose tooth in your mouth.  
Yikes! You can wiggle it with your finger.  
You can push it back and forth with your tongue.  
Then one day it falls out.  
There you are with your old baby tooth in your hand and a big hole in your mouth.  
It happens to everyone, everywhere, all over the world.  
“Look! Look! My tooth fell out! My tooth fell out!”  
But what happens next?  
What in the world do you do with your tooth?

North America

United States

I put my tooth under my pillow. While I'm sound asleep, the Tooth Fairy will come into my room, take my tooth, and leave some money in its place.

Mexico

When I go to sleep, I leave my tooth in a box on the bedside table. I hope El Ratón, the magic mouse, will take my tooth and bring me some money. He leaves more money for a front tooth.

Yupik

My mother wraps my tooth in a food, like meat or bread. Then I feed it to a female dog and say, “Replace this tooth with a better one.”

Yellowknife Déné

My mother or grandmother takes my tooth and puts it in a tree and then my family dances around it. This makes certain that my new tooth will grow in as straight as a tree.

Navajo

My mother saves my tooth until my mouth stops hurting. Then we take my tooth to the southeast, away from our house. We bury the tooth on the east side of a healthy young sagebrush, rabbit bush, or pinyon tree because we believe that east is the direction associated with childhood.

[...]

*So You Want to Be President?* By Judith St. George, illustrated by David Small (2000)

[...]

Every single President has taken this oath: “I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will to the best of my ability, preserve, protect, and defend the Constitution of the United States.”

Only thirty-five words! But it’s a big order if you’re President of this country. Abraham Lincoln was tops at filling that order. “I know very well that many others might in this matter or as in others, do better than I can,” he said. “But...I am here. I must do the best I can, and bear the responsibility of taking the course which I feel I ought to take.”

That’s the bottom line. Tall, short, fat, thin, talkative, quiet, vain, humble, lawyer, teacher, or soldier—this is what most of our Presidents have tried to do, each in his own way. Some succeeded. Some failed. If you want to be President—a good President—pattern your self after the best. Our best have asked more of themselves than they thought they could give. They have had the courage, spirit, and will to do what they knew was right. Most of all, their first priority has always been the people and the country they served.

***Boy, Were We Wrong About Dinosaurs* by Kathleen V. Kudlinski, illustrated by S.D. Schindler (2005)**

Long, long ago, before people knew anything about dinosaurs, giant bones were found in China. Wise men who saw the bones tried to guess what sort of enormous animal they could have come from.

After they studied the fossil bones, the ancient Chinese decided that they came from dragons. They thought these dragons must have been magic dragons to be so large. And they believed that dragons could still be alive.

Boy, were they wrong!

No one knows exactly what dinosaurs looked like. All that is left of them are fossil bones and a few other clues. Now that we think that many of our own past guesses about dinosaurs were just as wrong as those of ancient China.

Some of our mistakes were little ones. When the first fossil bones of *Iguanodon* were found, one was shaped like a rhino's horn. Scientists guessed that the strange horn fit like a spike on *Iguanodon*'s nose

Boy, were we wrong about *Iguanodon*!

When a full set of fossil bones was found later, there were two pointed bones, they were part of *Iguanodon*'s hands, not its nose!

Other new clues show us that we may have been wrong about every kind of dinosaur.

Some of our first drawings of dinosaurs showed them with their elbows and knees pointing out to the side, like a lizard's. With legs like that, big dinosaurs could only waddle clumsily on all fours or float underwater.

Now we know that their legs were straight under them, like a horse's. Dinosaurs were not clumsy. The sizes and shapes of their leg bones seem to show that some were as fast and graceful as deer.

[...]

***Bat Loves the Night* by Nicola Davies, illustrated by Sarah Fox-Davies (2008)**

Bats are the only mammals that can really fly, and flight has made them very successful. There are more than nine hundred species, living in almost every habitat from subarctic tundra to tropical forests and deserts. Birds may rule the air by day, but bats are the monarchs of the night.

This book is about one of the pipistrelle bats. Pipistrelles are found around the world, from North America to Africa, Europe, Asia, and Australia.

Bat is waking, upside down as usual, hanging by her toenails.

Her beady eyes open.  
Her pixie ears twitch.

She shakes her thistledown fur.

She unfurls her wings, made of skin so fine the finger bones inside show through.

*The pipistrelle bat's body is no bigger than your thumb.*

*A bat's wing is its arm and hand. Four extra-long fingers support the skin of the wing.*

*Bats' toes are shaped like hooks, so it's no effort for a bat to hang upside down.*

Now she unhooks her toes and drops into black space. With a sound like a tiny umbrella opening, she flaps her wings.

Bat is flying.

[...]

***Moonshot: The Flight of Apollo 11* by Brian Floca (2009)**

High above there is the Moon, cold and quiet, no air, no life, but glowing in the sky.

Here below there are three men who close themselves in special clothes, who—*click*—lock hands in heavy gloves, who—*click*—lock heads in large round helmets.

It is summer here in Florida, hot, and near the sea. But now these men are dressed for colder, stranger places. They walk with stiff and awkward steps in suits not made for Earth.

They have studied and practiced and trained, and said good-bye to family and friends. If all goes well, they will be gone for one week, gone where no one has been.

Their two small spaceships are *Columbia* and *Eagle*. They sit atop the rocket that will raise them into space, a monster of a machine: It stands thirty stories, it weighs six million pounds, a tower full of fuel and fire and valves and pipes and engines, too big to believe, but built to fly—the mighty, massive Saturn V.

The astronauts squeeze in to *Columbia*'s sideways seats, lying on their backs, facing toward the sky—Neil Armstrong on the left, Michael Collins in the right, Buzz Aldrin in the middle.

*Click* and they fasten straps.

*Click* and the hatch is sealed.

There they wait, while the Saturn hums beneath them.

Near the rocket, in Launch Control, and far away in Houston, in Mission Control, there are numbers, screens, and charts, ways of watching and checking every piece of the rocket and ships, the fuel, the valves, the pipes, the engines, the beats of the astronauts' hearts.

As the countdown closes, each man watching is asked the question: GO/NO GO?

And each man answers back: "GO." "GO." "GO."

Apollo 11 is GO for launch.

[...]

***Where Do Polar Bears Live?* by Sarah L. Thomson, illustrated by Jason Chin (2010)**

This island is covered with snow. No trees grow. Nothing has green leaves. The land is white as far as you can see.

Then something small and round and black pokes up out of the snow.

A black nose sniffs the air. Then a smooth white head appears. A mother polar bear heaves herself out of her den.

A cub scrambles after her.

When the cub was born four months ago, he was no bigger than a guinea pig. Blind and helpless, he snuggled in his mother's fur. He drank her milk and grew, safe from the long Arctic winter.

Outside the den, on some days, it was fifty degrees below zero. From October to February, the sun never rose.

Now it is spring—even though snow still covers the land. The cub is about the size of a cocker spaniel. He's ready to leave the den. For the first time, he sees bright sunlight and feels the wind ruffle his fur.

The cub tumbles and slides down icy hills. His play makes him strong and teaches him to walk and run in snow.

Like his mother, he cub is built to survive in the Arctic. Hi white fur will grow to be six inches thick—longer than your hand. The skin beneath the cub's fur is black. It soaks up the heat of the sun. Under the skin is a layer of fat. Like a snug blanket, this blubber keeps in the heat of the bear's body.

Polar bears get too hot more easily than they get too cold. They stretch out on the ice to cool off.

[...]

## Grades 2–3: Read-Aloud Narratives

### “How the Camel Got His Hump” in *Just So Stories* by Rudyard Kipling (1902)

Now this is the next tale, and it tells how the Camel got his big hump.

In the beginning of years, when the world was so new and all, and the Animals were just beginning to work for Man, there was a Camel, and he lived in the middle of a Howling Desert because he did not want to work; and besides, he was a Howler himself. So he ate sticks and thorns and tamarisks and milkweed and prickles, most 'scruciating idle; and when anybody spoke to him he said "Humph!" Just "Humph!" and no more.

Presently the Horse came to him on Monday morning, with a saddle on his back and a bit in his mouth, and said, "Camel, O Camel, come out and trot like the rest of us."

"Humph!" said the Camel; and the Horse went away and told the Man.

Presently the Dog came to him, with a stick in his mouth, and said, "Camel, O Camel, come and fetch and carry like the rest of us."

"Humph!" said the Camel; and the Dog went away and told the Man.

Presently the Ox came to him, with the yoke on his neck and said, "Camel, O Camel, come and plough like the rest of us."

"Humph!" said the Camel; and the Ox went away and told the Man.

At the end of the day the Man called the Horse and the Dog and the Ox together, and said, "Three, O Three, I'm very sorry for you (with the world so new-and-all); but that Humph-thing in the Desert can't work, or he would have been here by now, so I am going to leave him alone, and you must work double-time to make up for it."

That made the Three very angry (with the world so new-and-all), and they held a palaver, and an *indaba*, and a *punchayet*, and a pow-wow on the edge of the Desert; and the Camel came chewing milkweed most 'scruciating idle, and laughed at them. Then he said "Humph!" and went away again.

Presently there came along the Djinn in charge of All Deserts, rolling in a cloud of dust (Djinns always travel that way because it is Magic), and he stopped to palaver and pow-wow with the Three.

"Djinn of All Deserts," said the Horse, "is it right for any one to be idle, with the world so new-and-all?"

"Certainly not," said the Djinn.

"Well," said the Horse, "there's a thing in the middle of your Howling Desert (and he's a Howler himself) with a long neck and long legs, and he hasn't done a stroke of work since Monday morning. He won't trot."

"Whew!" said the Djinn, whistling, "that's my Camel, for all the gold in Arabia! What does he say about it?"

"He says 'Humph!'" said the Dog; "and he won't fetch and carry."

"Does he say anything else?"

"Only 'Humph!'; and he won't plough," said the Ox.

"Very good," said the Djinn. "I'll humph him if you will kindly wait a minute."

[...]

***The Thirteen Clocks* by James Thurber (1950)**

Once upon a time, in a gloomy castle on a lonely hill, where there were thirteen clocks that wouldn't go, there lived a cold aggressive Duke, and his niece, the Princess Saralinda. She was warm in every wind and weather, but he was always cold. His hands were as cold as his smile and almost as cold as his heart. He wore gloves when he was asleep, and he wore gloves when he was awake, which made it difficult for him to pick up pins or coins or kernels of nuts, or to tear the wings from nightingales. He was six feet four, and forty-six, and even colder than he thought he was. One eye wore a velvet patch; the other glittered through a monocle, which made half of his body seem closer to you than the other half. He had lost one eye when he was twelve, for he was fond of peering into nests and lairs in search of birds and animals to maul. One afternoon, a mother shrike had mauled him first. His nights were spent in evil dreams, and his days were given to wicked schemes.

Wickedly scheming, he would limp and cackle through the cold corridors of the castle, planning new impossible feats for the suitors of Saralinda to perform. He did not wish to give her hand in marriage, since her hand was the only warm hand in the castle. Even the hands of his watch and the hands of all the thirteen clocks were frozen. They had all frozen at the same time, on a snowy night, seven years before, and after that it was always ten to five in the castle. Travelers and mariners would look up at the gloomy castle on the lonely hill and say, "Time lies frozen there. It's always Then. It's never Now."

[...]

***The Cricket in Times Square* by George Selden, illustrated by Garth Williams (1960)**

From Chapter Three: “Chester”

Tucker Mouse had been watching the Bellinis and listening to what they said. Next to scrounging, eaves-dropping on human beings was what he enjoyed most. That was one of the reasons he lived in the Times Square subway station. As soon as the family disappeared, he darted out across the floor and scooted up to the newsstand. At one side the boards had separated and there was a wide space he could jump through. He’d been in a few times before—just exploring. For a moment he stood under the three-legged stool, letting his eyes get used to the darkness. Then he jumped up on it.

“Psst!” he whispered. “Hey, you up there—are you awake?”

There was no answer.

“Psst! Psst! Hey!” Tucker whispered again, louder this time.

From the shelf above came a scuffling, like little feet feeling their way to the edge. “Who is that going ‘psst’?” said a voice.

“It’s me,” said Tucker. “Down here on the stool.”

A black head, with two shiny black eyes, peered down at him. “Who are you?”

“A mouse,” said Tucker. “Who are *you*?”

“I’m Chester Cricket, said the cricket. He had a high, musical voice. Everything he said seemed spoken in an unheard melody.

“My name’s Tucker,” said Tucker Mouse. “Can I come up?”

“I guess so,” said Chester Cricket. “This isn’t my house anyway.”

Tucker jumped up beside the cricket and looked him all over. “A cricket,” he said admiringly. “So you’re a cricket. I never saw one before.”

“I’ve seen mice before,” the cricket said. “I knew quite a few back in Connecticut.”

“Is that where you’re from?” asked Tucker.

“Yes,” said Chester. “I guess I’ll never see it again,” he added wistfully.

[...]

*The Search for Delicious* by Natalie Babbitt (1969)

There was a time once when the earth was still very young, a time some call the oldest days. This was long before there were any people about to dig parts of it up and cut parts of it off. People came along much later, building their towns and castles (which nearly always fell down after a while) and plaguing each other with quarrels and supper parties. The creatures who lived on earth in that early time strayed each in his own place and kept it beautiful. There were dwarfs in the mountains, woldwellers in the forests, mermaids in the lakes, and, of course, winds in the air.

There was one particular spot on the earth where a ring of mountains enclosed a very dry and dusty place. There were winds and dwarfs there, but no mermaids because there weren't any lakes, and there were no woldwellers either because forests couldn't grow in so dry a place.

Then a remarkable thing happened. Up in the mountains one day a dwarf was poking about with a sharp tool, looking for a good spot to begin mining. He poked and poked until he had made a very deep hole in the earth. Then he poked again and clear spring water came spurting up in the hole. He hurried in great excitement to tell the other dwarfs and they all came running to see the water. They were so pleased that they built over it a fine house of heavy stones and they made a special door out of a flat rock and balanced it in its place very carefully on carved hinges. Then one of them made a whistle out of a small stone which blew a certain very high note tuned to just the right warble so that when you blew it, the door of the rock house would open, and when you blew it again, the door would not shut. They took turns being in charge of the whistle and they worked hard to keep the spring clean and beautiful.

[...]

***Bud, Not Buddy* by Christopher Paul Curtis (1999)**

From Chapter 1

Here we go again. We were all standing in line waiting for breakfast when one of the caseworkers came in and tap-tap-taped down the line. Uh-oh, this meant bad news, either they'd found a foster home for somebody or somebody was about to get paddled. All the kids watched the woman as she moved along the line, her high-heeled shoes sounding like little fire-crackers going off on the wooden floor.

Shoot! She stopped at me and said, "Are you Buddy Caldwell?"

I said, "It's Bud, not Buddy, ma'am."

She put her hand on my shoulder and took me out of the line. Then she pulled Jerry, one of the littler boys, over. "Aren't you Jerry Clark?" He nodded.

"Boys, good news! Now that the school year has ended, you both have been accepted in new temporary-care homes starting this afternoon!"

Jerry asked the same thing I was thinking, "Together?"

She said, "Why no, Jerry, you'll be in a family with three little girls..."

Jerry looked like he'd just found out they were going to dip him in a pot of boiling milk.

"...and Bud..." She looked at some papers she was holding. "Oh, yes, the Amoses, you'll be with Mr. and Mrs. Amos and their son, who's twelve years old, that makes him just two years older than, doesn't it, Bud?"

Yes, ma'am."

She said, "I'm sure you'll both be very happy."

Me and Jerry looked at each other.

The woman said, "Now, now, boys, no need to look so glum, I know you don't understand what it means, but there's a depression going on all over this country. People can't find jobs and these are very, very difficult times for everybody. We've been lucky enough to find two wonderful families who've opened their doors for you. I think it's best that we show our new foster families that we're very..."

She dragged out the word very, waiting for us to finish her sentence for her.

Jerry said, "Cheerful, helpful and grateful." I moved my lips and mumbled.

She smiled and said, "Unfortunately, you won't have time for breakfast. I'll have a couple of pieces of fruit put in a bag. In the meantime go to the sleep room and strip your beds and gather all of your things."

Here we go again. I felt like I was walking in my sleep as I followed Jerry back to the room where all the boys' beds were jim-jammed together. This was the third foster home I was going to and I'm used to packing up and leaving, but it still surprises me that there are always a few seconds, right after they tell you you've got to go, when my nose gets

all runny and my throat gets all choky and my eyes get all sting-y. But the tears coming out doesn't happen to me anymore, I don't know when it first happened, but is seems like my eyes don't cry anymore.

[...]

## Grades 2–3 Read-Aloud Poetry

### “The Jumblies” by Edward Lear (1871)

They went to sea in a sieve, they did;  
In a sieve they went to sea:  
In spite of all their friends could say,  
On a winter's morn, on a stormy day,  
In a sieve they went to sea.  
And when the sieve turned round and round,  
And every one cried, "You'll all be drowned!"  
They called aloud, "Our sieve ain't big;  
But we don't care a button, we don't care a fig:  
In a sieve we'll go to sea!"

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

They sailed away in a sieve, they did,  
In a sieve they sailed so fast,  
With only a beautiful pea-green veil  
Tied with a ribbon, by way of a sail,  
To a small tobacco-pipe mast.  
And every one said who saw them go,  
"Oh! won't they be soon upset, you know?  
For the sky is dark, and the voyage is long;  
And, happen what may, it's extremely wrong  
In a sieve to sail so fast."

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

The water it soon came in, it did;  
The water it soon came in:  
So, to keep them dry, they wrapped their feet  
In a pinky paper all folded neat;  
And they fastened it down with a pin.  
And they passed the night in a crockery-jar;  
And each of them said, "How wise we are!  
Though the sky be dark, and the voyage be long,  
Yet we never can think we were rash or wrong,  
While round in our sieve we spin."

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

And all night long they sailed away;  
And when the sun went down,  
They whistled and warbled a moony song  
To the echoing sound of a coppery gong,  
In the shade of the mountains brown."  
O Timballoo! How happy we are  
When we live in a sieve and a crockery-jar!  
And all night long, in the moonlight pale,  
We sail away with a pea-green sail  
In the shade of the mountains brown

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

They sailed to the Western Sea, they did,—  
To a land all covered with trees:  
And they bought an owl, and a useful cart,  
And a pound of rice, and a cranberry-tart,  
And a hive of silvery bees;  
And they bought a pig, and some green jackdaws,  
And a lovely monkey with lollipop paws,  
And forty bottles of ring-bo-ree,  
And no end of Stilton cheese.

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

And in twenty years they all came back,—  
In twenty years or more;  
And every one said, "How tall they've grown!  
For they've been to the Lakes, and the Terrible Zone,  
And the hills of the Chankly Bore.  
"And they drank their health, and gave them a feast  
Of dumplings made of beautiful yeast;  
And every one said, "If we only live,  
We, too, will go to sea in a sieve,  
To the hills of the Chankly Bore.

Far and few, far and few,  
Are the lands where the Jumblies live:  
Their heads are green, and their hands are blue  
And they went to sea in a sieve.

**“The Pied Piper of Hamelin” by Robert Browning (1888)**

Hamelin Town's in Brunswick,  
By famous Hanover city;  
The river Weser, deep and wide,  
Washes its wall on the southern side;  
A pleasanter spot you never spied;  
But, when begins my ditty,  
Almost five hundred years ago,  
To see the townsfolk suffer so  
From vermin, was a pity.

Rats!  
They fought the dogs and killed the cats,  
And bit the babies in the cradles,  
And ate the cheeses out of the vats.  
And licked the soup from the cook's own ladles,  
Split open the kegs of salted sprats,  
Made nests inside men's Sunday hats,  
And even spoiled the women's chats,  
By drowning their speaking  
With shrieking and squeaking  
In fifty different sharps and flats.

At last the people in a body  
To the Town Hall came flocking:  
"Tis clear," cried they, "our Mayor's a noddy;  
And as for our Corporation--shocking  
To think we buy gowns lined with ermine  
For dolts that can't or won't determine  
What's best to rid us of our vermin!  
You hope, because you're old and obese,  
To find in the furry civic robe ease?  
Rouse up, sirs! Give your brains a racking  
To find the remedy we're lacking,  
Or, sure as fate, we'll send you packing!"  
At this the Mayor and Corporation  
Quaked with a mighty consternation.

[...]

**“Your World” by Georgia Douglas Johnson (1918)**

Your world is as big as you make it.  
I know, for I used to abide  
In the narrowest nest in a corner,  
My wings pressing close to my side.

But I sighted the distant horizon  
Where the skyline encircled the sea  
And I throbbed with a burning desire  
To travel this immensity.

I battered the cordons around me  
And cradled my wings on the breeze,  
Then soared to the uttermost reaches  
With rapture, with power, with ease!

**“The Song of the Jellicles” by T. S. Eliot (1939)**

Jellicle Cats come out tonight,  
Jellicle Cats come one come all:  
The Jellicle Moon is shining bright—  
Jellicles come to the Jellicle Ball.

Jellicle Cats are black and white,  
Jellicle Cats are rather small;  
Jellicle Cats are merry and bright,  
And pleasant to hear when they caterwaul.  
Jellicle Cats have cheerful faces,  
Jellicle Cats have bright black eyes;  
They like to practise their airs and graces  
And wait for the Jellicle Moon to rise.

Jellicle Cats develop slowly,  
Jellicle Cats are not too big;  
Jellicle Cats are roly-poly,  
They know how to dance a gavotte and a jig.  
Until the Jellicle Moon appears  
They make their toilette and take their repose:  
Jellicles wash behind their ears,  
Jellicles dry between their toes.

Jellicle Cats are white and black,  
Jellicle Cats are of moderate size;  
Jellicles jump like a jumping-jack,  
Jellicle Cats have moonlit eyes.  
They're quiet enough in the morning hours,  
They're quiet enough in the afternoon,  
Reserving their terpsichorean powers  
To dance by the light of the Jellicle Moon.

Jellicle Cats are black and white,  
Jellicle Cats (as I said) are small;  
If it happens to be a stormy night  
They will practise a caper or two in the hall.  
If it happens the sun is shining bright  
You would say they had nothing to do at all:  
They are resting and saving themselves to be right  
For the Jellicle Moon and the Jellicle Ball.

**“Fireflies” by Paul Fleischman, illustrated by Eric Beddows (1988)**

From *Joyful Noise: Poems for Two Voices*

|                           |                           |
|---------------------------|---------------------------|
| Light                     | Light                     |
|                           | is the ink we use         |
| Night                     | Night                     |
| is our parchment          |                           |
|                           | We're                     |
|                           | fireflies                 |
| fireflies                 | flickering                |
| flitting                  |                           |
|                           | flashing                  |
| fireflies                 |                           |
| glimmering                | fireflies                 |
|                           | gleaming                  |
| glowing                   |                           |
| Insect calligraphers      | Insect calligraphers      |
| practicing penmanship     |                           |
|                           | copying sentences         |
| Six-legged scribblers     | Six-legged scribblers     |
| of vanishing messages,    |                           |
|                           | fleeting graffiti         |
| Fine artists in flight    | Fine artists in flight    |
| adding dabs of light      |                           |
|                           | bright brush strokes      |
| Signing the June nights   | Signing the June nights   |
| as if they were paintings | as if they were paintings |
|                           | We're                     |
| flickering                | fireflies                 |
| fireflies                 | flickering                |
| fireflies.                | fireflies.                |

## Grades 2–3: Read-Aloud Informational Texts

### *Lincoln: A Photobiography* by Russell Freedman (1987)

From Chapter One: “The Mysterious Mr. Lincoln”

Abraham Lincoln wasn’t the sort of man who could lose himself in a crowd. After all, he stood six feet four inches tall. And to top it off, he wore a high silk hat.

His height was mostly in his long bony legs. When he sat in a chair, he seemed no taller than anyone else. I was only when he stood up that he towered over other men.

At first glance, most people thought he was homely. Lincoln thought so too, once referring to his “poor, lean, lank face.” As a young man he was sensitive about his gawky looks, but in time, he learned to laugh at himself. When a rival called him “two-faced” during a political debate, Lincoln replied: “I leave it to my audience. If I had another face, do you think I’d wear this one?”

According to those who knew him, Lincoln was a man of many faces. In repose, he often seemed sad and gloomy. But when he began to speak, his expression changed. “The dull, listless features dropped like a mask,” said a Chicago newspaperman. “The eyes began to sparkle, the mouth to smile, the whole countenance was wreathed in animation, so that a stranger would have said, ‘Why, this man, so angular and solemn a moment ago, is really handsome.’”

Lincoln was the most photographed man of his time, but his friends insisted that no photo ever did him justice. It’s no wonder. Back then cameras required long exposures. The person being photographed had to “freeze” as the seconds ticked by. If he blinked an eye, the picture would be blurred. That’s why Lincoln looks so stiff and formal in his photos. We never see him laughing or joking.

[...]

*A Drop of Water: A Book of Science and Wonder* by Walter Wick (1997)

“Soap Bubbles”

There are few objects you can make that have both the dazzling beauty and delicate precision of a soap bubble. Shown here at actual size, this bubble is a nearly perfect sphere. Its shimmering liquid skin is five hundred times thinner than a human hair.

Bubbles made of plain water break almost as quickly as they form. That’s because surface tension is so strong the bubbles collapse. Adding soap to water weakens water’s surface tension. This allows a film of soapy water to stretch and stretch without breaking.

When you blow a bubble, it looks somewhat like a drop of water emerging from a faucet. And just like the surface of a drop of water, the bubble’s surface shrinks to form a sphere. Spheres and circles are mathematical shapes. Because they can form spontaneously, they are also shapes of nature.

[...]

***The Museum Book: A Guide to Strange and Wonderful Collections* by Jan Mark,  
illustrated by Richard Holland (2007)**

From Chapter One

Suppose you went into a museum and you didn't know what it was. Imagine: it's raining, there's a large building nearby with an open door, and you don't have to pay to go in. It looks like an ancient Greek temple. Temples are places of worship, so you'd better go in quietly.

But inside it doesn't seem much like any temple or mosque or church you have ever been in. That is, it looks like all of them, but the furniture is out of place. Perhaps it's a hotel; it has fifty rooms, but there is only one bed, although it is a very splendid bed. Apparently Queen Elizabeth I slept in it. Or perhaps there are fifty beds, but they are all in one room and you can't sleep in any of them. There are red velvet ropes to keep you out.

Farther down the corridor you notice a steam locomotive. It's a train station! But there is no track except for a few yards that the engine is resting on, and already you have seen something else. Across the hall is a totem pole that goes right up to the roof, standing next to a Viking ship. Beyond it is a room full of glass cases displaying rocks, more kinds of rocks than you ever knew existed, from diamonds to meteorites. From where you are standing, you can see into the next room, where the glass cases are full of stuffed fish; and the next, which is lined with shelves of Roman pottery; and the next, which is crowded with birds; and after that, lions and giraffes and pandas and whales.

It must be a zoo.

[...]

Just then you see someone walking toward you who isn't dead—you hope. He is wearing a uniform with a badge on it that reads *Guide*.

"Enjoying yourself?" he says.

You say, "Where did you get all this stuff?"

"All?" he says. "These are just the things we show to the public. Down in the basement there's a hundred thousand times more. Do you know," he murmurs, "we've got *twenty-seven* two-headed sheep?"

"But why?" you ask. "Why do you have *any* two-headed sheep.

"Because people give them to us," he says. "And so that you can look at them. Where else would you see one? Where else would you be able to see the mummy case of King Tutankhamun, the first plane to fly the Atlantic, the first train engine, the last dodo, a *diplodocus*, the astrolabe of Ahmad of Isfahan (an example of the oldest scientific instrument in the world), chicken-skin gloves, the lantern carried by Guy Fawkes when he went to blow up the British Parliament buildings, a murderer's trigger finger—?"

"But where am I?" you say. "What *is* this place?"

And he says, "It's a museum."

[...]

***What the World Eats* by Faith D’Aluisio, photographed by Peter Menzel (2008)**

From “Mali: The Natomos of Kouakourou”

The village of Kouakourou—north of Mali’s capital, Bamako, on the Niger River—looks as though it might have risen one day from the depths of the desert. The houses and courtyard walls blend in with the earth around them: desert-colored, sun-dried mud bricks, stuck together with mud mortar and plastered with...mud. There is no electricity. Inside the houses, the windowless rooms are cool and bare, containing only a sleeping mat or two, and sometimes a cushion or stool. A high-walled courtyard—for cooking, mealtimes, and general daily life—surrounds each house, and beyond that is a common area where the women and girls pound grain in a mortar, singing to pass the time.

[...]

*Wild Tracks! A Guide to Nature's Footprints* by Jim Arnosky (2008)

“Feline Tracks”

Of all the larger predators, wildcats are the most likely to use the same trails again and again. In deep snow, their habitual routes become gully trails in which the feline tracks going to and coming from their hunting grounds are preserved, down out of the wind, away from blowing snow.

A cat's sharp retractable claws do not show in its track unless the cat has lunged to catch its prey or scratched the ground to cover its droppings. Only cats thoroughly cover their droppings.

Bobcat, lion, and jaguar paws all have three-lobed heels. The lynx, the ocelot, and the jaguarondi have single lobed-heels.

The wildcats we have in North America are, from the smallest to the largest: ocelot, jaguarondi, bobcat, lynx, American lion, and jaguar.

## Grades 4–5

### Grades 4–5: Narratives

#### *Alice in Wonderland* by Lewis Carroll (1865)

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, 'and what is the use of a book,' thought Alice 'without pictures or conversation?'

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

In another moment down went Alice after it, never once considering how in the world she was to get out again.

[...]

### ***The Secret Garden* by Frances Hodgson Burnett (1911)**

When Mary Lennox was sent to Misselthwaite Manor to live with her uncle everybody said she was the most disagreeable-looking child ever seen. It was true, too. She had a little thin face and a little thin body, thin light hair and a sour expression. Her hair was yellow, and her face was yellow because she had been born in India and had always been ill in one way or another. Her father had held a position under the English Government and had always been busy and ill himself, and her mother had been a great beauty who cared only to go to parties and amuse herself with gay people. She had not wanted a little girl at all, and when Mary was born she handed her over to the care of an Ayah, who was made to understand that if she wished to please the Mem Sahib she must keep the child out of sight as much as possible. So when she was a sickly, fretful, ugly little baby she was kept out of the way, and when she became a sickly, fretful, toddling thing she was kept out of the way also. She never remembered seeing familiarly anything but the dark faces of her Ayah and the other native servants, and as they always obeyed her and gave her her own way in everything, because the Mem Sahib would be angry if she was disturbed by her crying, by the time she was six years old she was as tyrannical and selfish a little pig as ever lived. The young English governess who came to teach her to read and write disliked her so much that she gave up her place in three months, and when other governesses came to try to fill it they always went away in a shorter time than the first one. So if Mary had not chosen to really want to know how to read books she would never have learned her letters at all.

One frightfully hot morning, when she was about nine years old, she awakened feeling very cross, and she became crosser still when she saw that the servant who stood by her bedside was not her Ayah.

"Why did you come?" she said to the strange woman. "I will not let you stay. Send my Ayah to me."

The woman looked frightened, but she only stammered that the Ayah could not come and when Mary threw herself into a passion and beat and kicked her, she looked only more frightened and repeated that it was not possible for the Ayah to come to Missie Sahib.

There was something mysterious in the air that morning. Nothing was done in its regular order and several of the native servants seemed missing, while those whom Mary saw slunk or hurried about with ashy and scared faces. But no one would tell her anything and her Ayah did not come. She was actually left alone as the morning went on, and at last she wandered out into the garden and began to play by herself under a tree near the veranda. She pretended that she was making a flower-bed, and she stuck big scarlet hibiscus blossoms into little heaps of earth, all the time growing more and more angry and muttering to herself the things she would say and the names she would call Saidie when she returned.

[...]

***The Black Stallion* by Walter Farley (1941)**

The tramp steamer *Drake* plowed away from the coast of India and pushed its blunt prow into the Arabian Sea, homeward bound. Slowly it made its way west toward the Gulf of Aden. Its hold was loaded with coffee, rice, tea, oil seeds and jute. Black smoke poured from its one stack, darkening the hot cloudless sky.

Alexander Ramsay, Jr., known to his friends back home in New York City as Alec, leaned over the rail and watched the water slide away from the sides of the boat. His red hair blazed redder than ever in the hot sun, his tanned elbows rested heavily on the rail as he turned his freckled face back toward the fast-disappearing shore.

[...]

*The Little Prince* by Antoine de Saint-Exupery (1943)

[...]

It was then that the fox appeared.

"Good morning," said the fox.

"Good morning," the little prince responded politely, although when he turned around he saw nothing.

"I am right here," the voice said, "under the apple tree."

"Who are you?" asked the little prince, and added, "You are very pretty to look at."

"I am a fox," said the fox.

"Come and play with me," proposed the little prince. "I am so unhappy."

"I cannot play with you," the fox said. "I am not tamed."

"Ah! Please excuse me," said the little prince.

But, after some thought, he added:

"What does that mean — 'tame'?"

"You do not live here," said the fox. "What is it that you are looking for?"

"I am looking for men," said the little prince. "What does that mean — 'tam e'?"

"Men," said the fox. "They have guns, and they hunt. It is very disturbing. They also raise chickens. These are their only interests. Are you looking for chickens?"

"No," said the little prince. "I am looking for friends. What does that mean — 'tame'?"

"It is an act too often neglected," said the fox. "It means to establish ties."

"To establish 'ties'?"

"Just that," said the fox. "To me, you are still nothing more than a little boy who is just like a hundred thousand other little boys. And I have no need of you. And you, on your part, have no need of me. To you, I am nothing more than a fox like a hundred thousand other foxes. But if you tame me, then we shall need each other. To me, you will be unique in all the world. To you, I shall be unique in all the world..."

"I am beginning to understand," said the little prince. "There is a flower... I think that she has tamed me..."

"It is possible," said the fox. "On the Earth one sees all sorts of things."

[...]

***Tuck Everlasting* by Natalie Babbitt (1975)**

From Chapter 12

[...]

The sky was a ragged blaze of red and pink and orange, and its double trembled on the surface of the pond like color spilled from a paintbox. The sun was dropping fast now, a soft red sliding egg yolk, and already to the east there was a darkening to purple. Winnie, newly brave with her thoughts of being rescued, climbed boldly into the rowboat. The hard heels of her buttoned boots made a hollow banging sound against its wet boards, loud in the warm and breathless quiet. Across the pond a bullfrog spoke a deep note of warning. Tuck climbed in, too, pushing off, and, settling the oars into their locks, dipped them into the silty bottom in one strong pull. The rowboat slipped from the bank then, silently, and glided out, tall water grasses whispering away from its sides, releasing it.

Here and there the still surface of the water dimpled, and bright rings spread noiselessly and vanished. "Feeding time," said Tuck softly. And Winnie, looking down, saw hosts of tiny insects skittering and skating on the surface. "Best time of all for fishing," he said, "when they come up to feed."

He dragged on the oars. The rowboat slowed and began to drift gently toward the farthest end of the pond. It was so quiet that Winnie almost jumped when the bullfrog spoke again. And then, from the tall pines and birches that ringed the pond, a wood thrush caroled. The silver notes were pure and clear and lovely.

"Know what that is, all around us, Winnie?" said Tuck, his voice low. "Life. Moving, growing, changing, never the same two minutes together. This water, you look out at it every morning, and it *looks* the same, but it ain't. All night long it's been moving, coming in through the stream back there to the west, slipping out through the stream down east here, always quiet, always new, moving on. You can't hardly see the current, can you? And sometimes the wind makes it look like it's going the other way. But it's always there, the water's always moving on, and someday, after a long while, it comes to the ocean."

They drifted in silence for a time. The bullfrog spoke again, and from behind them, far back in some reedy, secret place, another bullfrog answered. In the fading light, the trees along the banks were slowly losing their dimensions, flattening into silhouettes clipped from black paper and pasted to the paling sky. The voice of a different frog, hoarser and not so deep, croaked from the nearest bank.

"Know what happens then?" said Tuck. "To the water? The sun sucks some of it up right out of the ocean and carries it back in clouds, and then it rains, and the rain falls into the stream, and the stream keeps moving on, taking it all back again. It's a wheel, Winnie. Everything's a wheel, turning and turning, never stopping. The frogs is part of it, and the bugs, and the fish, and the wood thrush, too. And people. But never the same ones. Always coming in new, always growing and changing, and always moving on. That's the way it's supposed to be. That's the way it *is*."

The rowboat had drifted at last to the end of the pond, but now its bow bumped into the rotting branches of a fallen tree that thrust thick fingers into the water. And though the current pulled at it, dragging its stern sidewise, the boat was wedged and could not follow. The water slipped past it, out between clumps of reeds and brambles, and gurgled down a narrow bed, over stones and pebbles, foaming a little, moving swiftly now after its slow trip between the pond's wide banks. And, farther down, Winnie could see that it hurried into a curve, around a leaning willow, and disappeared.

[...]

**“Zlateh the Goat” by Isaac Bashevis Singer (1984)**

[...]

The snow fell for three days, though after the first day it was not as thick and the wind quieted down. Sometimes Aaron felt that there could never have been a summer, that the snow had always fallen, ever since he could remember. He, Aaron, never had a father or mother or sisters. He was a snow child, born of the snow, and so was Zlateh. It was so quiet in the hay that his ears rang in the stillness. Aaron and Zlateh slept all night and a good part of the day. As for Aaron's dreams, they were all about warm weather. He dreamed of green fields, trees covered with blossoms, clear brooks, and singing birds. By the third night the snow had stopped, but Aaron did not dare to find his way home in the darkness. The sky became clear and the moon shone, casting silvery nets on the snow. Aaron dug his way out and looked at the world. It was all white, quiet, dreaming dreams of heavenly splendor. The stars were large and close. The moon swam in the sky as in a sea.

[...]

*M. C. Higgins, the Great* by Virginia Hamilton (1993)

From Chapter 1

Mayo Cornelius Higgins raised his arms high to the sky and spread them wide. He glanced furtively around. It was all right. There was no one to see him greeting the coming sunrise. But the motion of his arms caused a flutter of lettuce leaves he had bound to his wrists with rubber bands. Like bracelets of green feathers, the leaves commenced to wave.

M.C., as he was called, felt warm, moist air surround him. Humidity trapped in the hills clung to the mountainside as the night passed on. In seconds, his skin grew clammy. But he paid no attention to the oppressive heat with its odors of summer growth and decay. For he was staring out over a grand sweep of hill, whose rolling outlines grew clearer by the minute. As he stood on the gallery of his home, the outcropping on which he lived on the mountainside seemed to fade out from under him.

I'm standing in midair, he thought.

He saw dim light touch clouds clustered behind the eastern hills.

Bounce the sun beside me if I want.

All others of his family were still asleep in the house. To be by himself in the perfect quiet was reason enough for him to wake up way early. Alone for half an hour, he could believe he had been chosen to remain forever suspended, facing the hills. He could pretend there was nothing terrible behind him, above his head. Arms outstretched, picture-framed by pine uprights supporting the gallery roof, he was M.C. Higgins, higher than everything.

M.C. smiled. Going to be my best day, he told himself. He let his arms fall, and sniffed a bracelet of cold, fresh vegetable. He bit gently into a lettuce stem, pulling at it until he had an entire leaf to chew.

Will it really be mine—this mountain? Daddy says it will one day.

He loved the mountain, its long, lingering dawns. But he frowned, squinting off at the hills with night still huddled in their folds.

Now it won't ever be mine.

He shivered as with a sudden chill, and stepped off the gallery.

Pay no mind to what Daddy says.

"We have to leave it," he said softly, "and that's a shame."

[...]

***The Birchbark House* by Louise Erdrich (1999)**

From Chapter 1: “The Birchbark House”

She was named Omaykayas, or Little Frog, because her first step was a hop. She grew into a nimble young girl of seven winters, a thoughtful girl with shining brown eyes and a wide grin, only missing her two top front teeth. She touched her upper lip. She wasn't used to those teeth gone, and was impatient for new, grown-up teeth to complete her smile. Just like her namesake, Omaykayas now stared long at a silky patch of bog before she gathered herself and jumped. One hummock. Safety. Omaykayas sprang wide again. This time she landed on the very tip-top of a pointed old stump. She balanced there, looking all around. The lagoon water moved in sparkling crescents. Thick swales of swamp grass rippled. Mud turtles napped in the sun. The world was so calm that Omaykayas could hear herself blink. Only the sweet call of a solitary white-throated sparrow pierced the cool of the woods beyond.

All of a sudden Grandma yelled.

“I found it!”

Startled, Omaykayas slipped and spun her arms in wheels. She teetered, but somehow kept her balance. Two big, skipping hops, another leap, and she was on dry land. She stepped over spongy leaves and moss, into the woods where the sparrows sang nesting songs in delicate relays.

“Where are you?” Nokomis yelled again. “I found the tree!”

“I'm coming,” Omaykayas called back to her grandmother.

It was spring, time to cut Birchbark.

[...]

***Bud, Not Buddy* by Christopher Paul Curtis (1999)**

[Also a read-aloud narrative at Grades 2–3]

From Chapter 1

Here we go again. We were all standing in line waiting for breakfast when one of the caseworkers came in and tap-tap-taped down the line. Uh-oh, this meant bad news, either they'd found a foster home for somebody or somebody was about to get paddled. All the kids watched the woman as she moved along the line, her high-heeled shoes sounding like little fire-crackers going off on the wooden floor.

Shoot! She stopped at me and said, "Are you Buddy Caldwell?"

I said, "It's Bud, not Buddy, ma'am."

She put her hand on my shoulder and took me out of the line. Then she pulled Jerry, one of the littler boys, over. "Aren't you Jerry Clark?" He nodded.

"Boys, good news! Now that the school year has ended, you both have been accepted in new temporary-care homes starting this afternoon!"

Jerry asked the same thing I was thinking, "Together?"

She said, "Why no, Jerry, you'll be in a family with three little girls..."

Jerry looked like he'd just found out they were going to dip him in a pot of boiling milk.

"...and Bud..." She looked at some papers she was holding. "Oh, yes, the Amoses, you'll be with Mr. and Mrs. Amos and their son, who's twelve years old, that makes him just two years older than, doesn't it, Bud?"

Yes, ma'am."

She said, "I'm sure you'll both be very happy."

Me and Jerry looked at each other.

The woman said, "Now, now, boys, no need to look so glum, I know you don't understand what it means, but there's a depression going on all over this country. People can't find jobs and these are very, very difficult times for everybody. We've been lucky enough to find two wonderful families who've opened their doors for you. I think it's best that we show our new foster families that we're very..."

She dragged out the word very, waiting for us to finish her sentence for her.

Jerry said, "Cheerful, helpful and grateful." I moved my lips and mumbled.

She smiled and said, "Unfortunately, you won't have time for breakfast. I'll have a couple of pieces of fruit put in a bag. In the meantime go to the sleep room and strip your beds and gather all of your things."

Here we go again. I felt like I was walking in my sleep as I followed Jerry back to the room where all the boys' beds were jim-jammed together. This was the third foster home I was going to and I'm used to packing up and leaving, but it still surprises me that there are always a few seconds, right after they tell you you've got to go, when my nose gets

all runny and my throat gets all choky and my eyes get all sting-y. But the tears coming out doesn't happen to me anymore, I don't know when it first happened, but it seems like my eyes don't cry anymore.

[...]

*Where the Mountain Meets the Moon* by Grace Lin (2009)

From Chapter 1

Far away from here, following the Jade River, there was once a black mountain that cut into the sky like a jagged piece of rough metal. The villagers called it Fruitless Mountain because nothing grew on it and birds and animals did not rest there.

Crowded in the corner of where Fruitless Mountain and the Jade River met was a village that was a shade of faded brown. This was because the land around the village was hard and poor. To coax rice out of the stubborn land, the field had to be flooded with water. The villagers had to tramp in the mud, bending and stooping and planting day after day. Working in the mud so much made it spread everywhere and the hot sun dried it onto their clothes and hair and homes. Over time, everything in the village had become the dull color of dried mud.

One of the houses in this village was so small that its wood boards, held together by the roof, made one think of a bunch of matches tied with a piece of twine. Inside, there was barely enough room for three people to sit around the table—which was lucky because only three people lived there. One of them was a young girl called Minli.

Minli was not brown and dull like the rest of the village. She had glossy black hair with pink cheeks, shining eyes always eager for adventure, and a fast smile that flashed from her face. When people saw her lively and impulsive spirit, they thought her name, which meant *quick thinking*, suited her well. “Too well,” her mother sighed, as Minli had a habit of quick acting as well.

[...]

## Grades 4–5: Poetry

### “The Echoing Green” from *Songs of Innocence* by William Blake (1789)

The sun does arise,  
And make happy the skies;  
The merry bells ring  
To welcome the Spring;  
The skylark and thrush,  
The birds of the bush,  
Sing louder around  
To the bells' cheerful sound;  
While our sports shall be seen  
On the echoing green.

Old John, with white hair,  
Does laugh away care,  
Sitting under the oak,  
Among the old folk.  
They laugh at our play,  
And soon they all say,  
'Such, such were the joys  
When we all--girls and boys--  
In our youth-time were seen  
On the echoing green.'

Till the little ones, weary,  
No more can be merry:  
The sun does descend,  
And our sports have an end.  
Round the laps of their mothers  
Many sisters and brothers,  
Like birds in their nest,  
Are ready for rest,  
And sport no more seen  
On the darkening green.

**“The New Colossus” by Emma Lazarus (1883)**

Not like the brazen giant of Greek fame  
With conquering limbs astride from land to land;  
Here at our sea-washed, sunset gates shall stand  
A mighty woman with a torch, whose flame  
Is the imprisoned lightning, and her name  
Mother of Exiles. From her beacon-hand  
Glow world-wide welcome; her mild eyes command  
The air-bridged harbor that twin cities frame.  
"Keep, ancient lands, your storied pomp!" cries she  
With silent lips. "Give me your tired, your poor,  
Your huddled masses yearning to breathe free,  
The wretched refuse of your teeming shore.  
Send these, the homeless, tempest-tossed to me,  
I lift my lamp beside the golden door!"

**Media Text:**

Photos, multimedia, and a virtual tour of the Statue of Liberty, hosted on the National Parks Service's Web site:  
<http://www.nps.gov/stli/photosmultimedia/index.htm>

**“Casey at the Bat” by Ernest Lawrence Thayer (1888)**

The outlook wasn't brilliant for the Mudville nine that day;  
The score stood four to two with but one inning more to play.  
And then when Cooney died at first, and Barrows did the same,  
A sickly silence fell upon the patrons of the game.

A straggling few got up to go in deep despair. The rest  
Clung to that hope which springs eternal in the human breast;  
They thought if only Casey could but get a whack at that—  
We'd put up even money now with Casey at the bat.

But Flynn preceded Casey, as did also Jimmy Blake,  
And the former was a lulu and the latter was a cake;  
So upon that stricken multitude grim melancholy sat,  
For there seemed but little chance of Casey's getting to the bat.

But Flynn let drive a single, to the wonderment of all,  
And Blake, the much despised, tore the cover off the ball;  
And when the dust had lifted, and the men saw what had occurred,  
There was Johnnie safe at second and Flynn a-hugging third.

Then from 5,000 throats and more there rose a lusty yell;  
It rumbled through the valley, it rattled in the dell;  
It knocked upon the mountain and recoiled upon the flat,  
For Casey, mighty Casey, was advancing to the bat.

There was ease in Casey's manner as he stepped into his place;  
There was pride in Casey's bearing and a smile on Casey's face.  
And when, responding to the cheers, he lightly doffed his hat,  
No stranger in the crowd could doubt 'twas Casey at the bat.

Ten thousand eyes were on him as he rubbed his hands with dirt;  
Five thousand tongues applauded when he wiped them on his shirt.  
Then while the writhing pitcher ground the ball into his hip,  
Defiance flashed in Casey's eye, a sneer curled Casey's lip.

And now the leather-covered sphere came hurtling through the air,  
And Casey stood a-watching it in haughty grandeur there.  
Close by the sturdy batsman the ball unheeded sped—  
"That ain't my style," said Casey. "Strike one," the umpire said.

From the benches, black with people, there went up a muffled roar,  
Like the beating of the storm-waves on a stern and distant shore.  
"Kill him! Kill the umpire!" shouted some one on the stand;  
And it's likely they'd have killed him had not Casey raised his hand.

With a smile of Christian charity great Casey's visage shone;  
He stilled the rising tumult; he bade the game go on;  
He signaled to the pitcher, and once more the spheroid flew;  
But Casey still ignored it, and the umpire said, "Strike two."

"Fraud!" cried the maddened thousands, and echo answered fraud;  
But one scornful look from Casey and the audience was awed.  
They saw his face grow stern and cold, they saw his muscles strain,  
And they knew that Casey wouldn't let that ball go by again.

The sneer is gone from Casey's lip, his teeth are clenched in hate;  
He pounds with cruel violence his bat upon the plate.  
And now the pitcher holds the ball, and now he lets it go,  
And now the air is shattered by the force of Casey's blow.

Oh, somewhere in this favored land the sun is shining bright;  
The band is playing somewhere, and somewhere hearts are light,  
And somewhere men are laughing, and somewhere children shout;  
But there is no joy in Mudville—mighty Casey has struck out.

**“A Bird Came Down the Walk” by Emily Dickinson (1893)**

A Bird came down the walk—  
He did not know I saw;  
He bit an angleworm in halves  
And ate the fellow, raw.

And then he drank a dew  
From a convenient grass,  
And then hopped sidewise to the wall  
To let a beetle pass.

He glanced with rapid eyes  
That hurried all abroad—  
They looked like frightened beads, I thought—  
He stirred his velvet head —

Like one in danger; cautious,  
I offered him a crumb,  
And he unrolled his feathers  
And rowed him softer home

Than oars divide the ocean,  
Too silver for a seam,  
Or butterflies, off banks of noon,  
Leap, plashless, as they swim.

**“Fog” by Carl Sandburg (1916)**

The fog comes  
on little cat feet.

It sits looking  
over harbor and city  
on silent haunches  
and then moves on.

**“Dust of Snow” by Robert Frost (1923)**

The way a crow  
Shook down on me  
The dust of snow  
From a hemlock tree

Has given my heart  
A change of mood  
And saved some part  
Of a day I had rued.

**“Little Red Riding Hood and the Wolf” by Roald Dahl (1982)**

As soon as Wolf began to feel  
That he would like a decent meal,  
He went and knocked on Grandma's door.

[...]

**Media Text:**

Audio samples of composer Paul Patterson's orchestral setting of Dahl's text:  
<http://www.paulpatterson.co.uk/red.htm>

**“They Were My People” by Grace Nichols (1988)**

They were those who cut cane  
to the rhythm of the sunbeat

[...]

**“Words Free As Confetti” by Pat Mora (1996)**

Come, words, come in your every color.

I’ll toss you in storm or breeze.

I’ll say, say, say you,

Taste you sweet as plump plums,

bitter as old lemons,

[...]

## Grades 4–5: Informational Texts

### *Discover Mars* by Melvin Berger (1992)

[...]

Mars is very cold and very dry. Scattered across the surface are many giant volcanoes. Lava covers much of the land.

In Mars' northern half, or hemisphere, is a huge raised area. It is about 2,500 miles wide. Astronomers call this the Great Tharsis Bulge.

There are four mammoth volcanoes on the Great Tharsis Bulge. The largest one is Mount Olympus, or Olympus Mons. It is the biggest mountain on Mars. Some think it may be the largest mountain in the entire solar system.

Mount Olympus is 15 miles high. At its peak is a 50 mile wide basin. Its base is 375 miles across. That's nearly as big as the state of Texas!

Mauna Loa, in Hawaii, is the largest volcano on earth. Yet, compared to Mount Olympus, Mauna Loa looks like a little hill. The Hawaiian volcano is only 5½ miles high. Its base, on the bottom of the Pacific Ocean, is just 124 miles wide.

Each of the three other volcanoes in the Great Tharsis Bulge are over 10 miles high. They are named Arsia Mons, Pavonis Mons, and Asraeus Mons.

[...]

#### **Media Text:**

NASA's illustrated fact sheet on Mars:

[http://www.nasa.gov/worldbook/mars\\_worldbook.html](http://www.nasa.gov/worldbook/mars_worldbook.html)

*Let's Investigate Marvelously Meaningful Maps* by Madelyn Wood Carlisle (1992)

From "A Scale for Your Map"

One of the most important things the legend on a map tells is what scale was used in drawing the map. By scale we mean how much space on the map stands for how much space on the ground or in your house or your room.

If you want your map to be accurate, you will have to choose what scale you will use. We say maps are drawn "to scale," or, if they are just roughly sketched, "not to scale."

If you are drawing a map of your room you will chose a different scale from the one you would use if you were going to make a map of the United States or one showing how you would walk to school.

For the map of your room you might decide that one inch on your map will stand for one foot in your room. If your room measures 10 feet by 11 feet, your map will be 10 inches by 11 inches.

But the United States is 3,000 miles wide. To draw a map of the United States to the scale of one inch equals one mile, you would have to have a piece of paper 3,000 inches long!

If you want your map of the United States to fit on a sheet of paper ten inches wide, one inch on your paper will have to stand for 300 miles.

***Hurricanes: Earth's Mightiest Storms* by Patricia Lauber (1996)**

From "The Making of a Hurricane"

Great whirling storms roar out of the oceans in many parts of the world. They are called by several names—hurricane, typhoon, and cyclone are the three most familiar ones. But no matter what they are called, they are all the same sort of storm. They are born in the same way, in tropical waters. They develop the same way, feeding on warm, moist air. And they do the same kind of damage, both ashore and at sea. Other storms may cover a bigger area or have higher winds, but none can match both the size and the fury of hurricanes. They are earth's mightiest storms.

Like all storms, they take place in the atmosphere, the envelope of air that surrounds the earth and presses on its surface. The pressure at any one place is always changing. There are days when air is sinking and the atmosphere presses harder on the surface. These are the times of high pressure. There are days when a lot of air is rising and the atmosphere does not press down as hard. These are times of low pressure. Low-pressure areas over warm oceans give birth to hurricanes.

No one knows exactly what happens to start these storms. But when conditions are right, warm, moist air is set in motion. It begins to rise rapidly from the surface of the ocean in a low pressure area.

Like water in a hose, air flows from where there is more pressure to where there is less pressure. And so air over the surface of the ocean flows into the low pressure area, picking up moisture as it travels. This warm, moist air soars upward.

As the air rises above the earth, it cools. The cooling causes moisture to condense into tiny droplets of water that form clouds. As the moisture condenses, it gives off heat. Heat is one kind of energy. It is the energy that powers the storm. The clouds are the source of the storm's rain.

The low-pressure area acts like a chimney—warm air is drawn in at the bottom, rises in a column, cools, and spreads out. As the air inside rises and more air is drawn in, the storm grows.

The air being drawn in, however, does not travel in a straight line. The earth's surface is rotating, and the rotation causes the path to curve. The air travels in a spiral within the storm. In the Northern Hemisphere, the spiraling winds travel counterclockwise—the opposite of the way the hands of a clock move. In the Southern Hemisphere, they travel clockwise.

[...]

***The Kid’s Guide to Money* by Steve Otfinoski (1996)**

From Chapter 2: “Spending Your Money”

**Budgeting Your Spending**

Spending your money on the things you want may be a lot of fun. But spending has its own set of responsibilities. You have to make sure you don’t buy so many things you want that you don’t have money for the things you need. One way to be sure you have enough money to pay for everything you need is to make a budget. A budget is a plan for managing your money on a regular basis. When you follow a **budget**, you have enough money to meet all your expenses.

**Five Steps to Making a Budget**

- Step 1: Figure out your weekly income, the money you receive from all sources. Count only the money you get regularly, for example, a weekly allowance or money earned from a steady job such as delivering newspapers.
- Step 2: Every week, make a list of the things you need to spend money on, such as bus fare, school supplies, and lunches.
- Step 3: Every week, make a list of the things you want but could get along without if you had to. These could include going to a movie or buying snacks [...]
- Step 4: Now list any things that you need to save for.
- Step 5: Subtract your needs (the total amount from step 2) from your income. You can spend or save whatever’s left. This is your weekly budget.

Here is a sample weekly budget:

|  |               |                 |               |
|--|---------------|-----------------|---------------|
| Total weekly income: \$10.00   |               |                 |               |
| NEEDS  |               | WANTS           |               |
| lunch  | \$2.00        | snacks          | \$3.00        |
| bus fare   | \$1.50        | movie           | \$3.50        |
| Total needs:   | <u>\$3.50</u> | Total wants:    | <u>\$6.50</u> |
| Total weekly income  | \$10.00       | Saving for      |               |
| Total weekly needs   | \$3.50        | new bike        | \$2.00        |
| Money remaining:   | <u>\$6.50</u> | Giving donation | <u>\$1.00</u> |
| Budget notes:<br>I need to rethink my “want” spending.<br>I really want to go to the movies this week, so if I bring my own snacks to school I can cut that expense and still have enough money to save for the bike and make a donation to charity. |               |                 |               |

*Toys: Amazing Stories Behind Some Great Inventions* by Don Wulffson (2000)

From “Kites”

Invented in China, kites have been around for at least three thousand years. Since their beginning, they’ve been used primarily as toys. But kites have had other uses too, and that’s the best part of their story.

Like fishing with kites. It sounds hard to believe, but that’s one use to which they’ve long been put in China and other Asian countries. The fisherman stands on the shore maneuvering a kite far out over the water. From the tail dangles a hook, line and sinker. When a fish bites, the kite is jerked upward, then it—and the airborne fish—is reeled in.

Flying kites over houses is a Chinese custom that dates as far back at 1000 B.C.—and is still practiced today, especially at night. [...]

In China, dating to 1000 B.C., kites were used by the military as signaling devices, most often to warn of an enemy attack. Different colored kites indicated the number of troops and the direction from which they were coming. At night, for the same purpose, tiny lanterns of different colors were raised on the kites.

Around 500 B.C., the Chinese took this concept to a whole new level. Huge kites were built—kites big and strong enough to support a person! First, the soldier would lie with his legs extended across the kite and grab hold of special handgrips. Then, using a stout cord, several soldiers would tow the kite until it rose high in to the air. Once aloft, the man would have a clear view of the enemy on the ground, and, using flag and hand signals, relay information back to his officers.

[...]

**“Good Pet, Bad Pet” by Elizabeth Schleichert from *Ranger Rick* (2002)**

Are you thinking about getting a pet? Then read on to see which one might be best for you.

Where to Start

Pets can be great! Who else licks your face, chirps happily, or purrs in your lap? A pet can make you feel good and can calm you down when you're upset. And caring for a pet can help you learn about kindness and responsibility.

There are all sorts of pets. Some take a lot of time and attention and need a lot of space. Others can fit in a corner and don't need much care at all. Some live just a year or two. Others may still be alive when you leave home for good! Some may be happy to stay in a cage-others may mess on your carpets and scratch your couch.

So, before your family rushes out to get a pet, why not sit down and talk? Ask your parents how they feel about it. The pet you want has to be one that they want too. After all, a parent needs to be the one in charge of pet care and willing to take up the slack if necessary.

Here are some things to do before making a decision:

Talk to people who have a pet like the one you want. Ask them what they like and don't like about it. Find out what's fun and what's tough about having this pet. Check out how much time, money, space, and hard work the pet takes.

Read some pet books or go online to learn more.

Talk to a vet who treats the kind of pet you're thinking about getting.

Check to make sure nobody in the family is allergic to pets or to pet bedding.

Study the charts [...]. (These are, of course, just the opinions or recommendations of Ranger Rick.)

If you decide to get a pet, figure out how to divide the chores among family members.

Even if you don't end up with a pet, you can have fun reading about the possibilities!

[...]

**“Ancient Mound Builders” by E. Barrie Kavash from *Cobblestone* (2003)**

The ancestors of today's southeastern Indian peoples constructed many mounds out of the earth. These were used as tombs, temples, and chiefs' houses. Some of the mounds were very large, requiring the coordinated labor of many tribe members. Remember that this was a time well before the invention of any kind of vehicle, let alone construction vehicles: The mounds were built with literally - basketloads of soil!

Mounds were constructed by the peoples of several distinctive cultures whose existence spanned many centuries. For example, Louisiana's Poverty Point culture of 1000-100 B.C. erected some of the oldest known mounds in the Southeast. Another period of major mound building, from 200 B.C. to A.D. 500, witnessed the construction of conical burial mounds throughout the Southeast. The last important mound-building culture (about 1000-1600), known as Mississippian, lived in large towns along river floodplains and formed huge, flat-topped mounds.

About 2,800 years ago, at a place in northeastern Louisiana called Poverty Point, a group of Indians developed a complex society and trade center on the floodplain of the Mississippi River. These Indians established long distance trading networks. They sought steatite from Georgia and Alabama, galena from Missouri, copper from the Great Lakes, and diverse stones from Alabama, Tennessee, Kentucky, Ohio, Indiana, Arkansas, and Mississippi. These raw materials were made into cups, bowls, smoking pipes, and beads and other ornaments to wear.

The Poverty Point Indians were great craftsmen and engineers. They created a collection of mounds whose outlines formed the shape of a giant bird. It is a striking effigy, parts of which still can be seen today. The bird measures 640 by 700 feet and has outspread wings whose central mound stands 70 feet tall. It is connected to three smaller mounds and six concentric low ridges that were arranged in a crescent shape surrounding a curve of the Mississippi River. Millions of cubic feet of earth more than two-thirds of a mile long - were moved to build the latter. What purpose this construction served still is not clear today.

Later mounds were used as tombs for the dead. After the death of a very important member of the group, such as a warrior, elder, or religious leader, the person was placed in a pit or tomb made of logs. Sometimes, the burial structure was burned and covered over with earth. As additional significant people died, they were put on top of the original mound. Slowly, these mounds turned into hills of earth that sometimes joined other, similar mounds.

[...]

At the height of the Mississippian culture, around the years 1100-1250, hundreds of towns and smaller settlements covered the Southeast. But by 1400, many of the great ceremonial centers, including Moundville, were in a decline. Perhaps the large populations of these Indian cultures depleted the soils and forests, thus reducing their food and building supplies.

But there is quite a legacy from these diverse ancient people who engineered the enormous mounds we can still see today to honor their leaders and loved ones.

**Media Text:**

An overview of Poverty Point from the Louisiana Division of Archaeology, including illustrations and maps:  
<http://www.crt.state.la.us/archaeology/expeditions/overview2nancy.htm>

***About Time: A First Look at Time and Clocks by Bruce Koscielniak (2004)***

[...]

Sometime around 1440, the spring-powered clock was invented. Instead of depending on the pull of weights for power, this type of clock used a flat metal spring wound tightly into a coil. The escapement allowed the spring to unwind by turning one gear tooth at a time. With the use of a spring, smaller, truly portable clocks could be made.

The first well-known watches, made in Germany around 1510 by Peter Henlein, were so named because guards or “watchmen” carried small clocks to keep track of how long to stay at a particular duty post.

Many different skills went into making a clock, and new tools and methods were constantly being invented to make ever smaller, more complicated mechanisms that worked with greater precision.

Founders melted and poured metal into a mold to make clock parts.

Spring makers hand-forged (heated and pounded into shape) and polished steel clock springs.

Screw makers cut screws used to fasten clocks together by using a small lathe devised by a German clockmaker in 1480. Earlier, only wedges or pegs were used.

Gear-tooth cutting had been done by hand until the mid-1500s, when Giannelo Torriano of Cremona, Italy, invented a machine that could cut perfect gear teeth. Brass replaced iron for clock making.

Engravers, gilders, and enamellers decorated clock cases and dials.

Glass –making shops made and cut glass.

Woodworkers made clock cases.

[...]

***England the Land* by Erinn Banting (2004)**

“Living Fences”

Low fences, some of which are thousands of years old, divide much of England’s countryside. These fences, called hedgerows, were first built by the Anglo-Saxons, a group of warriors from Germany and Scandinavia who arrived in England around 410 A.D. As they gained control of sections of land, they protected their property with walls made from wooden stakes and spiny plants. Dead hedgerows, as these fences were called, were eventually replaced by fences made from live bushes and trees.

Recently, people building large farms and homes in the countryside have destroyed many live hedgerows. Other people are working to save the hedgerows, which are home to a variety of wildlife, including birds, butterflies, hedgehogs, and hares.

[...]

### *A History of US* by Joy Hakim (2005)

From *Book 1: The First Americans, Prehistory to 1600*, Chapter 7: “The Show-Offs”

In case you forgot, you’re still in that time-and-space capsule, but you’re not a baby anymore. You’re 10 years old and able to work the controls yourself. So get going; we want to head northwest, to the very edge of the land, to the region that will be the states of Washington and Oregon. The time? We were in the 13<sup>th</sup> century; let’s try the 14<sup>th</sup> century for this visit.

Life is easy for the Indians here in the Northwest near the great ocean. They are affluent (AF-flew-ent –it means “wealthy”) Americans. For them the world is bountiful: the rivers hold salmon and sturgeon; the ocean is full of seals, whales, fish, and shellfish; the woods are swarming with game animals. And there are berries and nuts and wild roots to be gathered. They are not farmers. They don’t need to farm.

Those Americans go to sea in giant canoes; some are 60 feet long. (How long is your bedroom? Your schoolroom?) Using stone tools and fire, Indians of the Northwest cut down gigantic fir trees and hollow out the logs to make their boats. The trees tower 200 feet and are 10 feet across at the base. There are so many of them, so close together, with a tangle of undergrowth, that it is sometimes hard for hunters to get through the forest. Tall as these trees are, there are not as big as the redwoods that grow in a vast forest to the south (in the land that will become California).

These Native Americans carve animal and human figures on tall fir poles, called “totem poles.” The poles are painted and are symbols of a family’s power and rank. The Indians’ totem poles are colorful, but rough; finer poles will be carved after the Europeans come and bring metal knives.

Because food and wood are so easy to gather, the Northwest Indians have much leisure time. Their lives are full of playacting, dancing, and singing. In times of celebration, relatives and friends come from far villages. They beat drums made of animal skins that have been heated near a fire then stretched taut across a frame of birch. These people of the coastal forests gather in circles and dance and sing of the fish and animals they will hunt. They also sing of their ancestors, and of their fears and hopes, and they pray to the animals for forgiveness and for good luck in the hunt. Sometimes they have wrestling contests. Often they wrestle just for fun. Sometimes the best wrestler gets to marry a special girl.

Many Americans elsewhere in North America live in communities where almost everything is shared – sometimes even leadership. That is not true here. These Indians care about wealth, property, and prestige (press-TEEJ – it means “importance and reputation”). They value private property, and they pass their property on to their children and grandchildren. They own slaves and sometimes go to war with other Indians just to capture slaves. People are not treated as equals in this society. They are divided into ranks, or classes. There are slaves, commoners, and nobles. In times of strife, many of the men become warriors and wear wooden helmets and wood slat armor.

[...]

#### **Media Text:**

“American Indians of the Pacific Northwest Collection,” a digital archive of images and documents hosted by the University of Washington:

<http://content.lib.washington.edu/aipnw/>

***My Librarian is a Camel* by Margriet Ruurs (2005)**

From “Peru”

Children in Peru can receive their book in several different, innovative ways.

CEDILL-IBBY Peru is an institution that delivers books in bags to families in Lima. Each bag contains twenty books, which families can keep for a month. The books come in four different reading levels so that children really learn how to read. This project in Spanish is called *El Libro Compartido en Familia* and enables parents to share the joy of books with their children.

In small, rural communities, books are delivered in wooden suitcases and plastic bags. These suitcases and bags contain books that the community can keep and share for the next three months. The number of book in each suitcase depends on the size of the community. There are no library buildings in these small towns, and people gather outside, in the plaza, to see books they can check out. In the coastal regions, books are sometimes delivered by donkey cart. The books are stored in the reading promoter’s home.

In the ancient city of Cajamarca, reading promoters from various rural areas select and receive a large collection of books for their area. The program is called *Aspaderuc*. The reading promoter lends these books to his or her neighbors, and after three months, a new selection of books goes out to each area. Books in this system are for children and adults.

And last but not least, *Fe Y Alegria* brings a collection of children’s books to rural schools. The books are brought from school to school by wagon. The children, who are excited about browsing through the books when they arrive, are turning into avid readers.

[...]

***Horses by Seymour Simon (2006)***

[...]

Horses move in four natural ways, called gaits or paces. They walk, trot, canter, and gallop. The walk is the slowest gait and the gallop is the fastest.

When a horse walks, each hoof leaves the ground at a different time. It moves one hind leg first, and then the front leg on the same side; then the other hind leg and the other front leg. When a horse walks, its body swings gently with each stride.

When a horse trots, its legs move in pairs, left front leg with right hind leg, and right front leg. When a horse canters, the hind legs and one front leg move together, and then the hind legs and the other foreleg move together.

The gallop is like a much faster walk, where each hoof hits the ground one after another. When a horse gallops, all four of its hooves may be flying off the ground at the same time.

Horses are usually described by their coat colors and by the white markings on their faces, bodies, legs, and hooves.

Brown horses range in color from dark brown bays and chestnuts to golden browns, such as palominos, and lighter browns such as roans and duns.

Partly colored horses are called pintos or paints. Colorless, pure-white horses—albinos—are rare. Most horses that look white are actually gray.

Skewbalds have brown-and-white patches. Piebalds have black and white patches. Spotted have dark spots on a white coat or white spots on a dark coat.

[...]

*Quest for the Tree Kangaroo* by Sy Montgomery (2006)

From “Marsupial Mania”

Stuart Little, the small mouse with big parents, had nothing on baby marsupials. Marsupials (“mar-SOUP-ee-ulz”) are special kinds of mammals. Even the biggest ones give birth to babies that are incredibly small. A two-hundred-pound six-foot mother kangaroo, for instance, gives birth to a baby as small as a lima bean. That’s what makes marsupials marsupials. Their babies are born so tiny that in order to survive they must live in a pouch on the mother’s tummy. The pouch is called a marsupium. (Don’t you wish you had one?)

A baby marsupial lives hidden in the mother’s warm moist pouch for months. There it sucks milk from a nipple like other baby mammals. One day it’s big enough to poke its head out to see the world. The European explorers who saw kangaroos for the first time in Australia reported they had discovered a two-headed animal—with one head on the neck and another in the belly.

North America has only one marsupial. You may have seen it: The Virginia opossum actually lives in most of the United States, not just Virginia. South America also has marsupials. But most marsupials live in or near Australia. They include the koala (which is *not* a bear), two species of wombat, the toothy black Tasmania devil, four species of black and white spotted “native cats” (though they’re not cats at all), and many others.

The most famous marsupials, however, are the kangaroos. All kangaroos hop—some of them six feet high and faster than forty miles an hour. More than fifty different species of kangaroo hop around on the ground—from the big red kangaroo to the musky rat kangaroo.

[...]

***Volcanoes* by Seymour Simon (2006)**

[...]

In early times, no one knew how volcanoes formed or why they spouted red-hot molten rock. In modern times, scientists began to study volcanoes. They still don't know all the answers, but they know much about how a volcano works.

Our planet made up of many layers of rock. The top layers of solid rock are called the crust. Deep beneath the crust is the mantle, where it is so hot that some rock melts. The melted, or molten, rock is called magma.

Volcanoes are formed when magma pushes its way up through the crack in Earth's crust. This is called a volcanic eruption. When magma pours forth on the surface, it is called lava.

[...]

***We Are the Ship: The Story of Negro League Baseball* by Kadir Nelson (2008)**

From “4<sup>th</sup> Inning: Racket Ball: Negro League Owners”

[...]

Most of the owners didn't make much money from their teams. Baseball was just a hobby for them, a way to make their illegal money look good. To save money, each team would only carry fifteen or sixteen players. The major league teams each carried about twenty-five. Average salary for each player started at roughly \$125 per month back in '34, and went up to \$500-\$800 during the forties, though there were some who made much more than that, like Satchel Paige and Josh Gibson. The average major league player's salary back then was \$7,000 per month. We also got around fifty cents to a dollar per day for food allowance. Back then you could get a decent meal for about twenty-five cents to seventy-five cents.

Some of the owners didn't treat their players very well. Didn't pay them enough or on time. That's why we would jump from team to team. Other owners would offer us more money, and we would leave our teams and go play for them. We were some of the first unrestricted free agents.

There were, however, a few owners who *did* know how to treat their ballplayers. Cum Posey was one of them. He always took care of his ballplayers, put them in the best hotels, and paid them well and on time. Buck Leonard said Posey never missed a payday in the seventeen years he played for the Grays.

[...]

**“Kenya’s Long Dry Season” by Nellie Gonzalez Cutler from *Time for Kids* (2009)**

The East African nation of Kenya is experiencing a severe drought. Crops are failing. People are struggling to feed their families.

For the past three seasons, the rains have failed to come to Kenya. The East African nation's grasslands are dried out. Bare, leafless trees dot the landscape. Watering holes are almost dry.

The drought has caused cattle to die and crops to shrivel. This year's grain harvest is expected to be 28% less than last year's. Food prices have risen by as much as 130%.

Kenya is facing a severe food crisis. The United Nations World Food Program (WFP) says it will need to provide emergency food aid to 3.8 million Kenyans over the next six months.

**Keeping Kids in School**

Eunice Wairimu lives on a small farm north of Nairobi, Kenya's capital. Her maize, potato and bean crops have failed. "I can't remember the last time I ate meat," she says. She relies on aid from the WFP.

Gabrielle Menezes, of the WFP, says the drought is taking a heavy toll. The WFP is working to keep kids in school, where it provides them with nutritious meals. "In times of crisis, children are pulled out of school to go to work," she told TFK. "But in areas where the WFP has school meals, the dropout rates are very low."

The WFP says it needs \$230 million in donations. "WFP is aiming to help almost one in every 10 Kenyans," says WFP's Burkard Oberle, "but we can't do it without money."

[...]

**Media Text:**

Fact page on Kenya from the World Food Programme, a nonprofit organization working to alleviate hunger:  
<http://www.wfp.org/countries/kenya>

## “Seeing Eye to Eye” by Leslie Hall from *National Geographic Explorer* (2009)

A hungry falcon soars high above Earth. Its sharp eyes scan the ground. Suddenly, it spies something moving in the grass. The falcon dives toward it.

Far below, a gray field mouse scurries through the grass. Its dark, beady eyes search constantly for danger. With eyes on either side of its head, the mouse can see almost everything around it.

Will the mouse see the falcon in time to escape? Or, will the speedy falcon catch the prey it spied from far above? Whatever happens, one thing is clear: Without eyes, neither animal has a good chance.

Why? Eyes help many animals make sense of the world around them - and survive. Eyes can guide the falcon to dinner or help the mouse see a perfect place to hide.

Animal eyes come in many different shapes, sizes, colors, and even numbers. Yet they do the same job. They all catch light. With help from the brain, eyes turn light into sight.

Eyes work in the same way for people. Look at this page. You may think you see words and pictures. Believe it or not, you don't. All you see is light bouncing off the page. How is this possible? The secret is in the rules of light.

### Light Rules

Light is a form of energy, like heat or sound. It can come from a natural source, like the sun, or artificial sources, like a lamp or a flashlight.

Light is the fastest known thing. It travels in waves and in nearly straight lines. In air, it can speed 299,700 kilometers (186,200 miles) per second. It can race from the sun to Earth in just over eight minutes! Light doesn't always travel so fast. For example, water or glass can slow light down, but just a bit.

Light may seem to break all driving speed laws. Yet there are certain rules it always follows. Light reflects, or bounces off objects. It also refracts, or bends. And it can be absorbed, or soaked up, by objects. These rules of light affect what, and how, we see.

### Light! Eyes!

Imagine this scene: You're at your desk happily reading *Explorer* magazine. Light from your desk lamp scatters in all directions.

Light hits the page. Some bounces off the page, or reflects. It changes direction. It's a little like how sound bounces off a wall. Now some of this reflected light is traveling right toward your face. Don't duck! For you to see *Explorer*, some of this light has to enter your eyes. Objects become visible when light bounces off them.

Your eyes are light catchers. Yet it takes more than catching light to see an image. Your eyes also have to bend light. Here's how.

First, light hits your cornea. That's the clear covering on the front of your eyeball. The cornea refracts, or bends, light.

### And Action!

Is your cornea super strong? No! Think about how light travels more slowly through water. The same thing happens in your cornea. As light passes through the cornea, it slows down. That makes the light change direction, or bend.

Next, light enters your pupil, the dark center part of your eye. It passes through your lens. The lens bends light, too. What's the big deal about bending light? That's how your eyes focus, or aim the light to make a clear image.

The image appears on your retina at the back of your eyeball. It's like a movie. Playing Today at a Theater in Your Eye: Explorer magazine! There's only one problem. The image is upside down. Luckily, your brain flips the image right side up. That's pretty smart!

[...]

### “Computer” from *Britannica Junior Encyclopedia* (2010)

The word computer once meant a person who did computations, but now it almost always refers to automated electronic devices. Computers can do much more than calculate, however. They are now used in all sorts of ways to better control or automate products and processes. For example, computers are used in airplanes and automobiles to control the way that fuel is injected into the engine, and they are used to monitor every part of the production process in most modern factories. Computers help people write reports, draw pictures, and keep track of information. Since the invention of the Internet, computers are also used to gather information from digital libraries located all over the world, to send and receive electronic messages (e-mail), and to work, shop, and bank from home.

Computers come in many sizes and shapes. They range from small devices that perform one specific function, such as those in cameras that control the shutter speed, to supercomputers. Supercomputers are specially engineered to be able to perform trillions of operations per second. Because they are so powerful and therefore so expensive they are generally used only by government agencies and large research centers.

[...]

#### Parts of a Computer System

A computer system requires both hardware and software. Hardware includes all of the mechanical parts of a computer. Software consists of the instructions and data that the hardware uses to perform its tasks.

#### Hardware

All computers, no matter how large or small, have basically the same types of hardware. These include a central processing unit (CPU), memory, storage (secondary memory), input/output (I/O) devices, and some type of telecommunication device.

The CPU is the computer's “brain,” where all computations are performed. The computer carries out its computations one step at a time, with each step occurring on each “beat” of its built-in clock. The fastest computer clocks now beat more than 3 GHz (gigahertz), or billions of times per second.

Memory is where instructions and data are held while being worked on. Read-only memory (ROM) is built into the computer and cannot be changed. ROM contains instructions that the computer needs to start up. Random-access memory (RAM), or one of its variants, is typically used for the main computer memory because of its speed. Information is stored temporarily in RAM as a computer processes data and instructions. Secondary memory is where instructions and data are saved for long-term storage. Most computers use a magnetic device called a hard drive for storage. A hard drive accesses data very quickly. Slower devices are often used to store files on magnetic tape or optical discs such as compact discs (CDs) and digital video discs (DVDs).

I/O devices enable communication between a computer and the person using it. Input devices allow the user to enter data or commands for processing by the CPU. They include the keyboard, mouse, joystick, scanner, and digital tablet. Output devices let the user see or hear the results of the computer's data processing. They include the monitor, printer, and speakers.

Telecommunication devices enable computers to send data through telephone lines or other channels. In this way computer users can exchange information with one another. These devices include regular telephone modems, digital subscriber line (DSL) telephone modems, cable modems, and various wireless modems.

[...]

## "Telescopes" by Ronan, Colin A. from *The New Book of Knowledge* (2010)

You can see planets, stars, and other objects in space just by looking up on a clear night. But to really see them--to observe the craters on the moon, the rings around Saturn, and the countless other wonders in our sky--you must use a telescope.

A telescope is an instrument used to produce magnified (enlarged) images of distant objects. It does this by gathering and focusing the light or other forms of electromagnetic radiation emitted or reflected by those objects. The word "telescope" comes from two Greek words meaning "far" and "see."

### Kinds of Telescopes

There are many different types of telescopes, both optical and non-optical. Optical telescopes are designed to focus visible light. Non-optical telescopes are designed to detect kinds of electromagnetic radiation that are invisible to the human eye. These include radio waves, infrared radiation, X rays, ultraviolet radiation, and gamma rays. The word "optical" means "making use of light."

Some telescopes are launched into space. These telescopes gain clearer views. And they can collect forms of electromagnetic radiation that are absorbed by the Earth's atmosphere and do not reach the ground.

### Optical Telescopes

Different types of optical telescopes gather and focus light in different ways. Refracting telescopes, or refractors, use lenses. Reflecting telescopes, or reflectors, use mirrors. And catadioptric telescopes, or catadioptrics, use a combination of lenses and mirrors. The main lens or mirror in an optical telescope is called the objective.

*Refracting Telescopes.* A refracting telescope is typically a long, tube-shaped instrument. The objective is a system of lenses at the front end of the tube (the end facing the sky). When light strikes the lenses, it is bent and brought to a focus within the tube. This forms an image of a distant object. This image can be magnified by the eyepiece. This consists of a group of small lenses at the back of the tube. A camera can replace or be added to the eyepiece. Then photographs can be taken of celestial objects. For many years, these cameras used film. Today most are equipped with charge-coupled devices (CCD's). These devices use semiconductor chips to electronically capture images. CCD's are similar to the devices in home digital cameras and video camcorders. However, the CCD's used by astronomers are usually extremely sensitive to light.

[...]

**“Underground Railroad” by Henrietta Buckmaster from *The New Book of Knowledge* (2010)**

The Underground Railroad was not a railroad. And it did not run underground. It was a secret network of refuge stations in the United States operated by Northern abolitionists--both black and white--. It was created to help runaway slaves escape from the South, where they were held in bondage in the days before the Civil War.

Over a period of about 40 years, from the 1820's until the war began in 1861, many brave rescuers helped an estimated 40,000 slaves North to freedom. Many fugitives escaped to Pennsylvania, New York, and Massachusetts, but most ended up in Illinois, Indiana, and Ohio. They used the Mississippi and Ohio rivers as escape routes. Thousands more fled to Canada. There officials refused to turn them over to authorities in the United States. Others escaped to Mexico, where slavery had been abolished in 1829. And they escaped to colonies in the Caribbean, where slavery had been abolished by the British in 1833.

[...]

## Exemplars of Reading Text Complexity and Quality, ELA 6–12

### Selecting Text Samples

The following text samples primarily serve to exemplify the level of complexity and quality that the *Standards* require all students in a given grade band to engage with while additionally suggesting the breadth of text types that students should encounter. The choices should serve as useful guideposts in helping educators select texts of similar **complexity, quality, and breadth** for their own classrooms. The process of text selection was guided by these criteria in the following fashion:

- *Complexity.* Appendix A describes in detail a three-part model of measuring text complexity based on qualitative and quantitative indices of inherent text difficulty balanced with educators' professional judgment. In selecting texts to serve as exemplars, the work group began by soliciting contributions from teachers, educational leaders, and researchers who have experience working with students in the grades for which the texts have been selected. These contributors were asked to propose texts that they or their colleagues have used successfully with students in a given grade band. The work group made final selections based in part on whether qualitative and quantitative measures identified by the *Standards* indicated that the proposed texts were of sufficient complexity for the grade band. For those types of texts—particularly poetry and multimedia sources—for which these measures are not as well suited, professional judgment necessarily played a greater role in selection.
- *Quality.* While it is possible to have high-complexity texts of low inherent quality, the work group solicited only texts of recognized value. From the pool of submissions gathered from outside contributors, the work group selected classic or historically significant texts as well as contemporary works of comparable literary merit, cultural significance, and/or content richness.
- *Breadth.* After identifying texts of appropriate complexity and quality, the work group applied a range of secondary criteria to ensure that the samples presented in each band represented as broad a range of sufficiently complex, high-quality texts as possible. Among the factors considered were initial publication date, authorship, and subject matter.

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### Organization and Excerpting

Texts are organized first by category, with narrative texts followed by drama and poetry and then the informational texts. Within each category, the texts are organized by date, usually of first publication, beginning with the oldest and ending with the most recent. In some cases, the date of any given work may be open to debate.

The excerpts given here are meant to stand in for the full work in most instances. Works that are not in the public domain may be represented by short excerpts or snippets while the work group awaits permission from the rights holders for full use.

## **Media Texts**

Selected excerpts are accompanied by annotated links to related media texts available online at the time of the publication of this document.

## Grades 6–8 Exemplar Texts

### Narratives

|   |    |
|---|----|
| <i>Little Women</i><br>by Louisa May Alcott (1869)  | 9  |
| <i>The Adventures of Tom Sawyer</i><br>by Mark Twain (1876)   | 11 |
| <i>A Wrinkle in Time</i><br>by Madeline L'Engle (1962)  | 14 |
| <i>The Dark is Rising</i><br>by Susan Cooper (1973)   | 15 |
| <i>Dragonwings</i><br>by Laurence Yep (1975)  | 17 |
| <i>Roll of Thunder, Hear My Cry</i><br>by Mildred Taylor (1976)   | 18 |
| “The People Could Fly”<br>from <i>The People Could Fly: American Black Folktales</i><br>by Virginia Hamilton (1985) | 19 |
| <i>The Tale of the Mandarin Ducks</i><br>by Katherine Paterson (1990)   | 20 |
| “Eleven” from <i>Woman Hollering Creek: And Other Stories</i><br>by Sandra Cisneros (1992)                          | 21 |
| <i>Black Ships Before Troy: The Story of the Iliad</i><br>by Rosemary Sutcliff (1993)                               | 22 |

### Drama

|   |    |
|---|----|
| <i>A Midsummer Night's Dream</i><br>by William Shakespeare (1596)               | 23 |
| <i>The Diary of Anne Frank</i><br>by Frances Goodrich and Albert Hackett (1958) | 25 |

### Poetry

|   |    |
|---|----|
| “Paul Revere's Ride”<br>by Henry Wadsworth Longfellow (1861)  | 26 |
| “O Captain, My Captain”<br>by Walt Whitman (1865)   | 30 |
| “Jabberwocky”<br>by Lewis Carroll (1872)  | 31 |
| “Twelfth Song of Thunder”<br>from <i>The Mountain Chant: A Navajo Ceremony</i><br>Navajo tradition (1887) | 32 |
| “The Railway Train”<br>by Emily Dickinson (1893)  | 33 |
| “The Song of Wandering Aengus”  | 34 |

|  |    |
|--|----|
| by W. B. Yeats (1899)  |    |
| “Chicago”  | 35 |
| from <i>Chicago Poems</i> (1914) by Carl Sandburg                    |    |
| “Stopping by Woods on a Snowy Evening”                               | 36 |
| by Robert Frost (1923)   |    |
| “I, Too”   | 37 |
| by Langston Hughes (1925)  |    |
| “The Book of Questions”  | 38 |
| by Pablo Neruda (1973) translated by William O’Daly                  |    |
| “Oranges”  | 39 |
| from <i>Black Hair</i> (1985) by Gary Soto                           |    |
| “A Poem for My Librarian, Mrs. Long”                                 | 40 |
| from <i>Acolytes</i> (2007) by Nikki Giovanni                        |    |
| <b>Informational Texts (English Language Arts)</b>                   |    |
| “Allegory of the Cave”   | 41 |
| from <i>The Republic</i> by Plato (380 BCE)                          |    |
| translated by G.M.A. Grube   |    |
| “Letter on Thomas Jefferson”   | 43 |
| by John Adams (1822)   |    |
| <i>Narrative of the Life of Frederick Douglass an American Slave</i> | 44 |
| by Frederick Douglass (1845)   |    |
| “Gettysburg Address”   | 46 |
| by Abraham Lincoln (1863)  |    |
| “Lee Surrenders to Grant”  | 47 |
| by Horace Porter (1865)  |    |
| “Blood, Toil, Tears and Sweat”                                       | 48 |
| by Winston Churchill (1940)  |    |
| <i>Travels with Charley: In Search of America</i>                    | 49 |
| by John Steinbeck (1962)   |    |
| “Address to the Nation on Civil Rights”                              | 50 |
| by John F. Kennedy (1963)  |    |
| <i>I Know Why the Caged Bird Sings</i>                               | 52 |
| by Maya Angelou (1969)   |    |
| “Address to Students at Moscow State University”                     | 53 |
| by Ronald Reagan (1988)  |    |

## Grades 9-10 Exemplar Texts

### Narratives

|   |    |
|---|----|
| The Odyssey   | 55 |
| by Homer (8th century B.C.E.) translated by Robert Fagles |    |
| “The Nose”  | 56 |
| by Nikolai Gogol (1836) translated by Ronald Wilks        |    |
| “The Gift of the Magi”                                    | 58 |
| by O. Henry (1906)  |    |
| <i>The Grapes of Wrath</i>                                | 59 |
| by John Steinbeck (1939)                                  |    |
| <i>Fahrenheit 451</i>                                     | 61 |
| by Ray Bradbury (1953)                                    |    |
| “I Stand Here Ironing”                                    | 62 |
| by Tillie Olsen (1956)                                    |    |
| <i>The Killer Angels</i>                                  | 63 |
| by Michael Shaara (1975)                                  |    |
| <i>The Joy Luck Club</i>                                  | 65 |
| by Amy Tan (1989)   |    |
| <i>In the Time of the Butterflies</i>                     | 66 |
| by Julia Alvarez (1994)                                   |    |
| <i>The Book Thief</i>                                     | 67 |
| by Marcus Zusak (2005)                                    |    |

### Drama

|   |    |
|---|----|
| <i>The Tragedy of Romeo and Juliet</i>              | 68 |
| by William Shakespeare (1592)                       |    |
| <i>The Glass Menagerie</i>                          | 70 |
| by Tennessee Williams (1944)                        |    |
| <i>Rhinoceros</i>                                   | 72 |
| by Eugene Ionesco (1959) translated by Derek Prouse |    |
| <i>Master Harold... and the Boys</i>                | 75 |
| by Athol Fugard (1982)                              |    |

### Poetry

|                                  |    |
|----------------------------------|----|
| “Song”                           | 76 |
| by John Donne (1635)             |    |
| “Ozymandias”                     | 77 |
| by Percy Bysshe Shelley (1810)   |    |
| “The Raven”                      | 78 |
| by Edgar Allen Poe (1845)        |    |
| “We Grow Accustomed to the Dark” | 81 |
| by Emily Dickinson (1893)        |    |

|   |     |
|---|-----|
| “Loveliest of Trees”<br>by A. E. Houseman (1896)  | 82  |
| “Lift Ev’ry Voice and Sing”<br>by James Weldon Johnson (1900)                                       | 83  |
| “Domination of Black”<br>by Wallace Stevens (1916)  | 84  |
| “Yet Do I Marvel”<br>by Countee Cullen (1925)   | 85  |
| “Women”<br>by Alice Walker (1970)   | 86  |
| “I Am Offering This Poem to You”<br>by Jimmy Santiago Baca (1977)                                   | 87  |
| <b>Informational Texts (English Language Arts)</b>  |     |
| “Speech to the Second Virginia Convention”<br>by Patrick Henry (1775)                               | 88  |
| “Second Inaugural Address”<br>by Abraham Lincoln (1865)   | 90  |
| “State of the Union Address”<br>by Franklin Delano Roosevelt (1941)                                 | 91  |
| “I Am an American Day Address”<br>by Learned Hand (1944)  | 93  |
| “Remarks to the Senate in Support of a Declaration of Conscience”<br>by Margaret Chase Smith (1950) | 94  |
| “Address at the March on Washington”<br>by Martin Luther King, Jr. (1963)                           | 97  |
| “Nobel Prize Acceptance Speech”<br>by Elie Wiesel (1986)  | 100 |
| “A Quilt of a Country”<br>by Anna Quindlen (2001)   | 101 |

## Grades 11-12 Exemplar Texts

### Narratives

|   |     |
|---|-----|
| <i>Pride and Prejudice</i><br>by Jane Austen (1813)                     | 102 |
| <i>Jane Eyre</i><br>by Charlotte Brontë (1848)                          | 105 |
| “At Home”<br>by Anton Chekov (1887) translated by Constance Garnett     | 106 |
| <i>The Great Gatsby</i><br>by F. Scott Fitzgerald (1925)                | 108 |
| <i>As I Lay Dying</i><br>by William Faulkner (1930)                     | 109 |
| <i>Their Eyes Were Watching God</i><br>by Zora Neale Hurston (1937)     | 110 |
| <i>Black Boy</i><br>by Richard Wright (1945)                            | 111 |
| <i>The Adventures of Augie March</i><br>by Saul Bellow (1949)           | 112 |
| <i>The Bluest Eye</i><br>by Toni Morrison (1970)                        | 113 |
| <i>Dreaming in Cuban</i><br>by Cristina García (1992)                   | 114 |
| <i>The Namesake</i><br>by Jhumpa Lahiri (2003)                          | 115 |
| <b>Drama</b>  |     |
| <i>Macbeth</i><br>by William Shakespeare (c1611)                        | 116 |
| <i>The Importance of Being Earnest</i><br>by Oscar Wilde (1895)         | 118 |
| <i>Death of a Salesman</i><br>by Arthur Miller (1949)                   | 121 |
| <i>A Raisin in the Sun</i><br>by Lorraine Hansberry (1959)              | 122 |
| <b>Poetry</b>   |     |
| “A Valediction Forbidding Mourning”<br>by John Donne (1633)             | 123 |
| “Ode on a Grecian Urn”<br>by John Keats (1820)                          | 124 |
| “Song of Myself”<br>from <i>Leaves of Grass</i> by Walt Whitman (c1860) | 126 |
| “Because I Could Not Stop for Death”                                    | 127 |

|  |     |
|--|-----|
| by Emily Dickinson (1890)                                  |     |
| “Mending Wall”   | 128 |
| by Robert Frost (1914)                                     |     |
| “Ode to My Suit”   | 129 |
| by Pablo Neruda (1954) translated by Margaret Sayers Peden |     |
| “Sestina”  | 130 |
| by Elizabeth Bishop (1983)                                 |     |
| “The Latin Deli: An Ars Poetica”                           | 131 |
| by Judith Ortiz Cofer (1988)                               |     |
| “Demeter’s Prayer to Hades”                                | 132 |
| by Rita Dove (1995)  |     |
| “Man Listening to Disc”                                    | 133 |
| by Billy Collins (2001)                                    |     |
| <b>Informational Texts (English Language Arts)</b>         |     |
| <i>The Declaration of Independence</i>                     | 134 |
| by Thomas Jefferson (1776)                                 |     |
| <i>The Crisis</i>  | 137 |
| by Thomas Paine (1776)                                     |     |
| <i>Walden</i>  | 138 |
| by Henry David Thoreau (1854)                              |     |
| “Society and Solitude”                                     | 139 |
| by Ralph Waldo Emerson (1857)                              |     |
| “The Fallacy of Success”                                   | 141 |
| by G.K. Chesterton (1909)                                  |     |
| <i>The American Language</i>                               | 143 |
| by H.L. Mencken (1938)                                     |     |
| “Politics and the English Language”                        | 144 |
| by George Orwell (1946)                                    |     |
| “Abraham Lincoln and the Self-Made Myth”                   | 146 |
| by Richard Hofstadter (1948)                               |     |
| “Letter from Birmingham City Jail”                         | 147 |
| by Martin Luther King, Jr. (1963)                          |     |
| “Mother Tongue”  | 148 |
| by Amy Tan (1990)  |     |
| “Take the Tortillas Out of Your Poetry”                    | 150 |
| by Rudolfo Anaya (1995)                                    |     |

## Grades 6–8

### Grades 6-8: Narratives

#### *Little Women* by Louisa May Alcott (1869)

"Merry Christmas, little daughters! I'm glad you began at once, and hope you will keep on. But I want to say one word before we sit down. Not far away from here lies a poor woman with a little newborn baby. Six children are huddled into one bed to keep from freezing, for they have no fire. There is nothing to eat over there, and the oldest boy came to tell me they were suffering hunger and cold. My girls, will you give them your breakfast as a Christmas present?"

They were all unusually hungry, having waited nearly an hour, and for a minute no one spoke, only a minute, for Jo exclaimed impetuously, "I'm so glad you came before we began!"

"May I go and help carry the things to the poor little children?" asked Beth eagerly.

"I shall take the cream and the muffings," added Amy, heroically giving up the article she most liked.

Meg was already covering the buckwheats, and piling the bread into one big plate.

"I thought you'd do it," said Mrs. March, smiling as if satisfied. "You shall all go and help me, and when we come back we will have bread and milk for breakfast, and make it up at dinnertime."

They were soon ready, and the procession set out. Fortunately it was early, and they went through back streets, so few people saw them, and no one laughed at the queer party.

A poor, bare, miserable room it was, with broken windows, no fire, ragged bedclothes, a sick mother, wailing baby, and a group of pale, hungry children cuddled under one old quilt, trying to keep warm.

How the big eyes stared and the blue lips smiled as the girls went in.

"Ach, mein Gott! It is good angels come to us!" said the poor woman, crying for joy.

"Funny angels in hoods and mittens," said Jo, and set them to laughing.

In a few minutes it really did seem as if kind spirits had been at work there. Hannah, who had carried wood, made a fire, and stopped up the broken panes with old hats and her own cloak. Mrs. March gave the mother tea and gruel, and comforted her with promises of help, while she dressed the little baby as tenderly as if it had been her own. The girls meantime spread the table, set the children round the fire, and fed them like so many hungry birds, laughing, talking, and trying to understand the funny broken English.

"Das ist gut!" "Die Engel-kinder!" cried the poor things as they ate and warmed their purple hands at the comfortable blaze. The girls had never been called angel children before, and thought it very agreeable, especially Jo, who had been considered a 'Sancho' ever since she was born. That was a very happy breakfast, though they didn't get any of it. And when they went away, leaving comfort behind, I think there were not in all the city four merrier people than the hungry little girls who gave away their breakfasts and contented themselves with bread and milk on Christmas morning.

"That's loving our neighbor better than ourselves, and I like it," said Meg, as they set out their presents while their mother was upstairs collecting clothes for the poor Hummels.

**Media Text:**

Composer Mark Adamo details for an *Opera America* online course the process of adapting the novel to operatic form:  
<http://www.markadamo.com/course.pdf>

*The Adventures of Tom Sawyer* by Mark Twain (1876)

But Tom's energy did not last. He began to think of the fun he had planned for this day, and his sorrows multiplied. Soon the free boys would come tripping along on all sorts of delicious expeditions, and they would make a world of fun of him for having to work--the very thought of it burnt him like fire. He got out his worldly wealth and examined it--bits of toys, marbles, and trash; enough to buy an exchange of WORK, maybe, but not half enough to buy so much as half an hour of pure freedom. So he returned his straitened means to his pocket, and gave up the idea of trying to buy the boys. At this dark and hopeless moment an inspiration burst upon him! Nothing less than a great, magnificent inspiration.

He took up his brush and went tranquilly to work. Ben Rogers hove in sight presently--the very boy, of all boys, whose ridicule he had been dreading. Ben's gait was the hop-skip-and-jump--proof enough that his heart was light and his anticipations high. He was eating an apple, and giving a long, melodious whoop, at intervals, followed by a deep-toned ding-dong-dong, ding-dong-dong, for he was personating a steamboat. As he drew near, he slackened speed, took the middle of the street, leaned far over to starboard and rounded to ponderously and with laborious pomp and circumstance--for he was personating the Big Missouri, and considered himself to be drawing nine feet of water. He was boat and captain and engine-bells combined, so he had to imagine himself standing on his own hurricane-deck giving the orders and executing them:

"Stop her, sir! Ting-a-ling-ling!" The headway ran almost out, and he drew up slowly toward the sidewalk.

"Ship up to back! Ting-a-ling-ling!" His arms straightened and stiffened down his sides.

"Set her back on the stabboard! Ting-a-ling-ling! Chow! ch-chow-wow! Chow!" His right hand, meantime, describing stately circles--for it was representing a forty-foot wheel.

"Let her go back on the labboard! Ting-a-lingling! Chow-ch-chow-chow!" The left hand began to describe circles.

"Stop the stabboard! Ting-a-ling-ling! Stop the labboard! Come ahead on the stabboard! Stop her! Let your outside turn over slow! Ting-a-ling-ling! Chow-ow-ow! Get out that head-line! LIVELY now! Come--out with your spring-line--what're you about there! Take a turn round that stump with the bight of it! Stand by that stage, now--let her go! Done with the engines, sir! Ting-a-ling-ling! SH'T! SH'T! SH'T!" (trying the gauge-cocks)."

Tom went on whitewashing--paid no attention to the steamboat. Ben stared a moment and then said: "Hi-YI! YOU'RE up a stump, ain't you!"

No answer. Tom surveyed his last touch with the eye of an artist, then he gave his brush another gentle sweep and surveyed the result, as before. Ben ranged up alongside of him. Tom's mouth watered for the apple, but he stuck to his work. Ben said:

"Hello, old chap, you got to work, hey?"

Tom wheeled suddenly and said:

"Why, it's you, Ben! I warn't noticing."

"Say--I'm going in a-swimming, I am. Don't you wish you could? But of course you'd druther WORK--wouldn't you? Course you would!"

Tom contemplated the boy a bit, and said:

"What do you call work?"

"Why, ain't THAT work?"

Tom resumed his whitewashing, and answered carelessly:

"Well, maybe it is, and maybe it ain't. All I know, is, it suits Tom Sawyer."

"Oh come, now, you don't mean to let on that you LIKE it?"

The brush continued to move.

"Like it? Well, I don't see why I oughtn't to like it. Does a boy get a chance to whitewash a fence every day?"

That put the thing in a new light. Ben stopped nibbling his apple. Tom swept his brush daintily back and forth--stepped back to note the effect--added a touch here and there--criticised the effect again—Ben watching every move and getting more and more interested, more and more absorbed. Presently he said:

"Say, Tom, let ME whitewash a little."

Tom considered, was about to consent; but he altered his mind:

"No--no--I reckon it wouldn't hardly do, Ben. You see, Aunt Polly's awful particular about this fence--right here on the street, you know--but if it was the back fence I wouldn't mind and SHE wouldn't. Yes, she's awful particular about this fence; it's got to be done very careful; I reckon there ain't one boy in a thousand, maybe two thousand, that can do it the way it's got to be done."

"No--is that so? Oh come, now--lemme just try. Only just a little--I'd let YOU, if you was me, Tom."

"Ben, I'd like to, honest injun; but Aunt Polly--well, Jim wanted to do it, but she wouldn't let him; Sid wanted to do it, and she wouldn't let Sid. Now don't you see how I'm fixed? If you was to tackle this fence and anything was to happen to it--"

"Oh, shucks, I'll be just as careful. Now lemme try. Say--I'll give you the core of my apple."

"Well, here--No, Ben, now don't. I'm afeard--"

"I'll give you ALL of it!"

Tom gave up the brush with reluctance in his face, but alacrity in his heart. And while the late steamer Big Missouri worked and sweated in the sun, the retired artist sat on a barrel in the shade close by, dangled his legs, munched his apple, and planned the slaughter of more innocents. There was no lack of material; boys happened along every little while; they came to jeer, but remained to whitewash. By the time Ben was fagged out, Tom had traded the next chance to Billy Fisher for a kite, in good repair; and when he played out, Johnny Miller bought in for a dead rat and a string to swing it with--and so on, and so on, hour after hour. And when the middle of the afternoon came, from being a poor poverty-stricken boy in the morning, Tom was literally rolling in wealth. He had besides the things before mentioned, twelve marbles, part of a jews-harp, a piece of blue bottle-glass to look through, a spool cannon, a key that wouldn't unlock anything, a fragment of chalk, a glass stopper of a decanter, a tin soldier, a couple of tadpoles, six fire-crackers, a kitten with only one eye, a brass doorknob, a dog-collar--but no dog--the handle of a knife, four pieces of orange-peel, and a dilapidated old window sash.

He had had a nice, good, idle time all the while--plenty of company--and the fence had three coats of whitewash on it! If he hadn't run out of whitewash he would have bankrupted every boy in the village.

Tom said to himself that it was not such a hollow world, after all. He had discovered a great law of human action, without knowing it--namely, that in order to make a man or a boy covet a thing, it is only necessary to make the thing difficult to attain. If he had been a great and wise philosopher, like the writer of this book, he would now have comprehended that Work consists of whatever a body is OBLIGED to do, and that Play consists of whatever a body is not obliged to do. And this would help him to understand why constructing artificial flowers or performing on a tread-mill is work, while rolling ten-pins or climbing Mont Blanc is only amusement. There are wealthy gentlemen in England who drive four-horse passenger-coaches twenty or thirty miles on a daily line, in the summer, because the privilege costs them considerable money; but if they were offered wages for the service, that would turn it into work and then they would resign.

The boy mused awhile over the substantial change which had taken place in his worldly circumstances, and then wended toward headquarters to report.

*A Wrinkle in Time* by Madeline L'Engle (1962)

"If we knew ahead of time what was going to happen we'd be – we'd be like the people on Camazotz, with no lives of our own, with everything all planned and done for us. How can I explain it to you? Oh, I know. In your language you have a form of poetry called the sonnet."

"Yes, yes," Calvin said impatiently. "What's that got to do with the Happy Medium?"

"Kindly pay me the courtesy of listening to me." Mrs. Whatsit's voice was stern, and for a moment Calvin stopped pawing the ground like a nervous colt. "It is a very strict form of poetry, is it not?"

"Yes."

"There are fourteen lines, I believe, all in iambic pentameter. That's a very strict rhythm or meter, yes?"

"Yes." Calvin nodded.

"No."

"But within this strict form the poet has complete freedom to say whatever he wants, doesn't he?"

"Yes." Calvin nodded again.

"So," Mrs. Whatsit said.

"So what?"

"Oh, do not be stupid, boy!" Mrs. Whatsit scolded. "You know perfectly well what I am driving at!"

"You mean you're comparing our lives to a sonnet? A strict form, but freedom within it?"

"Yes." Mrs. Whatsit said. "You're given the form, but you have to write the sonnet yourself. What you say is completely up to you."

## *The Dark is Rising* by Susan Cooper (1973)

From *Midwinter Day*

He was woken by music. It beckoned him, lilting and insistent; delicate music, played by delicate instruments that he could not identify, with one rippling, bell-like phrase running through it in a gold thread of delight. There was in this music so much of the deepest enchantment of all his dreams and imaginings that he woke smiling in pure happiness at the sound. In the moment of his waking, it began to fade, beckoning as it went, and then as he opened his eyes it was gone. He had only the memory of that one rippling phrase still echoing in his head, and itself fading so fast that he sat up abruptly in bed and reached his arm out to the air, as if he could bring it back.

The room was very still, and there was no music, and yet Will knew that it had not been a dream.

He was in the twins' room still; he could hear Robin's breathing, slow and deep, from the other bed. Cold light glimmered round the edge of the curtains, but no one was stirring anywhere; it was very early. Will pulled on his rumpled clothes from the day before, and slipped out of the room. He crossed the landing to the central window, and looked down.

In the first shining moment he saw the whole strange-familial world, glistening white; the roofs of the outbuildings mounded into square towers of snow, and beyond them all the fields and hedge: buried, merged into one great flat expanse, unbroken white to the horizon's brim. Will drew in a long, happy breath, silently rejoicing. Then, very faintly, he heard the music again, the same phrase. He swung round vainly searching for it in the air, as if he might see it somewhere like a flickering light.

"Where are you?"

It had gone again. And when he looked back through the window, he saw that his own world had gone with it. In that flash, everything had changed. The snow was there as it had been a moment before, but not piled now on roofs or stretching flat over lawns and fields. There were no roofs, there were no fields. There were only trees. Will was looking over a great white forest: a forest of massive trees, sturdy as towers and ancient as rock. They were bare of leaves, clad only in the deep snow that lay untouched along every branch, each smallest twig. They were everywhere. They began so close to the house that he was looking out through the topmost branches of the nearest tree, could have reached out and shaken them if he had dared to open the window. All around him the trees stretched to the flat horizon of the valley. The only break in that white world of branches was away over to the south, where the Thames ran; he could see the bend in the river marked like a single stilled wave in this white ocean of forest, and the shape of it looked as though the river were wider than it should have been.

Will gazed and gazed, and when at last he stirred he found that he was clutching the smooth iron circle threaded onto his belt. The iron was warm to his touch.

He went back into the bedroom.

"Robin!" he said loudly. "Wake up!" But Robin breathed slowly and rhythmically as before, and did not stir.

He ran into the bedroom next door, the familiar small room that he had once shared with James, and shook James roughly by the shoulder. But when the shaking was done, James lay motionless, deeply asleep.

Will went out onto the landing again and took a long breath, and he shouted with all his might: "Wake up! Wake up, everyone!"

He did not now expect any response, and none came. There was a total silence, as deep and timeless as the blanketing snow; the house and everyone in it lay in a sleep that would not be broken.

Will went downstairs to pull on his boots, and the old sheepskin jacket that had belonged, before him, to two or three of his brothers in turn. Then he went out of the back door, closing it quietly behind him, and stood looking out through the quick white vapour of his breath.

The strange white world lay stroked by silence.. No birds sang. The garden was no longer there, in this forested land. Nor were the outbuildings nor the old crumbling walls. There lay only a narrow clearing round the house now, hummocked with unbroken snowdrifts, before the trees began, with a narrow path leading away. Will set out down the white tunnel of the path, slowly, stepping high to keep the snow out of his boots. As soon as he moved away from the house, he felt very much alone, and he made himself go on without looking back over his shoulder, because he knew that when he looked, he would find that the house was gone.

He accepted everything that came into his mind, without thought or question, as if he were moving through a dream. But a deeper part of him knew that he was not dreaming. He was crystal-clear awake, in a Midwinter Day that had been waiting for him to wake into it since the day he had been born, and, he somehow knew, for centuries before that. *Tomorrow will be beyond imagining....* Will came out of the white-arched path into the road, paved smooth with snow and edged everywhere by the great trees, and he looked up between the branches and saw a single black rook flap slowly past, high in the early sky.

*Dragonwings* by Laurence Yep (1975)

From Chapter IX: The Dragon Wakes (December, 1905—April, 1906)

By the time the winter rains came to the city, we were not becoming rich, but we were doing well. Each day we put a little money away in our cold tin can. Father never said anything, but I knew he was thinking about the day when we might be able to afford to bring Mother over. You see, it was not simply a matter of paying her passage over on the boat. Father would probably have to go over after her and escort her across. There had to be money for bribes—tea money, Uncle called it—at both ends of the ocean. Now that we no longer belonged to the Company, we somehow had to acquire a thousand *dollars* worth of property, a faraway figure when you can only save *nickels* and *dimes*.

And yet the hope that we could start our own little fix-it shop and qualify as merchants steadily grew with the collection of coins in the tin can. I was happy most of the time, even when it became the time for the New Year by the Tang people's reckoning. [...]

We took the old picture of the Stove King and smeared some honey on it before we burned it in the stove. Later that evening we would hang up a new picture of the Stove King that we had bought in the Tang people's town. That was a sign the Stove King had returned to his place above our stove. After we had finished burning the old picture, we sat down to a lunch of meat pastries and dumplings. Robin ate quietly—for her, that is. Actually, she monopolized only half the conversation. "Look," she said. "My aunt would never go in for those pagan customs—not in her house. But I could sneak the old picture out and tell her you wanted to replace it with a new one. Then you could smear honey on it for her."

"But you no believe in the Stove King"

"Of course not," she snapped. She squirmed in her seat. "But it might make you feel better."

I could see that she really wanted to make herself feel better. No sense in taking chances with the supernatural, and so on. I could tell her train of thought because I sometimes carried the little cross she had given me in my pocket—just as insurance.

*Roll of Thunder, Hear My Cry* by Mildred Taylor (1976)

“You were born blessed, boy, with land of your own. If you hadn’t been, you’d cry out for it while you try to survive... like Mr. Lanier and Mr. Avery. Maybe even do what they doing now. It’s hard on a man to give up, but sometimes it seems there just ain’t nothing else he can do.”

“I... I’m sorry, Papa,” Stacey muttered.

After a moment, Papa reached out and draped his arm over Stacey’s shoulder.

“Papa,” I said, standing to join them, “we giving up too?”

Papa looked down at me and brought me closer, then waved his hand toward the drive. “You see that fig tree over yonder, Cassie? Them other trees all around... that oak and walnut, they’re a lot bigger and they take up more room and give so much shade they almost overshadow that little ole fig. But that fig tree’s got roots that run deep, and it belongs in that yard as much as that oak and walnut. It keeps blooming, bearing fruit year after year, knowing all the time it’ll never get as big as them other trees. Just keeps on growing and doing what it gotta do. It don’t give up. It give up, it’ll die. There’s a lesson to be learned from that little tree, Cassie girl, ‘cause we’re like it. We keep doing what we gotta do, and we don’t give up. We can’t.”

*“The People Could Fly” from The People Could Fly: American Black Folktales by Virginia Hamilton (1985)*

They say the people could fly. Say that long ago in Africa, some of the people knew magic. And they would walk up on the air like climbin up on a gate. And they flew like blackbirds over the fields. Black, shiny wings flappin against the blue up there.

Then, many of the people were captured for Slavery. The ones that could fly shed their wings. They couldn't take their wings across the water on slave ships. Too crowded, don't you know.

The folks were full of misery, then. Got sick with the up and down of the sea. So they forgot about flyin when they could no longer breathe the sweet scent of Africa.

Say the people who could fly kept their power, although they shed their wings. They looked the same as the other people from Africa who had been coming over, who had dark skin. Say you couldn't tell anymore one who could fly from one who couldn't.

One such who could was an old man, call him Toby. And standin tall, yet afraid, was a young woman who once had wings. Call her Sarah. Now Sarah carried a babe tied to her back. She trembled to be so hard worked and scorned.

The slaves labored in the fields from sunup to sundown. The owner of the slaves callin himself their Master. Say he was a hard lump of clay. A hard, glinty coal. A hard rock pile, wouldn't be moved. His Overseer on horseback pointed out the slaves who were slowin down. So the one called Driver cracked his whip over the slow ones to make them move faster. That whip was a slice-open cut of pain. So they did move faster. Had to.

*The Tale of the Mandarin Ducks* by Katherine Paterson (1990)

Long ago and far away in the Land of the Rising Sun, there lived together a pair of mandarin ducks. Now, the drake was a magnificent bird with plumage of colors so rich that the emperor himself would have envied it. But his mate, the duck, wore the quiet tones of the wood, blending exactly with the hole in the tree where the two had made their nest.

One day while the duck was sitting on her eggs, the drake flew down to a nearby pond to search for food. While he was there, a hunting party entered the woods. The hunters were led by the lord of the district, a proud and cruel man who believed that everything in the district belonged to him to do with as he chose. The lord was always looking for beautiful things to adorn his manor house and garden. And when he saw the drake swimming gracefully on the surface of the pond, he determined to capture him.

The lord's chief steward, a man named Shozo, tried to discourage his master. "The drake is a wild spirit, my lord," he said. "Surely he will die in captivity." But the lord pretended not to hear Shozo. Secretly he despised Shozo, because although Shozo had once been his mightiest samurai, the warrior had lost an eye in battle and was no longer handsome to look upon.

The lord ordered his servants to clear a narrow way through the undergrowth and place acorns along the path. When the drake came out of the water he saw the acorns. How pleased he was! He forgot to be cautious, thinking only of what a feast they would be to take home to his mate.

Just as he was bending to pick up an acorn in his scarlet beak, a net fell over him, and the frightened bird was carried back to the lord's manor and placed in a small bamboo cage.

**“Eleven” from *Woman Hollering Creek: And Other Stories* by Sandra Cisneros (1992)**

What they don't understand about birthdays and what they never tell you is that when you're eleven, you're also ten, and nine, and eight, and seven, and six, and five, and four, and three, and two, and one. And when you wake up on your eleventh birthday you expect to feel eleven, but you don't. You open your eyes and everything's just like yesterday, only it's today. And you don't feel eleven at all. You feel like you're still ten. And you are -- underneath the year that makes you eleven.

Like some days you might say something stupid, and that's the part of you that's still ten. Or maybe some days you might need to sit on your mama's lap because you're scared, and that's the part of you that's five. And maybe one day when you're all grown up maybe you will need to cry like if you're three, and that's okay. That's what I tell Mama when she's sad and needs to cry. Maybe she's feeling three.

Because the way you grow old is kind of like an onion or like the rings inside a tree trunk or like my little wooden dolls that fit one inside the other, each year inside the next one. That's how being eleven years old is.

You don't feel eleven. Not right away. It takes a few days, weeks even, sometimes even months before you say Eleven when they ask you. And you don't feel smart eleven, not until you're almost twelve. That's the way it is.

*Black Ships Before Troy: The Story of the Iliad* by Rosemary Sutcliff (1993)

In the high and far-off days when men were heroes and walked with the gods, Peleus, king of the Myrmidons, took for his wife a sea nymph called Thetis, Thetis of the Silver Feet. Many guests came to their wedding feast, and among the mortal guests came all the gods of high Olympus.

But as they sat feasting, one who had not been invited was suddenly in their midst: Eris, the goddess of discord, had been left out because wherever she went she took trouble with her; yet here she was, all the same, and in her blackest mood, to avenge the insult.

All she did—it seemed a small thing—was to toss down on the table a golden apple. Then she breathed upon the guests once, and vanished.

The apple lay gleaming among the piled fruits and the brimming wine cups; and bending close to look at it, everyone could see the words "To the fairest" traced on its side.

Then the three greatest of the goddesses each claimed that it was hers. Hera claimed it as wife to Zeus, the All-father, and queen of all the gods. Athene claimed that she had the better right, for the beauty of wisdom such as hers surpassed all else. Aphrodite only smiled, and asked who had a better claim to beauty's prize than the goddess of beauty herself.

They fell to arguing among themselves; the argument became a quarrel, and the quarrel grew more and more bitter, and each called upon the assembled guests to judge between them. But the other guests refused, for they knew well enough that, whichever goddess they chose to receive the golden apple, they would make enemies of the other two.

## Grades 6-8: Drama

### *A Midsummer Night's Dream* by William Shakespeare (1596)

From Act I, Scene 1:

HERMIA

Godspeed, fair Helena. Wither away?

HELENA

Call you me "fair"? That "fair" again unsay.  
Demetrius loves your fair. O happy fair!  
Your eyes are lodestars and your tongue's sweet air  
More tunable than lark to shepherd's ear  
When wheat is green, when hawthorn buds appear.  
Sickness is catching, O, were favor so!  
Yours would I catch, fair Hermia, ere I go.  
My ear should catch your voice, my eye your eye;  
My tongue should catch your tongue's sweet melody.  
Were the world mine, Demetrius being bated,  
The rest I'd give to you to be translated.  
O, teach me how you look and with what art  
You sway the motion of Demetrius' heart!

HERMIA

I frown upon him, yet he loves me still.

HELENA

O, that your frowns would teach my smiles such skill!

HERMIA

I give him curses, yet he gives me love.

HELENA

O, that my prayers could such affection move!

HERMIA

The more I hate, the more he follows me.

HELENA

The more I love, the more he hateth me.

HERMIA

His folly, Helena, is no fault of mine.

HELENA

None but your beauty. Would that fault were mine!

HERMIA

Take comfort: he no more shall see my face.  
Lysander and myself will fly this place.  
Before the time I did Lysander see  
Seemed Athens as a paradise to me.  
O, then, what graces in my love do dwell  
That he hath turned a heaven unto a hell!

LYSANDER

Helen, to you our minds we will unfold.  
Tomorrow night when Phoebe doth behold  
Her silver visage in the watery glass,  
Decking with liquid pearl the bladed grass  
(A time that lovers' flights doth still conceal),  
Through Athens' gates have we devised to steal.

HERMIA

And in the wood where often you and I  
Upon faint primrose beds were wont to lie,  
Emptying our bosoms of their counsel sweet,  
There my Lysander and myself shall meet,  
And thence from Athens turn away our eyes  
To seek new friends and stranger companies.  
Farewell, sweet playfellow. Pray thou for us,  
And good luck grant thee thy Demetrius.  
Keep word, Lysander. We must starve our sight  
From lovers' food till morrow deep midnight.

LYSANDER

I will, my Hermia. *Hermia exits.*

Helena, adieu.

As you on him, Demetrius dote on you!

HELENA

How happy some o'er other some can be!  
Through Athens I was thought as fair as she.  
But what of that? Demetrius thinks not so.  
He will not know what all but he do know.  
And, as he errs, doting on Hermia's eyes,  
So I, admiring of his qualities,  
Things base and vile, holding no quantity,  
Love can transpose to form and dignity.  
Love looks not with the eyes but with the mind;  
And therefore is winged Cupid painted blind.  
Nor hath Love's mind of any judgment taste.  
Wings, and no eyes, figure unheedy haste.  
And therefore is Love said to be a child  
Because in choice he is so oft beguiled.  
As waggish boys in game themselves forswear,  
So the boy Love is perjured everywhere.  
For, ere Demetrius looked on Hermia's eyne,  
He hailed down oaths that he was only mine;  
And when this hail some heat from Hermia felt,  
So he dissolved, and show'rs of oaths did melt.  
I will go tell him of fair Hermia's flight.  
Then to the wood will he tomorrow night  
Pursue her. And, for this intelligence  
If I have thanks, it is a dear expense.  
But herein mean I to enrich my pain,  
To have his sight thither and back again.

*The Diary of Anne Frank* by Frances Goodrich and Albert Hackett (1958)

From Act I, Scene 1:

MIEP But, Mr. Frank, there are letters, notes . . .

MR FRANK Burn them. All of them.

MIEP Burn this? *(She hands him a worn, velour-covered book.)*

MR FRANK *(quietly)* Anne's diary. *(He opens the diary and reads.)* 'Monday, the sixth of July, nineteen hundred and forty-two.' *(To MIEP.)* Nineteen hundred and forty-two. Is it possible, Miep? Only three years ago. *(He reads.)* 'Dear Diary, since you and I are going to be great friends, I will start by telling you about myself. My name is Anne Frank. I am thirteen years old. I was born in Germany the twelfth of June, nineteen twenty-nine. As my family is Jewish we emigrated to Holland when Hitler came to power.'

## Grades 6-8: Poetry

### “Paul Revere’s Ride” by Henry Wadsworth Longfellow (1861)

Listen, my children, and you shall hear  
Of the midnight ride of Paul Revere,  
On the eighteenth of April, in Seventy-five;  
Hardly a man is now alive  
Who remembers that famous day and year.

He said to his friend, "If the British march  
By land or sea from the town to-night,  
Hang a lantern aloft in the belfry arch  
Of the North Church tower as a signal light,--  
One, if by land, and two, if by sea;  
And I on the opposite shore will be,  
Ready to ride and spread the alarm  
Through every Middlesex village and farm,  
For the country-folk to be up and to arm."

Then he said, "Good night!" and with muffled oar  
Silently rowed to the Charlestown shore,  
Just as the moon rose over the bay,  
Where swinging wide at her moorings lay  
The Somerset, British man-of-war;  
A phantom ship, with each mast and spar  
Across the moon like a prison bar,  
And a huge black hulk, that was magnified  
By its own reflection in the tide.

Meanwhile, his friend, through alley and street,  
Wanders and watches with eager ears,  
Till in the silence around him he hears  
The muster of men at the barrack door,  
The sound of arms, and the tramp of feet,  
And the measured tread of the grenadiers,  
Marching down to their boats on the shore.

Then he climbed to the tower of the church,  
Up the wooden stairs, with stealthy tread,  
To the belfry-chamber overhead,  
And startled the pigeons from their perch  
On the sombre rafters, that round him made  
Masses and moving shapes of shade,--  
Up the trembling ladder, steep and tall,  
To the highest window in the wall,  
Where he paused to listen and look down  
A moment on the roofs of the town,  
And the moonlight flowing over all.

Beneath, in the churchyard, lay the dead,

In their night-encampment on the hill,  
Wrapped in silence so deep and still  
That he could hear, like a sentinel's tread,  
The watchful night-wind, as it went  
Creeping along from tent to tent,  
And seeming to whisper, "All is well!"  
A moment only he feels the spell  
Of the place and the hour, and the secret dread  
Of the lonely belfry and the dead;  
For suddenly all his thoughts are bent  
On a shadowy something far away,  
Where the river widens to meet the bay, --  
A line of black that bends and floats  
On the rising tide, like a bridge of boats.

Meanwhile, impatient to mount and ride,  
Booted and spurred, with a heavy stride  
On the opposite shore walked Paul Revere.  
Now he patted his horse's side,  
Now gazed at the landscape far and near,  
Then, impetuous, stamped the earth,  
And turned and tightened his saddle-girth;  
But mostly he watched with eager search  
The belfry-tower of the Old North Church,  
As it rose above the graves on the hill,  
Lonely and spectral and sombre and still.  
And lo! as he looks, on the belfry's height  
A glimmer, and then a gleam of light!  
He springs to the saddle, the bridle he turns,  
But lingers and gazes, till full on his sight  
A second lamp in the belfry burns!

A hurry of hoofs in a village street,  
A shape in the moonlight, a bulk in the dark,  
And beneath, from the pebbles, in passing, a spark  
Struck out by a steed flying fearless and fleet;  
That was all! And yet, through the gloom and the light,  
The fate of a nation was riding that night;  
And the spark struck out by that steed, in his flight,  
Kindled the land into flame with its heat.

He has left the village and mounted the steep,  
And beneath him, tranquil and broad and deep,  
Is the Mystic, meeting the ocean tides;  
And under the alders, that skirt its edge,  
Now soft on the sand, now loud on the ledge,  
Is heard the tramp of his steed as he rides.

It was twelve by the village clock  
When he crossed the bridge into Medford town.  
He heard the crowing of the cock,  
And the barking of the farmer's dog,  
And felt the damp of the river fog,  
That rises after the sun goes down.

It was one by the village clock,  
When he galloped into Lexington.  
He saw the gilded weathercock  
Swim in the moonlight as he passed,  
And the meeting-house windows, blank and bare,  
Gaze at him with a spectral glare,  
As if they already stood aghast  
At the bloody work they would look upon.

It was two by the village clock,  
When he came to the bridge in Concord town.  
He heard the bleating of the flock,  
And the twitter of birds among the trees,  
And felt the breath of the morning breeze  
Blowing over the meadows brown.  
And one was safe and asleep in his bed  
Who at the bridge would be first to fall,  
Who that day would be lying dead,  
Pierced by a British musket-ball.

You know the rest. In the books you have read,  
How the British Regulars fired and fled,--  
How the farmers gave them ball for ball,  
From behind each fence and farm-yard wall,  
Chasing the red-coats down the lane,  
Then crossing the fields to emerge again  
Under the trees at the turn of the road,  
And only pausing to fire and load.

So through the night rode Paul Revere;  
And so through the night went his cry of alarm  
To every Middlesex village and farm,--  
A cry of defiance and not of fear,  
A voice in the darkness, a knock at the door,  
And a word that shall echo forevermore!  
For, borne on the night-wind of the Past,  
Through all our history, to the last,

In the hour of darkness and peril and need,  
The people will waken and listen to hear  
The hurrying hoof-beats of that steed,  
And the midnight message of Paul Revere.

**Media Text:**

“The Midnight Ride,” an extensive resource, including audio, images, and maps, provided by the Paul Revere Memorial Association:  
<http://www.paulreverehouse.org/ride/>

**“O Captain! My Captain!” by Walt Whitman (1865)**

O Captain! my Captain! our fearful trip is done;  
The ship has weather'd every rack, the prize we sought is won;  
The port is near, the bells I hear, the people all exulting,  
While follow eyes the steady keel, the vessel grim and daring:  
But O heart! heart! heart!  
O the bleeding drops of red,  
Where on the deck my Captain lies,  
Fallen cold and dead.

O Captain! my Captain! rise up and hear the bells;  
Rise up--for you the flag is flung--for you the bugle trills;  
For you bouquets and ribbon'd wreaths--for you the shores a-crowding;  
For you they call, the swaying mass, their eager faces turning;  
Here Captain! dear father!  
This arm beneath your head;  
It is some dream that on the deck,  
You've fallen cold and dead.

My Captain does not answer, his lips are pale and still;  
My father does not feel my arm, he has no pulse nor will;  
The ship is anchor'd safe and sound, its voyage closed and done;  
From fearful trip, the victor ship, comes in with object won;  
Exult, O shores, and ring, O bells!  
But I, with mournful tread,  
Walk the deck my Captain lies,  
Fallen cold and dead.

“Jabberwocky” by Lewis Carroll (1872)

'Twas brillig, and the slithy toves  
Did gyre and gimble in the wabe;  
All mimsy were the borogoves,  
And the mome raths outgrabe.

'Beware the Jabberwock, my son!  
The jaws that bite, the claws that catch!  
Beware the Jubjub bird, and shun  
The frumious Bandersnatch!

He took his vorpal sword in hand:  
Long time the manxome foe he sought—  
So rested he by the Tumtum tree,  
And stood awhile in thought.

And as in uffish thought he stood,  
The Jabberwock, with eyes of flame,  
Came whiffling through the tulgey wood,  
And burbled as it came!

One, two! One, two! And through and through  
The vorpal blade went snicker-snack!  
He left it dead, and with its head  
He went galumphing back.

'And hast thou slain the Jabberwock?  
Come to my arms, my beamish boy!  
O frabjous day! Callooh! Callay!  
He chortled in his joy.

'Twas brillig, and the slithy toves  
Did gyre and gimble in the wabe;  
All mimsy were the borogoves,  
And the mome raths outgrabe.

**“Twelfth Song of Thunder” from *The Mountain Chant: A Navajo Ceremony* Navajo tradition (1887)**

The voice that beautifies the land!  
The voice above,  
The voice of thunder  
Within the dark cloud  
Again and again it sounds,  
The voice that beautifies the land.

The voice that beautifies the land!  
The voice below,  
The voice of the grasshopper  
Among the plants  
Again and again it sounds,  
The voice that beautifies the land.

**“The Railway Train” by Emily Dickinson (1893)**

I like to see it lap the miles,  
And lick the valleys up,  
And stop to feed itself at tanks;  
And then, prodigious, step

Around a pile of mountains,  
And, supercilious, peer  
In shanties by the sides of roads;  
And then a quarry pare

To fit its sides, and crawl between,  
Complaining all the while  
In horrid, hooting stanza;  
Then chase itself down hill

And neigh like Boanerges;  
Then, punctual as a star,  
Stop -- docile and omnipotent --  
At its own stable door.

**“The Song of Wandering Aengus” by W. B. Yeats (1899)**

I WENT out to the hazel wood,  
Because a fire was in my head,  
And cut and peeled a hazel wand,  
And hooked a berry to a thread;  
And when white moths were on the wing,  
And moth-like stars were flickering out,  
I dropped the berry in a stream  
And caught a little silver trout.

When I had laid it on the floor  
I went to blow the fire a-flame,  
But something rustled on the floor,  
And someone called me by my name:  
It had become a glimmering girl  
With apple blossom in her hair  
Who called me by my name and ran  
And faded through the brightening air.

Though I am old with wandering  
Through hollow lands and hilly lands,  
I will find out where she has gone,  
And kiss her lips and take her hands;  
And walk among long dappled grass,  
And pluck till time and times are done,  
The silver apples of the moon,  
The golden apples of the sun.

“Chicago” from *Chicago Poems* (1914) by Carl Sandburg

Hog Butcher for the World,  
Tool Maker, Stacker of Wheat,  
Player with Railroads and the Nation's Freight Handler;  
Stormy, husky, brawling,  
City of the Big Shoulders:

They tell me you are wicked and I believe them, for I have seen your painted  
women under the gas lamps luring the farm boys.

And they tell me you are crooked and I answer: Yes, it is true I have seen  
the gunman kill and go free to kill again.

And they tell me you are brutal and my reply is: On the faces of women and  
children I have seen the marks of wanton hunger.

And having answered so I turn once more to those who sneer at this my city,  
and I give them back the sneer and say to them:

Come and show me another city with lifted head singing so proud to be alive  
and coarse and strong and cunning.

Flinging magnetic curses amid the toil of piling job on job, here is a tall bold  
slugger set vivid against the little soft cities;

Fierce as a dog with tongue lapping for action, cunning as a savage pitted  
against the wilderness,

Bareheaded,

Shoveling,

Wrecking,

Planning,

Building, breaking, rebuilding,

Under the smoke, dust all over his mouth, laughing with white teeth,

Under the terrible burden of destiny laughing as a young man laughs,

Laughing even as an ignorant fighter laughs who has never lost a battle,

Bragging and laughing that under his wrist is the pulse, and under his ribs  
the heart of the people,

Laughing!

Laughing the stormy, husky, brawling laughter of Youth, half-naked,  
sweating, proud to be Hog Butcher, Tool Maker, Stacker of Wheat,  
Player with Railroads and Freight Handler to the Nation.

**“Stopping by Woods on a Snowy Evening” by Robert Frost (1923)**

Whose woods these are I think I know.  
His house is in the village, though;  
He will not see me stopping here  
To watch his woods fill up with snow.

My little horse must think it queer  
To stop without a farmhouse near  
Between the woods and frozen lake  
The darkest evening of the year.

He gives his harness bells a shake  
To ask if there is some mistake.  
The only other sound's the sweep  
Of easy wind and downy flake.

The woods are lovely, dark, and deep,  
But I have promises to keep,  
And miles to go before I sleep,  
And miles to go before I sleep.

**“I, Too” by Langston Hughes (1925)**

I, too, sing America.

I am the darker brother.

They send me to eat in the kitchen

When company comes,

But I laugh,

And eat well,

And grow strong.

[...]

“The Book of Questions” by Pablo Neruda (1973) translated by William O’Daly

VI

Why does the hat of night  
fly so full of holes?

What does old ash say  
when it passes near the fire?

[...]

**“Oranges” from *Black Hair* (1985) by Gary Soto**

The first time I walked  
With a girl, I was twelve,  
Cold, and weighted down  
With two oranges in my jacket.  
December. Frost cracking  
Beneath my steps, my breath  
Before me, then gone,  
As I walked toward  
Her house, the one whose  
Porch light burned yellow  
Night and day, in any weather.  
Then released it to let  
Her unwrap the chocolate.  
I peeled my orange  
That was so bright against  
The gray of December  
That, from some distance,  
Someone might have thought  
I was making a fire in my hands.

[...]

**“A Poem for My Librarian, Mrs. Long” from *Acolytes* (2007) by Nikki Giovanni**

A Poem for My Librarian, Mrs. Long  
(You never know what troubled little girl needs a book)

At a time when there was not tv before 3:00 P.M.  
And on Sunday none until 5:00  
We sat on the front porches watching  
The jfg sign go on and off greeting  
The neighbors, discussion the political  
Situation congratulating the preacher  
On his sermon

[...]

## Grades 6-8: Informational Texts (English Language Arts)

### “Allegory of the Cave” from *The Republic* by Plato (380 BCE) translated by G. M. A. Grube

From Book VII

Next, I said, compare the effect of education and of the lack of it on our nature to an experience like this: Imagine human beings living in an underground, cavelike dwelling, with an entrance a long way up, which is both open to the light and as wide as the cave itself. They’ve been there since childhood, fixed in the same place, with their necks and legs fettered, able to see only in front of them, because their bonds prevent them from turning their heads around. Light is provided by a fire burning far above and behind them. Also behind them, but on higher ground, there is a path stretching between them and the fire. Imagine that along this path a low wall has been built, like the screen in front of puppeteers above which they show their puppets.

I’m imagining it.

Then also imagine that there are people along the wall, carrying all kinds of artifacts that project above it—statues of people and other animals, made out of stone, wood, and every material. And, as you’d expect, some of the carriers are talking, and some are silent.

It’s a strange image you’re describing, and strange prisoners.

They’re like us. Do you suppose, first of all, that these prisoners see anything of themselves and one another besides the shadows that the fire casts on the wall in front of them?

How could they, if they have to keep their heads motionless throughout life?

What about the things being carried along the wall? Isn’t the same true of them?

Of course.

And if they could talk to one another, don’t you think they’d suppose that the names they used applied to the things they see passing before them?

They’d have to.

And what if their prison also had an echo from the wall facing them? Don’t you think they’d believe that the shadows passing in front of them were talking whenever one of the carriers passing along the wall was doing so?

I certainly do.

Then the prisoners would in every way believe that the truth is nothing other than the shadows of those artifacts.

They must surely believe that.

Consider, then, what being released from their bonds and cured of their ignorance would naturally be like if something like this came to pass. When one of them was freed and suddenly compelled to stand up, turn his head, walk, and look up toward the light, he’d be pained and dazzled and unable to see the things whose shadows he’d seen before. What do you think he’d say, if we told him that what he’d seen before was inconsequential, but that now—because he is a bit closer to the things that are and is turned towards things that are more—he sees correctly? Or, to put it another way, if we pointed to each of the things passing by, asked him what each of them is, and compelled him to answer, don’t you think he’d be at a loss and that he’d believe the things he saw earlier were truer than the ones he was now being shown?

Much truer.

And if someone compelled him to look at the light itself, wouldn’t his eyes hurt, and wouldn’t he turn around and flee towards the things he’s able to see, believing that they’re really clearer than the ones he’s being shown?

He would.

And if someone dragged him away from there by force, up the rough, steep path, and didn’t let him go until he had dragged him into the sunlight, wouldn’t he be pained and irritated at being treated that way? And when he came into the light, with the sun filling his eyes, wouldn’t he be unable to see a single one of the things now said to be true?

He would be unable to see them, at least at first.

I suppose, then, that he’d need time to get adjusted before he could see things in the world above. At first, he’d see shadows most easily, then images of men and other things in water, then the things themselves. Of these, he’d be able to study the things in the sky and the sky itself more easily at night, looking at the light of the stars and the moon, than during the day, looking at the sun and the light of the moon.

Of course.

Finally, I suppose, he'd be able to see the sun, not images of it in water or some alien place, but the sun itself, in its own place, and be able to study it.

Necessarily so.

And at this point he would infer and conclude that the sun provides the seasons and the years, governs everything in the visible world, and is in some way the cause of all the things that he used to see.

It's clear that would be his next step.

What about when he reminds himself of his first dwelling place, his fellow prisoners, and what passed for wisdom there? Don't you think that he'd count himself happy for the change and pity the others?

Certainly.

And if there had been any honors, praises, or prizes among them for the one who was sharpest at identifying the shadows as they passed by and who best remembered which usually came earlier, which later, and which simultaneously, and who could thus best divine the future, do you think that our man would desire these rewards or envy those among the prisoners who were honored and held power? Instead, wouldn't he feel, with Homer, that he'd much prefer to "work the earth as a serf to another, one without possessions," and go through any sufferings, rather than share their opinions and live as they do?

I suppose he would rather suffer anything than live like that.

Consider this too. If this man went down into the cave again and sat down in his same seat, wouldn't his eyes—coming suddenly out of the sun like that—be filled with darkness?

They certainly would.

## “Letter on Thomas Jefferson” by John Adams (1822)

Mr. Jefferson came into Congress, in June, 1775, and brought with him a reputation for literature, science, science, and a happy talent of composition. Writings of his were handed about, remarkable for the peculiar felicity of expression. Though a silent member in Congress, he was so prompt, frank, explicit, and decisive upon committees and in conversation, not even Samuel Adams was more so, that he soon seized upon my heart; and upon this occasion I gave him my vote, and did all in my power to procure the votes of others. I think he had one more vote than any other, and that placed him at the head of the committee. I had the next highest number, and that placed me second. The committee met, discussed the subject, and then appointed Mr. Jefferson and me to make the draught, I suppose because we were the two first on the list.

The subcommittee met. Jefferson proposed to me to make the draft. I said, 'I will not,' 'You should do it.' 'Oh! no.' 'Why will you not? You ought to do it.' 'I will not.' 'Why?' 'Reasons enough.' 'What can be your reasons?' 'Reason first, you are a Virginian, and a Virginian ought to appear at the head of this business. Reason second, I am obnoxious, suspected, and unpopular. You are very much otherwise. Reason third, you can write ten times better than I can.' 'Well,' said Jefferson, 'if you are decided, I will do as well as I can.' 'Very well. When you have drawn it up, we will have a meeting.'

### Media Text:

Adams Family Papers: An Electronic Archive, hosted by the Massachusetts Historical Society, includes transcriptions of letters between John and Abigail Adams as well as John Adams's diary and autobiography:

<http://www.masshist.org/digitaladams/aea/index.html>

## *Narrative of the Life of Frederick Douglass an American Slave by Frederick Douglass (1845)*

The plan which I adopted, and the one by which I was most successful, was that of making friends of all the little white boys whom I met in the street. As many of these as I could, I converted into teachers. With their kindly aid, obtained at different times and in different places, I finally succeeded in learning to read. When I was sent of errands, I always took my book with me, and by going one part of my errand quickly, I found time to get a lesson before my return. I used also to carry bread with me, enough of which was always in the house, and to which I was always welcome; for I was much better off in this regard than many of the poor white children in our neighborhood. This bread I used to bestow upon the hungry little urchins, who, in return, would give me that more valuable bread of knowledge. I am strongly tempted to give the names of two or three of those little boys, as a testimonial of the gratitude and affection I bear them; but prudence forbids;—not that it would injure me, but it might embarrass them; for it is almost an unpardonable offence to teach slaves to read in this Christian country. It is enough to say of the dear little fellows, that they lived on Philpot Street, very near Durgin and Bailey's ship-yard. I used to talk this matter of slavery over with them. I would sometimes say to them, I wished I could be as free as they would be when they got to be men. "You will be free as soon as you are twenty-one, *but I am a slave for life!* Have not I as good a right to be free as you have?" These words used to trouble them; they would express for me the liveliest sympathy, and console me with the hope that something would occur by which I might be free.

I was now about twelve years old, and the thought of being *a slave for life* began to bear heavily upon my heart. Just about this time, I got hold of a book entitled "The Columbian Orator." Every opportunity I got, I used to read this book. Among much of other interesting matter, I found in it a dialogue between a master and his slave. The slave was represented as having run away from his master three times. The dialogue represented the conversation which took place between them, when the slave was retaken the third time. In this dialogue, the whole argument in behalf of slavery was brought forward by the master, all of which was disposed of by the slave. The slave was made to say some very smart as well as impressive things in reply to his master—things which had the desired though unexpected effect; for the conversation resulted in the voluntary emancipation of the slave on the part of the master.

In the same book, I met with one of Sheridan's mighty speeches on and in behalf of Catholic emancipation. These were choice documents to me. I read them over and over again with unabated interest. They gave tongue to interesting thoughts of my own soul, which had frequently flashed through my mind, and died away for want of utterance. The moral which I gained from the dialogue was the power of truth over the conscience of even a slaveholder. What I got from Sheridan was a bold denunciation of slavery, and a powerful vindication of human rights. The reading of these documents enabled me to utter my thoughts, and to meet the arguments brought forward to sustain slavery; but while they relieved me of one difficulty, they brought on another even more painful than the one of which I was relieved. The more I read, the more I was led to abhor and detest my enslavers. I could regard them in no other light than a band of successful robbers, who had left their homes, and gone to Africa, and stolen us from our homes, and in a strange land reduced us to slavery. I loathed them as being the meanest as well as the most wicked of men. As I read and contemplated the subject, behold! that very discontentment which Master Hugh had predicted would follow my learning to read had already come, to torment and sting my soul to unutterable anguish. As I writhed under it, I would at times feel that learning to read had been a curse rather than a blessing. It had given me a view of my wretched condition, without the remedy. It opened my eyes to the horrible pit, but to no ladder upon which to get out. In moments of agony, I envied my fellow-slaves for their stupidity. I have often wished myself a beast. I preferred the condition of the meanest reptile to my own. Any thing, no matter what, to get rid of thinking! It was this everlasting thinking of my condition that tormented me. There was no getting rid of it. It was pressed upon me by every object within sight or hearing, animate or inanimate. The silver trump of freedom had roused my soul to eternal wakefulness. Freedom now appeared, to disappear no more forever. It was heard in every sound, and seen in every thing. It was ever present to torment me with a sense of my wretched condition. I saw nothing without seeing it, I heard nothing without hearing it, and felt nothing without feeling it. It looked from every star, it smiled in every calm, breathed in every wind, and moved in every storm.

## “Gettysburg Address” by Abraham Lincoln (1863)

Fourscore and seven years ago, our fathers brought forth upon this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We are met to dedicate a portion of it as the final resting-place of those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But in a large sense we cannot dedicate,—we cannot consecrate,— we cannot hallow this ground. The brave men, living and dead, who struggled here, have consecrated it far above our power to add or detract. The world will little note, nor long remember, what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work that they have thus far so nobly carried on. It is, rather for us to be here dedicated to the great task remaining before us, that from these honored dead we take increased devotion to that cause for which they here gave the last full measure of devotion; that we here highly resolve that these dead shall not have died in vain; that this nation, under God, shall have a new birth of freedom, and that Government of the people, by the people and for the people, shall not perish from the earth.

## “Lee Surrenders to Grant” by Horace Porter (1865)

When Lee came to the sentence about the officers' side-arms, private horses & baggage, he showed for the first time during the reading of the letter a slight change of countenance & was evidently touched by this act of generosity. It was doubtless the condition mentioned to which he particularly alluded when he looked toward General Grant, as he finished reading & said with some degree of warmth in his manner, “This will have a very happy effect upon my army.”

General Grant then said: "Unless you have some suggestions to make in regard to the form in which I have stated the terms, I will have a copy of the letter made in ink, and sign it."

"There is one thing I should like to mention," Lee replied, after a short pause. "The cavalymen and artillerists own their own horses in our army. Its organization in this respect differs from that of the United States." This expression attracted the notice of our officers present, as showing how firmly the conviction was grounded in his mind that we were two distinct countries. He continued: "I should like to understand whether these men will be permitted to retain their horses."

"You will find that the terms as written do not allow this," General Grant replied; "only the officers are permitted to take their private property."

Lee read over the second page of the letter again, and then said: "No, I see the terms do not allow it; that is clear." His face showed plainly that he was quite anxious to have this concession made; and Grant said very promptly, and without giving Lee time to make a direct request:

"Well, the subject is quite new to me. Of course I did not know that any private soldiers owned their animals; but I think we have fought the last battle of the war, — I sincerely hope so, — and that the surrender of this army will be followed soon by that of all the others; and I take it that most of the men in the ranks are small farmers, and as the country has been so raided by the two armies, it is doubtful whether they will be able to put in a crop to carry themselves and their families through the next winter without the aid of the horses they are now riding, and I will arrange it in this way: I will not change the terms as now written, but I will instruct the officers I shall appoint to receive the paroles to let all the men who claim to own a horse or mule take the animals home with them to work their little farms."

## **“Blood, Toil, Tears and Sweat” by Winston Churchill (1940)**

I say to the House as I said to ministers who have joined this government, I have nothing to offer but blood, toil, tears, and sweat. We have before us an ordeal of the most grievous kind. We have before us many, many months of struggle and suffering.

You ask, what is our policy? I say it is to wage war by land, sea, and air. War with all our might and with all the strength God has given us, and to wage war against a monstrous tyranny never surpassed in the dark and lamentable catalogue of human crime. That is our policy.

You ask, what is our aim? I can answer in one word. It is victory. Victory at all costs - Victory in spite of all terrors - Victory, however long and hard the road may be, for without victory there is no survival.

[...]

I take up my task in buoyancy and hope. I feel sure that our cause will not be suffered to fail among men. I feel entitled at this juncture, at this time, to claim the aid of all and to say, "Come then, let us go forward together with our united strength."

*Travels with Charley: In Search of America* by John Steinbeck (1962)

I soon discovered that if a wayfaring stranger wishes to eavesdrop on a local population the places for him to slip in and hold his peace are bars and churches. But some New England towns don't have bars, and church is only on Sunday. A good alternative is the roadside restaurant where men gather for breakfast before going to work or going hunting. To find these places inhabited one must get up very early. And there is a drawback even to this. Early-rising men not only do not talk much to strangers, they barely talk to one another. Breakfast conversation is limited to a series of laconic grunts. The natural New England taciturnity reaches its glorious perfection at breakfast.

[...]

I am not normally a breakfast eater, but here I had to be or I wouldn't see anybody unless I stopped for gas. At the first lighted roadside restaurant I pulled in and took my seat at a counter. The customers were folded over their coffee cups like ferns. A normal conversation is as follows:

WAITRESS: "Same?"

CUSTOMER: "Yep."

WAITRESS: "Cold enough for you?"

CUSTOMER: "Yep."

(Ten minutes.)

WAITRESS: "Refill?"

CUSTOMER: "Yep."

This is a really talkative customer.

## **“Address to the Nation on Civil Rights” by John F. Kennedy (1963)**

Good evening, my fellow citizens:

This afternoon, following a series of threats and defiant statements, the presence of Alabama National Guardsmen was required on the University of Alabama to carry out the final and unequivocal order of the United States District Court of the Northern District of Alabama. That order called for the admission of two clearly qualified young Alabama residents who happened to have been born Negro. That they were admitted peacefully on the campus is due in good measure to the conduct of the students of the University of Alabama, who met their responsibilities in a constructive way.

I hope that every American, regardless of where he lives, will stop and examine his conscience about this and other related incidents. This Nation was founded by men of many nations and backgrounds. It was founded on the principle that all men are created equal, and that the rights of every man are diminished when the rights of one man are threatened.

Today, we are committed to a worldwide struggle to promote and protect the rights of all who wish to be free. And when Americans are sent to Vietnam or West Berlin, we do not ask for whites only. It ought to be possible, therefore, for American students of any color to attend any public institution they select without having to be backed up by troops. It ought to be possible for American consumers of any color to receive equal service in places of public accommodation, such as hotels and restaurants and theaters and retail stores, without being forced to resort to demonstrations in the street, and it ought to be possible for American citizens of any color to register and to vote in a free election without interference or fear of reprisal. It ought to be possible, in short, for every American to enjoy the privileges of being American without regard to his race or his color. In short, every American ought to have the right to be treated as he would wish to be treated, as one would wish his children to be treated. But this is not the case.

The Negro baby born in America today, regardless of the section of the State in which he is born, has about one-half as much chance of completing a high school as a white baby born in the same place on the same day, one-third as much chance of completing college, one-third as much chance of becoming a professional man, twice as much chance of becoming unemployed, about one-seventh as much chance of earning \$10,000 a year, a life expectancy which is 7 years shorter, and the prospects of earning only half as much.

This is not a sectional issue. Difficulties over segregation and discrimination exist in every city, in every State of the Union, producing in many cities a rising tide of discontent that threatens the public safety. Nor is this a partisan issue. In a time of domestic crisis men of good will and generosity should be able to unite regardless of party or politics. This is not even a legal or legislative issue alone. It is better to settle these matters in the courts than on the streets, and new laws are needed at every level, but law alone cannot make men see right. We are confronted primarily with a moral issue. It is as old as the Scriptures and is as clear as the American Constitution.

The heart of the question is whether all Americans are to be afforded equal rights and equal opportunities, whether we are going to treat our fellow Americans as we want to be treated. If an American, because his skin is dark, cannot eat lunch in a restaurant open to the public, if he cannot send his children to the best public school available, if he cannot vote for the public officials who will represent him, if, in short, he cannot enjoy the full and free life which all of us want, then who among us would be content to have the color of his skin changed and stand in his place? Who among us would then be content with the counsels of patience and delay?

One hundred years of delay have passed since President Lincoln freed the slaves, yet their heirs, their grandsons, are not fully free. They are not yet freed from the bonds of injustice. They are not yet freed from social and economic oppression. And this Nation, for all its hopes and all its boasts, will not be fully free until all its citizens are free.

We preach freedom around the world, and we mean it, and we cherish our freedom here at home, but are we to say to the world, and much more importantly, to each other that this is the land of the free except for the Negroes; that

we have no second-class citizens except Negroes; that we have no class or caste system, no ghettos, no master race except with respect to Negroes?

Now the time has come for this Nation to fulfill its promise. The events in Birmingham and elsewhere have so increased the cries for equality that no city or State or legislative body can prudently choose to ignore them. The fires of frustration and discord are burning in every city, North and South, where legal remedies are not at hand. Redress is sought in the streets, in demonstrations, parades, and protests which create tensions and threaten violence and threaten lives.

We face, therefore, a moral crisis as a country and a people. It cannot be met by repressive police action. It cannot be left to increased demonstrations in the streets. It cannot be quieted by token moves or talk. It is a time to act in the Congress, in your State and local legislative body and, above all, in all of our daily lives. It is not enough to pin the blame on others, to say this a problem of one section of the country or another, or deplore the facts that we face. A great change is at hand, and our task, our obligation, is to make that revolution, that change, peaceful and constructive for all. Those who do nothing are inviting shame, as well as violence. Those who act boldly are recognizing right, as well as reality.

[...]

This is one country. It has become one country because all of us and all the people who came here had an equal chance to develop their talents. We cannot say to ten percent of the population that you can't have that right; that your children cannot have the chance to develop whatever talents they have; that the only way that they are going to get their rights is to go in the street and demonstrate. I think we owe them and we owe ourselves a better country than that.

Therefore, I'm asking for your help in making it easier for us to move ahead and to provide the kind of equality of treatment which we would want ourselves; to give a chance for every child to be educated to the limit of his talents.

As I've said before, not every child has an equal talent or an equal ability or equal motivation, but they should have the equal right to develop their talent and their ability and their motivation, to make something of themselves. We have a right to expect that the Negro community will be responsible, will uphold the law, but they have a right to expect that the law will be fair, that the Constitution will be color blind, as Justice Harlan said at the turn of the century.

This is what we're talking about and this is a matter which concerns this country and what it stands for, and in meeting it I ask the support of all our citizens.

Thank you very much.

*I Know Why the Caged Bird Sings* by Maya Angelou (1969)

She said she was going to give me some books and that I not only must read them, I must read them aloud. She suggested that I try to make a sentence sound in as many different ways as possible.

"I'll accept no excuse if you return a book to me that has been badly handled." My imagination boggled at the punishment I would deserve if in fact I did abuse a book of Mrs. Flowers'. Death would be too kind and brief.

The odors in the house surprised me. Somehow I had never connected Mrs. Flowers with food or eating or any other common experience of common people. There must have been an outhouse, too, but my mind never recorded it.

The sweet scent of vanilla had met us as she opened the door.

"I made tea cookies this morning. You see, I had planned to invite you for cookies and lemonade so we could have this little chat. The lemonade is in the icebox."

It followed that Mrs. Flowers would have ice on an ordinary day, when most families in our town bought ice late on Saturdays only a few times during the summer to be used in the wooden ice-cream freezers.

She took the bags from me and disappeared through the kitchen door. I looked around the room that I had never in my wildest fantasies imagined I would see. Browned photographs leered or threatened from the walls and the white, freshly done curtains pushed against themselves and against the wind. I wanted to gobble up the room entire and take it to Bailey, who would help me analyze and enjoy it.

"Have a seat, Marguerite. Over there by the table." She carried a platter covered with a tea towel. Although she warned that she hadn't tried her hand at baking sweets for some time, I was certain that like everything else about her the cookies would be perfect.

They were flat round wafers, slightly browned on the edges and butter-yellow in the center. With the cold lemonade they were sufficient for childhood's lifelong diet. Remembering my manners, I took nice little lady-like bites off the edges. She said she had made them expressly for me and that she had a few in the kitchen that I could take home to my brother. So I jammed one whole cake in my mouth and the rough crumbs scratched the insides of my jaws, and if I hadn't had to swallow, it would have been a dream come true.

As I ate she began the first of what we later called "my lessons in living." She said that I must always be intolerant of ignorance but understanding of illiteracy. That some people, unable to go to school, were more educated and even more intelligent than college professors. She encouraged me to listen carefully to what country people called mother wit. That in those homely sayings was couched the collective wisdom of generations.

## **“Address to Students at Moscow State University” by Ronald Reagan (1988)**

But progress is not foreordained. The key is freedom -- freedom of thought, freedom of information, freedom of communication. The renowned scientist, scholar, and founding father of this university, Mikhail Lomonosov, knew that. “It is common knowledge,” he said, “that the achievements of science are considerable and rapid, particularly once the yoke of slavery is cast off and replaced by the freedom of philosophy.” [...]

The explorers of the modern era are the entrepreneurs, men with vision, with the courage to take risks and faith enough to brave the unknown. These entrepreneurs and their small enterprises are responsible for almost all the economic growth in the United States. They are the prime movers of the technological revolution. In fact, one of the largest personal computer firms in the United States was started by two college students, no older than you, in the garage behind their home. Some people, even in my own country, look at the riot of experiment that is the free market and see only waste. What of all the entrepreneurs that fail? Well, many do, particularly the successful ones; often several times. And if you ask them the secret of their success, they'll tell you it's all that they learned in their struggles along the way; yes, it's what they learned from failing. Like an athlete in competition or a scholar in pursuit of the truth, experience is the greatest teacher. [...]

We Americans make no secret of our belief in freedom. In fact, it's something of a national pastime. Every 4 years the American people choose a new President, and 1988 is one of those years. At one point there were 13 major candidates running in the two major parties, not to mention all the others, including the Socialist and Libertarian candidates -- all trying to get my job.

About 1,000 local television stations, 8,500 radio stations, and 1,700 daily newspapers -- each one an independent, private enterprise, fiercely independent of the Government -- report on the candidates, grill them in interviews, and bring them together for debates. In the end, the people vote; they decide who will be the next President.

But freedom doesn't begin or end with elections. Go to any American town, to take just an example, and you'll see dozens of churches, representing many different beliefs -- in many places, synagogues and mosques -- and you'll see families of every conceivable nationality worshiping together. Go into any schoolroom, and there you will see children being taught the Declaration of Independence, that they are endowed by their Creator with certain unalienable rights -- among them life, liberty, and the pursuit of happiness -- that no government can justly deny; the guarantees in their Constitution for freedom of speech, freedom of assembly, and freedom of religion.

Go into any courtroom, and there will preside an independent judge, beholden to no government power. There every defendant has the right to a trial by a jury of his peers, usually 12 men and women -- common citizens; they are the ones, the only ones, who weigh the evidence and decide on guilt or innocence. In that court, the accused is innocent until proven guilty, and the word of a policeman or any official has no greater legal standing than the word of the accused.

Go to any university campus, and there you'll find an open, sometimes heated discussion of the problems in American society and what can be done to correct them. Turn on the television, and you'll see the legislature conducting the business of government right there before the camera, debating and voting on the legislation that will become the law of the land. March in any demonstration, and there are many of them; the people's right of assembly is guaranteed in the Constitution and protected by the police. Go into any union hall, where the members know their right to strike is protected by law.

But freedom is more even than this. Freedom is the right to question and change the established way of doing things. It is the continuing revolution of the marketplace. It is the understanding that allows us to recognize shortcomings and seek solutions. It is the right to put forth an idea, scoffed at by the experts, and watch it catch fire among the people. It is the right to dream -- to follow your dream or stick to your conscience, even if you're the only one in a sea of doubters. Freedom is the recognition that no single person, no single authority or government has a monopoly on the truth, but that every individual life is infinitely precious, that every one of us put on this world has been put there for a reason and has something to offer.

## Grades 9–10

### Grades 9-10: Narratives

#### The Odyssey by Homer (eighth century BCE) translated by Robert Fagles

From Book One

Sing to me of the man, Muse, the man of twists and turns  
driven time and again off course, once he had plundered  
the hallowed heights of Troy.

Many cities of men he saw and learned their minds,  
many pains he suffered, heartsick on the open sea,  
fighting to save his life and bring his comrades home.  
But he could not save them from disaster, hard as he strove—  
the recklessness of their own ways destroyed them all,  
the blind fools, they devoured the cattle of the Sun  
and the Sungod blotted out the day of their return.  
Launch out on his story, Muse, daughter of Zeus.  
Start from where you will—sing for our time too.

By now,

all the survivors, all who avoided headlong death  
were safe at home, escaped the wars and waves.

But one man alone...

his heart set on his wife and his return—Calypso,  
the bewitching nymph, the lustrous goddess, held him back,  
deep in her arching caverns, craving him for a husband.  
But then, when the wheeling seasons brought the year around.  
That year spun out by the gods when he should reach his home,  
Ithaca—though not even there would he be free of trials,  
even among his loved ones—then every god took pity,  
all except Poseidon. He raged on, seething against  
the great Odysseus till he reached his native land.

## “The Nose” by Nikolai Gogol (1836) translated by Ronald Wilks

An extraordinarily strange thing happened in St. Petersburg on 25 March. Ivan Yakovlevich, a barber who lived on Voznesensky Avenue (his surname has got lost and all that his shop-front signboard shows is a gentleman with a lathered cheek and the inscription ‘We also let blood’) woke up rather early one morning and smelt hot bread. As he sat up in bed he saw his wife, who was a quite respectable lady and a great coffee-drinker, taking some freshly baked rolls out of the oven.

‘I don’t want any coffee today, Praskovya Osipovna,’ said Ivan Yakovlevich. ‘I’ll make do with some hot rolls and onion instead.’ (Here I must explain that Ivan Yakovlevich would really have liked to have had some coffee as well, but knew it was quite out of the question to expect both coffee and rolls, since Praskovya Osipovna did not take very kindly to these whims of his.) ‘Let the old fool have his bread, I don’t mind,’ she thought. ‘That means extra coffee for me!’ And she threw a roll on to the table.

Ivan pulled his frock-coat over his nightshirt for decency’s sake, sat down at the table, poured out some salt, peeled two onions, took a knife and with a determined expression on his face started cutting one of the rolls. When he had sliced the roll in two, he peered into the middle and was amazed to see something white there. Ivan carefully picked at it with his knife, and felt it with his finger. ‘Quite thick,’ he said to himself. ‘What on earth can it be?’

He poked two fingers in and pulled out—a nose!

He flopped back in his chair, and began rubbing his eyes and feeling around in the roll again. Yes, it was a nose all right, no mistake about that. And, what’s more, it seemed a very familiar nose. His face filled with horror. But this horror was nothing compared with his wife’s indignation.

‘You beast, whose nose is that you’ve cut off?’ she cried furiously. ‘You scoundrel! You drunkard! I’ll report it to the police myself, I will. You thief! Come to think of it, I’ve heard three customers say that when they come in for a shave you start pulling their noses about so much it’s a wonder they stay on at all!’

But Ivan felt more dead than alive. He knew that the nose belonged to none other than Collegiate Assessor Kovalyov, whom he shaved on Wednesdays and Sundays.

‘Wait a minute, Praskovya! I’ll wrap it up in a piece of cloth and dump it in the corner. Let’s leave it there for a bit, then I’ll try and get rid of it.’

‘I don’t want to know! Do you think I’m going to let a sawn-off nose lie about in *my* room ... you fathead! All you can do is strop that blasted razor of yours and let everything else go to pot. Layabout! Night-bird! And you expect me to cover up for you with the police! You filthy pig! Blockhead! Get that nose out of here, out! Do what you like with it, but I don’t want that thing hanging around here a minute longer!’

Ivan Yakovlevich was absolutely stunned. He thought and thought, but just didn’t know what to make of it.

‘I’m damned if I know what’s happened!’ he said at last, scratching the back of his ear. ‘I can’t say for certain if I came home drunk or not last night. All I know is, it’s crazy. After all, bread is baked in an oven, and you don’t get noses in bakeries. Can’t make head or tail of it! ...’

Ivan Yakovlevich lapsed into silence. The thought that the police might search the place, find the nose and afterwards bring a charge against him, very nearly sent him out of his mind. Already he could see that scarlet collar beautifully embroidered with silver, that sword ... and he began shaking all over. Finally he put on his scruffy old trousers and shoes and with Praskovya Osipovna’s vigorous invective ringing in his ears, wrapped the nose up in a piece of cloth and went out into the street.

All he wanted was to stuff it away somewhere, either hiding it between two curb-stones by someone’s front door or else ‘accidentally’ dropping it and slinking off down a side street. But as luck would have it, he kept bumping into

friends, who would insist on asking: 'Where are *you* off to?' or 'It's a bit early for shaving customers, isn't it?' with the result that he didn't have a chance to get rid of it. Once he *did* manage to drop it, but a policeman pointed with his halberd and said: 'Pick that up! Can't you see you dropped something!' And Ivan Yakovlevich had to pick it up and hide it in his pocket. Despair gripped him, especially as the streets were getting more and more crowded now as the shops and stalls began to open.

He decided to make his way to St. Isaac's Bridge and see if he could throw the nose into the River Neva without anyone seeing him. But here I am rather at fault for not telling you before something about Ivan Yakovlevich, who in many ways was a man you could respect.

**“The Gift of the Magi” by O. Henry (1906)**

White fingers and nimble tore at the string and paper. And then an ecstatic scream of joy; and then, alas! a quick feminine change to hysterical tears and wails, necessitating the immediate employment of all the comforting powers of the lord of the flat.

For there lay The Combs—the set of combs, side and back, that Della had worshipped long in a Broadway window. Beautiful combs, pure tortoise shell, with jewelled rims—just the shade to wear in the beautiful vanished hair. They were expensive combs, she knew, and her heart had simply craved and yearned over them without the least hope of possession. And now, they were hers, but the tresses that should have adorned the coveted adornments were gone.

But she hugged them to her bosom, and at length she was able to look up with dim eyes and a smile and say: “My hair grows so fast, Jim!”

And then Della leaped up like a little singed cat and cried, “Oh, oh!”

Jim had not yet seen his beautiful present. She held it out to him eagerly upon her open palm. The dull precious metal seemed to flash with a reflection of her bright and ardent spirit.

“Isn’t it a dandy, Jim? I hunted all over town to find it. You’ll have to look at the time a hundred times a day now. Give me your watch. I want to see how it looks on it.”

Instead of obeying, Jim tumbled down on the couch and put his hands under the back of his head and smiled.

“Dell,” said he, “let’s put our Christmas presents away and keep ’em a while. They’re too nice to use just at present. I sold the watch to get the money to buy your combs. And now suppose you put the chops on.”

The magi, as you know, were wise men—wonderfully wise men—who brought gifts to the Babe in the manger. They invented the art of giving Christmas presents. Being wise, their gifts were no doubt wise ones, possibly bearing the privilege of exchange in case of duplication. And here I have lamely related to you the uneventful chronicle of two foolish children in a flat who most unwisely sacrificed for each other the greatest treasures of their house. But in a last word to the wise of these days let it be said that of all who give gifts these two were the wisest. Of all who give and receive gifts, such as they are wisest. Everywhere they are wisest. They are the magi.

*The Grapes of Wrath* by John Steinbeck (1939)

The man took off his dark, stained hat and stood with a curious humility in front of the screen. "Could you see your way to sell us a loaf of bread, ma'am?"

Mae said, "This ain't a grocery store. We got bread to make san' widges."

"I know, ma'am." His humility was insistent. "We need bread and there ain't nothin' for quite a piece, they say."

"'F we sell bread we gonna run out." Mae's tone was faltering.

"We're hungry," the man said.

"Whyn't you buy a san' widge? We got nice san' widges, hamburgs."

"We'd sure admire to do that, ma'am. But we can't. We got to make a dime do all of us." And he said embarrassedly, "We ain't got but a little."

Mae said, "You can't get no loaf a bread for a dime. We only got fifteen-cent loafs."

From behind her Al growled, "God Almighty, Mae, give 'em bread."

"We'll run out 'fore the bread truck comes."

"Run out then, goddamn it," said Al. He looked sullenly down at the potato salad he was mixing.

Mae shrugged her plump shoulders and looked to the truck drivers to show them what she was up against.

She held the screen door open and the man came in, bringing a smell of sweat with him. The boys edged behind him and they went immediately to the candy case and stared in—not with craving or with hope or even with desire, but just with a kind of wonder that such things could be. They were alike in size and their faces were alike. One scratched his dusty ankle with the toe nails of his other foot. The other whispered some soft message and then they straightened their arms so that their clenched fists in the overall pockets showed through the thin blue cloth.

Mae opened a drawer and took out a long waxpaper-wrapped loaf. "This here is a fifteen-cent loaf."

The man put his hat back on his head. He answered with inflexible humility, "Won't you—can't you see your way to cut off ten cents' worth?"

Al said snarlingly, "Goddamn it, Mae. Give 'em the loaf."

The man turned toward Al. "No, we want ta buy ten cents' worth of it. We got it figgered awful close, mister, to get to California."

Mae said resignedly, "You can have this for ten cents."

"That'd be robbin' you, ma'am."

"Go ahead—Al says to take it." She pushed the waxpapered loaf across the counter. The man took a deep leather pouch from his rear pocket, untied the strings, and spread it open. It was heavy with silver and with greasy bills.

"May soun' funny to be so tight," he apologized. "We got a thousan' miles to go, an' we don' know if we'll make it." He dug in the pouch with a forefinger, located a dime, and pinched in for it. When he put it down on the counter he

had a penny with it. He was about to drop the penny back into the pouch when his eye fell on the boys frozen before the candy counter. He moved slowly down to them. He pointed in the case at big long sticks of striped peppermint. "Is them penny candy, ma'am?"

Mae moved down and looked in. "Which ones?"

"There, them stripy ones."

The little boys raised their eyes to her face and they stopped breathing; their mouths were partly opened, their half-naked bodies were rigid.

"Oh—them. Well, no—them's two for a penny."

"Well, gimme two then, ma'am." He placed the copper cent carefully on the counter. The boys expelled their held breath softly. Mae held the big sticks out.

***Fahrenheit 451* by Ray Bradbury (1953)**

It was a pleasure to burn.

It was a special pleasure to see things eaten, to see things blackened and *changed*. With the brass nozzle in his fists, with this great python spitting its venomous kerosene upon the world, the blood pounded in his head, and his hands were the hands of some amazing conductor playing all the symphonies of blazing and burning to bring down the tatters and charcoal ruins of history. With his symbolic helmet numbered 451 on his stolid head, and his eyes all orange flame with the thought of what came next, he flicked the igniter and the house jumped up in a gorging fire that burned the evening sky red and yellow and black. He strode in a swarm of fireflies. He wanted above all, like the old joke, to shove a marshmallow on a stick in the furnace, while the flapping pigeon-winged books died on the porch and lawn of the house. While the books went up in sparkling whirls and blew away on a wind turned dark with burning.

Montag grinned the fierce grin of all men singed and driven back by flame.

He knew that when he returned to the firehouse, he might wink at himself, a minstrel man, burnt-corked, in the mirror. Later, going to sleep, he would feel the fiery smile still gripped by his face muscles, in the dark. It never went away, that smile, it never ever went away, as long as he remembered.

## “I Stand Here Ironing” by Tillie Olsen (1956)

I stand here ironing, and what you asked me moves tormented back and forth with the iron.

“I wish you would manage the time to come in and talk with me about your daughter. I’m sure you can help me understand her. She’s a youngster who needs help and whom I’m deeply interested in helping.”

“Who needs help”... Even if I came, what good would it do? You think because I am her mother I have a key, or that in some way you could use me as a key? She has lived for nineteen years. There is all that like that has happened outside of me, beyond me.

And when is there time to remember, to sift, to weigh, to estimate, to total? I will start and there will be an interruption and I will have to gather it all together again. Or I will become engulfed with all I did or did not do, with what should have been and what cannot be helped.

She was a beautiful baby. The first and only one of our five that was beautiful at birth. You do not guess how new and uneasy her tenancy in her now-loveliness. You did not know her all those years she was thought homely, or see her peering over her baby pictures, making me tell her over and over how beautiful she had been—and would be, I would tell her—and was now, to the seeing eye. But the seeing eyes were few or non-existent. Including mine.

I nursed her. They feel that’s important nowadays. I nursed all the children, but with her, with all the fierce rigidity of first motherhood, I did like the books then said. Though her cries battered me to trembling and my breasts ached with swollenness, I waited till the clock decreed.

Why do I put that first? I do not even know if it matters or if it explains anything.

She was a beautiful baby. She blew shining bubbles of sound. She loved motion, loved light, loved color and music and textures. She would lie on the floor in her blue overalls patting the surface so hard in ecstasy her hands and feet would blur. She was a miracle to me, but when she was eight months old I had to leave her daytimes with the woman downstairs to whom she was no miracle at all, for I worked or looked for work and for Emily’s father, who “could no longer endure” (he wrote us in his good-bye note) “sharing want with us.”

*The Killer Angels* by Michael Shaara (1975)

“. . . have no doubt,” Fremantle was saying, “that General Lee shall become the world’s foremost authority on military matters when this war is over, which would appear now to be only a matter of days, or at most a few weeks. I suspect all Europe will be turning to him for lessons.”

Lessons?

“I have been thinking, I must confess, of setting some brief thoughts to paper,” Fremantle announced gravely. “Some brief remarks of my own, appended to an account of this battle, and perhaps others this army has fought. Some notes as to tactics.”

Tactics?

“General Lee’s various stratagems will be most instructive, most illuminating. I wonder, sir, if I might enlist your aid in this, ah, endeavor. As one most closely concerned? That is, to be brief, may I come to you when in need?”

“Sure,” Longstreet said. Tactics? He chuckled. The tactics were simple: find the enemy, fight him. He shook his head, snorting. Fremantle spoke softly, in tones of awe.

“One would not think of General Lee, now that one has met him, now that one has looked him, so to speak, in the *eye*, as it were, one would not think him, you know, to be such a *devious* man.”

“Devious?” Longstreet swung to stare at him, aghast.

“Oh my word,” Fremantle went on devoutly, “but he’s a tricky one. The Old Gray Fox, as they say. Charming phrase. American to the hilt.”

“Devious?” Longstreet stopped dead in the road. “Devious.” He laughed aloud. Fremantle stared an owlish stare.

“Why, Colonel, bless your soul, there ain’t a devious bone in Robert Lee’s body, don’t you know that?”

“My dear sir.”

“By damn, man, if there is one human being in the world *less* devious than Robert Lee, I aint yet met him. By God and fire, Colonel, but you amuse me.” And yet Longstreet was not amused. He leaned forward blackly across the pommel of the saddle. “Colonel, let me explain something. The secret of General Lee is that men love him and follow him with faith in him. That’s one secret. The next secret is that General Lee makes a decision and he *moves*, with guts, and he’s been up against a lot of sickly generals who don’t know how to make decisions, although some of them have guts but whose men don’t love them. That’s why we win, mostly. Because we move with speed, and faith, and because we usually have the good ground. Tactics? God, man, we don’t win because of tricks. What were the tactics at Malvern Hill? What were the tactics at Fredericksburg, where we got down behind a bloody stone wall and shot the bloody hell out of them as they came up, wave after wave, bravest thing you ever saw, because, listen, there are some damn good boys across the way, make no mistake on that. I’ve fought with those boys, and they know how to fight when they’ve got the ground, but tactics? Tactics?” He was stumbling for words, but it was pouring out of him in hot clumps out of the back of the brain, the words like falling coals, and Fremantle stared openmouthed.

“God in Heaven,” Longstreet said, and repeated it, “there’s no strategy to this bloody war. What it is is old Napoleon and a hell of a lot of chivalry. That’s all it is. What were the tactics at Chancellorsville, where we divided the army, *divided* it, so help me God, in the face of the enemy, and got away with it because Joe Hooker froze cold in his stomach? What were the tactics yesterday? What were they today? And what will be the blessed tactics tomorrow? I’ll tell you the tactics tomorrow. Devious? Christ in Heaven. Tomorrow we will attack an enemy that outnumbered us, an enemy that outguns us, an enemy dug in on the high ground, and let me tell you, if we win that one it will not

be because of tactics or because we are great strategists or because there is anything even remotely intelligent about the war at all. It will be a bloody miracle, a bloody miracle.”

*The Joy Luck Club* by Amy Tan (1989)

From "Jing-Mei Woo: Two Kinds"

My mother believed you could be anything you wanted to be in America. You could open a restaurant. You could work for the government and get good retirement. You could buy a house with almost no money down. You could become rich. You could become instantly famous.

"Of course you can be prodigy, too," my mother told me when I was nine. "You can be best anything. What does Auntie Lindo know? Her daughter, she is only best tricky."

America was where all my mother's hopes lay. She had come here in 1949 after losing everything in China: her mother and father, her family home, her first husband, and two daughters, twin baby girls. But she never looked back with regret. There were so many ways for things to get better.

We didn't immediately pick the right kind of prodigy. At first my mother thought I could be a Chinese Shirley Temple. We'd watch Shirley's old movies on TV as though they were training films. My mother would poke my arm and say, "*Ni kan*"—You watch. And I would see Shirley tapping her feet, or singing a sailor song, or pursing her lips into a very round O while saying, "Oh my goodness."

"*Ni kan*," said my mother as Shirley's eyes flooded with tears. "You already know how. Don't need talent for crying!"

*In the Time of the Butterflies* by Julia Alvarez (1994)

She remembers a clear moonlit night before the future began. They are sitting in the cool darkness under the anacahuita tree in the front yard, in the rockers, telling stories, drinking guanabana juice. Good for the nerves, Mamá always says.

They're all there, Mamá, Papá, Patria-Minerva-Dedé. Bang-bang-bang, their father likes to joke, aiming a pistol finger at each one, as if he were shooting them, not boasting about having sired them, Three girls, each born within a year of each other! And then, nine years later, Maria Teresa, his final desperate attempt at a boy misfiring.

Their father has his slippers on, one foot hooked behind the other. Every once in a while Dedé hears the clink of the rum bottle against the rim of his glass.

Many a night, and this night is no different, a shy voice calls out of the darkness, begging their pardon. Could they spare a *calmante* for a sick child out of their stock of kindness? Would they have some tobacco for a tired old man who spent the day grating yucca?

Their father gets up, swaying a little with drink and tiredness, and opens up the store. The *campesino* goes off with his medicine, a couple of cigars, a few mints for the godchildren. Dedé tells her father that she doesn't know how they do as well as they do, the way he gives everything away. But her father just puts his arm around her, and says, "Ay, Dedé, that's why I have you. Every soft foot needs a hard shoe."

She'll bury us all," her father adds, laughing, "in silk and pearls." Dedé hears again the clink of the rum bottle. "Yes, for sure, our Dedé here is going to be the millionaire in the family."

*The Book Thief* by Marcus Zusak (2005)

From "The Flag"

The last time I saw her was red. The sky was like soup, boiling and stirring. In some places it was burned. There were black crumbs, and pepper, streaked amongst the redness.

Earlier, kids had been playing hopscotch there, on the street that looked like oil-stained pages. When I arrived I could still hear the echoes. The feet tapping the road. The children-voices laughing, and the smiles like salt, but decaying fast.

Then, bombs.

This time, everything was too late.

The sirens. The cuckoo shrieks in the radio. All too late.

Within minutes, mounds of concrete and earth were stacked and piled. The streets were ruptured veins. Blood streamed till it was dried on the road, and the bodies were stuck there, like driftwood after the flood.

They were glued down, every last one of them. A packet of souls.

Was it fate?

Misfortune?

Is that what glued them down like that?

Of course not.

Let's not be stupid.

It probably had more to do with the hurled bombs, thrown down by humans hiding in the clouds.

For hours, the sky remained a devastating, home-cooked red. The small German town had been flung apart one more time. Snowflakes of ash fell so *lovelily* you were tempted to stretch out your tongue to catch them, taste them. Only, they would have scorched your lips. They would have cooked your mouth.

Clearly, I see it.

I was just about to leave when I found her kneeling there.

A mountain range of rubble was written, designed, erected around her. She was clutching at a book.

Apart from everything else, the book thief wanted desperately to go back to the basement, to write, or read through her story one last time. In hindsight, I see it so obviously on her face. She was dying for it—the safety, the home of it—but she could not move. Also, the basement no longer existed. It was part of the mangled landscape.



*Juliet:* 'Tis but thy name that is my enemy,  
Thou art thyself, though not a Montague.  
What's Montague? it is nor hand nor foot  
Nor arm nor face, o be some other name  
Belonging to a man.  
What's in a name? that which we call a rose  
By any other word would smell as sweet.  
So Romeo would, were he not Romeo call'd,  
Retain that dear perfection which he owes  
Without that title. Romeo, doff thy name,  
And for thy name, which is not part of thee,  
Take all myself.

*Romeo:* I take thee at thy word.  
Call me but Love and I'll be new baptiz'd,  
Henceforth I never will be Romeo.

*The Glass Menagerie* by Tennessee Williams (1944)

From Scene 5

TOM: What are you doing?

AMANDA: I'm brushing that cowlick down! [*She attacks his hair with the brush.*] What is this young man's position at the warehouse?

TOM [*submitting grimly to the brush and interrogation*]: This young man's position is that of a shipping clerk, Mother.

AMANDA: Sounds to me like a fairly responsible job, the sort of a job *you* would be in if you had more *get-up*. What is his salary? Have you any idea?

TOM: I would judge it to be approximately eighty-five dollars a month.

AMANDA: Well—not princely—but—

TOM: Twenty more than I make.

AMANDA: Yes, how well I know! But for a family man, eighty-five dollars a month is not much more than you can just get by on....

TOM: Yes, but Mr. O'Connor is not a family man.

AMANDA: He might be, mightn't he? Some time in the future?

TOM: I see. Plans and provisions.

AMANDA: You are the only young man that I know of who ignores the fact that the future becomes the present, the present the past, and the past turns into everlasting regret if you don't plan for it!

TOM: I will think that over and see what I can make of it.

AMANDA: Don't be supercilious with your mother! Tell me some more about this—what do you call him?

TOM: James D. O'Connor. The D. is for Delaney.

AMANDA: Irish on *both* sides! *Gracious!* And doesn't drink?

TOM: Shall I call him up and ask him right this minute?

AMANDA: The only way to find out about those things is to make discreet inquiries at the proper moment. When I was a girl in Blue Mountain and it was suspected that a young man drank, the girl whose attentions he had been receiving, if any girl *was*, would sometimes speak to the minister of his church, or rather her father would if her father was living, and sort of feel him out on the young man's character. That is the way such things are discreetly handled to keep a young woman from making a tragic mistake!

TOM: Then how did you happen to make a tragic mistake?

AMANDA: That innocent look of your father's had everyone fooled! He *smiled*—the world was *enchanted!* No girl can do worse than put herself at the mercy of a handsome appearance! I hope that Mr. O'Connor is not too good-looking.

TOM: No, he's not too good-looking. He's covered with freckles and hasn't too much of a nose.

AMANDA: He's not right-down homely, though?

TOM: Not right-down homely. Just medium homely, I'd say.

AMANDA: Character's what to look for in a man.

TOM: That's what I've always said, Mother.

AMANDA: You've never said anything of the kind and I suspect you would never give it a thought.

TOM: Don't be so suspicious of me.

AMANDA: At least I hope he's the type that's up and coming.

TOM: I think he really goes in for self-improvement.

AMANDA: What reason have you to think so?

TOM: He goes to night school.

AMANDA [*beaming*]: Splendid! What does he do, I mean study?

TOM: Radio engineering and public speaking!

AMANDA: Then he has visions of being advanced in the world! Any young man who studies public speaking is aiming to have an executive job some say! And radio engineering? A think for the future! Both of these facts are very illuminating. Those are the sort of things that a mother should know concerning any young man who comes to call on her daughter. Seriously or—not.

TOM: One little warning. He doesn't know about Laura. I didn't let on that we had dark ulterior motives. I just said, why don't you come and have dinner with us? He said okay and that was the whole conversation.

AMANDA: I bet it was! You're eloquent as an oyster. However, he'll know about Laura when he gets here. When he sees how lovely and sweet and pretty she is, he'll thank his lucky stars he was asked to dinner.

TOM: Mother, you mustn't expect too much of Laura.

AMANDA: What do you mean?

TOM: Laura seems all those things to you and me because she's out and we love her. We don't even notice she's crippled any more.

AMANDA: Don't say crippled! You know that I never allow that word to be used!

TOM: But face facts, Mother. She is and—that's not all—

AMANDA: What do you mean "not all"?

TOM: Laura is very different from other girls.

AMANDA: I think the difference is all to her advantage.

TOM: Not quite all—in the eyes of others—strangers—she's terribly shy and lives in a world of her own and those things make her seem a little peculiar to people outside the house.

AMANDA: Don't say peculiar.

TOM: Face the facts. She is.

*[The dance hall music changes to a tango that has a minor and somewhat ominous tone.]*

AMANDA: In what way is she peculiar—may I ask?

TOM *[gently]*: She lives in a world of her own—a world of little glass ornaments, Mother....

*[He gets up. Amanda remains holding the brush, looking at him, troubled.]*

She plays old phonograph records and—that's about all—

*[He glances at himself in the mirror and crosses to the door.]*

AMANDA *[sharply]*: Where are you going?

TOM: I'm going to the movies. *[He goes out the screen door.]*

AMANDA: Not to the movies, every night to the movies! *[She follows quickly to the screen door.]* I don't believe you always go to the movies!

*[He is gone. Amanda looks worriedly after him for a moment. Then vitality and optimism return and she turns from the door, crossing to the portieres.]*

Laura! Laura!

*[Laura answers from the kitchenette.]*

LAURA: Yes, Mother.

AMANDA: Let those dishes go and come in front!

*[Laura appears with a dish towel. Amanda speaks to her gaily.]*

Laura, come here and make a wish on the moon!

*[Screen image: The Moon.]*

LAURA *[entering]*: Moon—moon?

AMANDA: A little silver slipper of a moon. Look over your left shoulder, Laura, and make a wish!

*[Laura looks faintly puzzled as if called out of sleep. Amanda seizes her shoulders and turns her at an angle by the door.]*

Now! Now, darling, wish!

LAURA: What shall I wish for, Mother?

AMANDA *[her voice trembling and her eyes suddenly filling with tears]*: Happiness! Good fortune!

*[The sound of the violin rises and the stage dims out.]*

**Rhinoceros by Eugene Ionesco (1959) translated by Derek Prouse**

**From Act Two**

BERENGER: [*coming in*] Hello Jean!

JEAN: [*in bed*] What time is it? Aren't you at the office?

BERENGER: You're still in bed; you're not at the office, then? Sorry if I'm disturbing you.

JEAN: [*still with his back turned*] Funny, I didn't recognize your voice.

BERENGER: I didn't recognize yours either.

JEAN: [*still with his back turned*] Sit down!

BERENGER: Aren't you feeling well?

[JEAN *replies with a grunt.*]

You know, Jean, it was stupid of me to get so upset yesterday over a thing like that.

JEAN: A thing like what?

BERENGER: Yesterday ...

JEAN: When yesterday? Where yesterday?

BERENGER: Don't you remember? It was about that wretched rhinoceros.

JEAN: What rhinoceros?

BERENGER: The rhinoceros, or rather, the two wretched rhinoceroses we saw.

JEAN: Oh yes, I remember ... How do you know they were wretched?

BERENGER: Oh I just said that.

JEAN: Oh. Well let's not talk any more about it.

BERENGER: That's very nice of you.

JEAN: Then that's that.

BERENGER: But I would like to say how sorry I am for being so insistent ... and so obstinate ... and getting so angry ... in fact ... I acted stupidly.

JEAN: That's not surprising with you.

BERENGER: I'm very sorry.

JEAN: I don't feel very well. [*He coughs.*]

BERENGER: That's probably why you're in bed. [*With a change of tone:*] You know, Jean, as it turned out, we were both right.

JEAN: What about?

BERENGER: About ... well, you know, the same thing. Sorry to bring it up again, but I'll only mention it briefly. I just wanted you to know that in our different ways we were both right. It's been proved now. There are some rhinoceroses in the town with two horns and some with one.

JEAN: That's what I told you! Well, that's just too bad.

BERENGER: Yes, too bad.

JEAN: Or maybe it's all to the good; it depends.

BERENGER: [*continuing*] In the final analysis it doesn't much matter which comes from where. The important thing, as I see it is the fact that they're there at all, because ...

JEAN: [*turning and sitting on his unmade bed, facing BERENGER*] I don't feel well, I don't feel well at all!

BERENGER: Oh I am sorry! What do you think it is?

JEAN: I don't know exactly, there's something wrong somewhere ...

BERENGER: Do you feel weak?

JEAN: Not at all. On the contrary, I feel full of beans.

BERENGER: I meant just a passing weakness. It happens to everybody.

JEAN: It never happens to me.

BERENGER: Perhaps you're too healthy then. Too much energy can be a bad thing. It unsettles the nervous system.

JEAN: My nervous system is in perfect order. [*His voice has become more and more hoarse.*] I'm sound in mind and limb. I come from a long line of ...

BERENGER: I know you do. Perhaps you've just caught a chill. Have you got a temperature?

JEAN: I don't know. Yes, probably I have a touch of fever. My head aches.

BERENGER: Just a slight migraine. Would you like me to leave you alone?

JEAN: No, stay. You don't worry me.

BERENGER: Your voice is hoarse, too.

JEAN: Hoarse?

BERENGER: A bit hoarse, yes. That's why I didn't recognize it.

JEAN: Why should I be hoarse? My voice hasn't changed; it's yours that's changed!

BERENGER: Mine?

JEAN: Why not?

BERENGER: It's possible. I hadn't noticed.

JEAN: I sometimes wonder if you're capable of noticing anything. [*Putting his hand to his forehead.*] Actually it's my forehead that hurts. I must have given it a knock. [*His voice is even hoarser.*]

BERENGER: When did you do that?

JEAN: I don't know. I don't remember it happening.

BERENGER: But it must have hurt you.

JEAN: I must have done it while I was asleep.

BERENGER: The shock would have wakened you up. You must have just dreamed you knocked yourself.

JEAN: I never dream ...

BERENGER: [*continuing*] Your headache must have come on while you were asleep. You've forgotten you dreamed, or rather you only remember subconsciously.

JEAN: Subconsciously, me? I'm master of my own thoughts, my mind doesn't wander. I think straight, I always think straight.

BERENGER: I know that. I haven't made myself clear.

JEAN: Then make yourself clearer. And you needn't bother to make any of your unpleasant observations to me.

BERENGER: One often has the impression that one has knocked oneself when one has a headache. [*Coming closer to JEAN.*] If you'd really knocked yourself, you'd have a bump. [*Looking at JEAN.*] Oh, you've got one, you do have a bump, in fact.

JEAN: A bump?

BERENGER: Just a tiny one.

JEAN: Where?

BERENGER: [*pointing to JEAN's forehead*] There, it starts just above your nose.

JEAN: I've no bump. We've never had bumps in my family.

BERENGER: Have you got a mirror?

JEAN: That's the limit! [*Touching his forehead.*] I can feel something. I'm going to have a look, in the bathroom. [*He gets up abruptly and goes to the bathroom. BERENGER watches him as he goes. Then, from the bathroom:*] It's true, I have got a bump. [*He comes back; his skin has become greener.*] So you see I did knock myself.

BERENGER: You don't look well, your skin is quite green.

JEAN: You seem to delight in saying disagreeable things to me. Have you taken a look at yourself lately?

BERENGER: Forgive me. I didn't mean to upset you.

JEAN: [*very hoarse*] That's hard to believe.

BERENGER: Your breathing's very heavy. Does your throat hurt?

[*Jean goes and sits on his bed again.*]

If your throat hurts, perhaps it's a touch of quinsy.

JEAN: Why should I have quinsy?

BERENGER: It's nothing to be ashamed of—I sometimes get it. Let me feel your pulse. [*He rises and takes Jean's pulse.*]

JEAN: [*in an even hoarser voice*] Oh, it'll pass.

BERENGER: Your pulse is normal. You needn't get alarmed.

JEAN: I'm not alarmed in the slightest—why should I be?

*Master Harold...and the Boys* by Athol Fugard (1982)

**Sam:** Of course it is. That's what I've been trying to say to you all afternoon. And it's beautiful because that is what we want life to be like. But instead, like you said, Hally, we're bumping into each other all the time. Look at the three of us this afternoon: I've bumped into Willie, the two of us have bumped into you, you've bumped into your mother, she bumping into your Dad. . . . None of us knows the steps and there's no music playing. And it doesn't stop with us. The whole world is doing it all the time. Open a newspaper and what do you read? America has bumped into Russia, England is bumping into India, rich man bumps into poor man. Those are big collisions, Hally. They make for a lot of bruises. People get hurt in all that bumping, and we're sick and tired of it now. It's been going on for too long. Are we never going to get it right? . . . Learn to dance life like champions instead of always being just a bunch of beginners at it?

**Hally:** (*Deep and sincere admiration of the man*) You've got a vision, Sam!

**Sam:** Not just me. What I'm saying to you is that everybody's got it. That's why there's only standing room left for the Centenary Hall in two weeks' time. For as long as the music lasts, we are going to see six couples get it right, the way we want life to be.

**Hally:** But is that the best we can do, Sam . . . watch six finalists dreaming about the way it should be?

**Sam:** I don't know. But it starts with that. Without the dream we won't know what we're going for. And anyway I reckon there are a few people who have got past just dreaming about it and are trying for something real. Remember that thing we read once in the paper about the Mahatma Gandhi? Going without food to stop those riots in India?

## Grades 9–10: Poetry

### “Song” by John Donne (1635)

Goe, and catche a falling starre,  
    Get with child a mandrake roote,  
Tell me, where all past yeares are,  
    Or who cleft the Divels foot,  
Teach me to heare Mermaides singing,  
Or to keep off envies stinging,  
    And finde  
    What winde  
Serves to advance an honest minde.

If thou beest borne to strange sights,  
    Things invisible to see,  
Ride ten thousand daies and nights,  
    Till age snow white haire on thee,  
Thou, when thou return'st, wilt tell mee  
All strange wonders that befell thee,  
    And sweare  
    No where  
Lives a woman true, and faire.

If thou findest one, let mee know,  
    Such a Pilgrimage were sweet;  
Yet doe not, I would not goe,  
    Though at next doore wee might meet,  
Though shee were true, when you met her,  
And last, till you write your letter,  
    Yet shee  
    Will bee  
False, ere I come, to two, or three.

**“Ozymandias” by Percy Bysshe Shelley (1810)**

I met a traveller from an antique land  
Who said—“Two vast and trunkless legs of stone  
Stand in the desert ... Near them, on the sand,  
Half sunk, a shattered visage lies, whose frown,  
And wrinkled lip, and sneer of cold command,  
Tell that its sculptor well those passions read  
Which yet survive, stamped on these lifeless things,  
The hand that mocked them, and the heart that fed;  
And on the pedestal these words appear:  
'My name is Ozymandias, King of Kings:  
Look on my works, ye Mighty, and despair!'  
Nothing beside remains. Round the decay  
Of that colossal wreck, boundless and bare  
The lone and level sands stretch far away.”

**“The Raven” by Edgar Allen Poe (1845)**

Once upon a midnight dreary, while I pondered, weak and weary,  
Over many a quaint and curious volume of forgotten lore —  
While I nodded, nearly napping, suddenly there came a tapping,  
As of some one gently rapping, rapping at my chamber door.  
"T is some visiter," I muttered, "tapping at my chamber door —  
Only this and nothing more."

Ah, distinctly I remember it was in the bleak December;  
And each separate dying ember wrought its ghost upon the floor.  
Eagerly I wished the morrow; — vainly I had sought to borrow  
From my books surcease of sorrow — sorrow for the lost Lenore —  
For the rare and radiant maiden whom the angels name Lenore —  
Nameless *here* for evermore.

And the silken, sad, uncertain rustling of each purple curtain  
Thrilled me — filled me with fantastic terrors never felt before;  
So that now, to still the beating of my heart, I stood repeating  
"T is some visiter entreating entrance at my chamber door —  
Some late visiter entreating entrance at my chamber door; —  
This it is and nothing more."

Presently my soul grew stronger; hesitating then no longer,  
"Sir," said I, "or Madam, truly your forgiveness I implore;  
But the fact is I was napping, and so gently you came rapping,  
And so faintly you came tapping, tapping at my chamber door,  
That I scarce was sure I heard you" — here I opened wide the door;—  
Darkness there and nothing more.

Deep into that darkness peering, long I stood there wondering, fearing,  
Doubting, dreaming dreams no mortal ever dared to dream before;  
But the silence was unbroken, and the stillness gave no token,  
And the only word there spoken was the whispered word, "Lenore?"  
This I whispered, and an echo murmured back the word, "Lenore!"  
Merely this and nothing more.

Back into the chamber turning, all my soul within me burning,  
Soon again I heard a tapping somewhat louder than before.  
"Surely," said I, "surely that is something at my window lattice;  
Let me see, then, what thereat is, and this mystery explore —  
Let my heart be still a moment and this mystery explore; —  
'Tis the wind and nothing more!"

Open here I flung the shutter, when, with many a flirt and flutter,  
In there stepped a stately Raven of the saintly days of yore;

Not the least obeisance made he; not a minute stopped or stayed he;  
But with mien of lord or lady, perched above my chamber door —  
Perched upon a bust of Pallas just above my chamber door —  
Perched, and sat, and nothing more.

Then this ebony bird beguiling my sad fancy into smiling,  
By the grave and stern decorum of the countenance it wore,  
"Though thy crest be shorn and shaven, thou," I said, "art sure no craven,  
Ghastly grim and ancient Raven wandering from the Nightly shore —  
Tell me what thy lordly name is on the Night's Plutonian shore!"  
Quoth the Raven "Nevermore."

Much I marvelled this ungainly fowl to hear discourse so plainly,  
Though its answer little meaning — little relevancy bore;  
For we cannot help agreeing that no living human being  
Ever yet was blessed with seeing bird above his chamber door —  
Bird or beast upon the sculptured bust above his chamber door,  
With such name as "Nevermore."

But the Raven, sitting lonely on the placid bust, spoke only  
That one word, as if his soul in that one word he did outpour.  
Nothing farther then he uttered — not a feather then he fluttered —  
Till I scarcely more than muttered "Other friends have flown before —  
On the morrow *he* will leave me, as my Hopes have flown before."  
Then the bird said "Nevermore."

Startled at the stillness broken by reply so aptly spoken,  
"Doubtless," said I, "what it utters is its only stock and store  
Caught from some unhappy master whom unmerciful Disaster  
Followed fast and followed faster till his songs one burden bore —  
Till the dirges of his Hope that melancholy burden bore  
Of 'Never — nevermore.'"

But the Raven still beguiling my sad fancy into smiling,  
Straight I wheeled a cushioned seat in front of bird, and bust and door;  
Then, upon the velvet sinking, I betook myself to linking  
Fancy unto fancy, thinking what this ominous bird of yore —  
What this grim, ungainly, ghastly, gaunt, and ominous bird of yore  
Meant in croaking "Nevermore."

This I sat engaged in guessing, but no syllable expressing  
To the fowl whose fiery eyes now burned into my bosom's core;  
This and more I sat divining, with my head at ease reclining  
On the cushion's velvet lining that the lamp-light gloated o'er,  
But whose velvet-violet lining with the lamp-light gloating o'er,  
*She* shall press, ah, nevermore!

Then, methought, the air grew denser, perfumed from an unseen censer  
Swung by seraphim whose foot-falls tinkled on the tufted floor.  
"Wretch," I cried, "thy God hath lent thee — by these angels he hath sent thee  
Respite — respite and nepenthe from thy memories of Lenore;  
Quaff, oh quaff this kind nepenthe and forget this lost Lenore!"  
Quoth the Raven "Nevermore."

"Prophet!" said I, "thing of evil! — prophet still, if bird or devil! —  
Whether Tempter sent, or whether tempest tossed thee here ashore,  
Desolate yet all undaunted, on this desert land enchanted —  
On this home by Horror haunted — tell me truly, I implore —  
Is there — *is there* balm in Gilead? — tell me — tell me, I implore!"  
Quoth the Raven "Nevermore."

"Prophet!" said I, "thing of evil! — prophet still, if bird or devil!  
By that Heaven that bends above us — by that God we both adore —  
Tell this soul with sorrow laden if, within the distant Aidenn,  
It shall clasp a sainted maiden whom the angels name Lenore —  
Clasp a rare and radiant maiden whom the angels name Lenore."  
Quoth the Raven "Nevermore."

"Be that word our sign of parting, bird or fiend!" I shrieked, upstarting —  
"Get thee back into the tempest and the Night's Plutonian shore!  
Leave no black plume as a token of that lie thy soul hath spoken!  
Leave my loneliness unbroken! — quit the bust above my door!  
Take thy beak from out my heart, and take thy form from off my door!"  
Quoth the Raven "Nevermore."

And the Raven, never flitting, still is sitting, *still* is sitting  
On the pallid bust of Pallas just above my chamber door;  
And his eyes have all the seeming of a demon's that is dreaming,  
And the lamp-light o'er him streaming throws his shadow on the floor;  
And my soul from out that shadow that lies floating on the floor  
Shall be lifted — nevermore!

**“We Grow Accustomed to the Dark” by Emily Dickinson (1893)**

We grow accustomed to the Dark,  
When Light is put away,  
As when the Neighbor holds the Lamp  
To witness her Goodbye.

A Moment—We uncertain step  
For newness of the night,  
Then fit our Vision to the Dark,  
And meet the Road erect.

And so of larger Darknesses,  
Those Evenings of the Brain,  
When not a Moon disclose a sign,  
Or Star, come out, within.

The Bravest grope a little  
And sometimes hit a Tree  
Directly in the Forehead,  
But as they learn to see,

Either the Darkness alters  
Or something in the sight  
Adjusts itself to Midnight,  
And Life steps almost straight.

**“Loveliest of Trees” by A. E. Houseman (1896)**

Loveliest of Trees, the cherry now  
Is hung with bloom along the bough,  
And stands about the woodland ride  
Wearing white for Eastertide.

Now, of my threescore years and ten,  
Twenty will not come again,  
And take from seventy springs a score,  
It only leaves me fifty more.

And since to look at things in bloom  
Fifty springs are little room,  
About the woodlands I will go  
To see the cherry hung with snow.

**“Lift Ev’ry Voice and Sing” by James Weldon Johnson (1900)**

Lift ev’ry voice and sing,  
Till earth and heaven ring,  
Ring with the harmonies of Liberty,  
Let our rejoicing rise  
High as the list’ning skies,  
Let it resound loud as the rolling sea.  
Sing a song full of the faith that the dark past has taught us  
Sing a song full of the hope that the present has brought us  
Facing the rising sun of our new day begun,  
Let us march on till victory is won.

Stony the road we trod  
Bitter the chast’ning rod,  
Felt in the days when hope unborn had died;  
Yet with a steady beat  
Have not our weary feet  
Come to the place for which our fathers sighed?  
We have come over a way that with tears has been watered  
We have come, treading our path thro’ the blood of the slaughtered,  
Out from the gloomy past, till now we stand at last  
Where the white gleam of our bright star is cast.

God of our weary years,  
God of our silent tears,  
Thou who hast brought us thus far on the way;  
Thou who hast by Thy might,  
Led us into the light, Keep us forever in the path, we pray.  
Lest our feet stray from the places, our God, where we meet Thee,  
Lest our hearts, drunk with the wine of the world we forget Thee;  
Shadowed beneath Thy hand, may we forever stand,  
True to our God, true to our native land.

**“Domination of Black” by Wallace Stevens (1916)**

At night, by the fire,  
The colors of the bushes  
And of the fallen leaves,  
Repeating themselves,  
Turned in the room,  
Like the leaves themselves  
Turning in the wind.  
Yes: but the color of the heavy hemlocks  
Came striding.  
And I remembered the cry of the peacocks.

The colors of their tails  
Were like the leaves themselves  
Turning in the wind,  
In the twilight wind.  
They swept over the room,  
Just as they flew from the boughs of the hemlocks  
Down to the ground.  
I heard them cry—the peacocks.  
Was it a cry against the twilight,  
Or against the leaves themselves  
Turning in the wind,  
Turning as the flames  
Turned in the fire,  
Turning as the tails of the peacocks  
Turned in the loud fire,  
Loud as the hemlocks  
Full of the cry of the peacocks?  
Or was it a cry against the hemlocks?

Out of the window,  
I saw how the planets gathered  
Like the leaves themselves  
Turning in the wind.  
I saw how the night came,  
Came striding like the color of the heavy hemlocks.  
I felt afraid.  
And I remembered the cry of the peacocks.

**“Yet Do I Marvel” by Countee Cullen (1925)**

I doubt not God is good, well-meaning, kind,  
And did He stoop to quibble could tell why  
The little buried mole continues blind,  
Why flesh that mirrors Him must some day die,  
Make plain the reason tortured Tantalus  
Is baited by the fickle fruit, declare  
If merely brute caprice dooms Sisyphus  
To struggle up a never-ending stair.  
Inscrutable His ways are, and immune  
To catechism by a mind too strewn  
With petty cares to slightly understand  
What awful brain compels His awful hand.  
Yet do I marvel at this curious thing:  
To make a poet black, and bid him sing!

**“Women” by Alice Walker (1970)**

They were women then  
My mama’s generation  
Husky of voice—Stout of  
Step  
[...]

**“I Am Offering This Poem to You” by Jimmy Santiago Baca (1977)**

I am offering this poem to you,  
since I have nothing else to give.  
Keep it like a warm coat  
when winter comes to cover you,  
or like a pair of thick socks  
the cold cannot bite through,

I love you,

[...]

## Grades 9–10: Informational Text (English Language Arts)

### “Speech to the Second Virginia Convention” by Patrick Henry (1775)

MR. PRESIDENT: No man thinks more highly than I do of the patriotism, as well as abilities, of the very worthy gentlemen who have just addressed the House. But different men often see the same subject in different lights; and, therefore, I hope it will not be thought disrespectful to those gentlemen if, entertaining as I do, opinions of a character very opposite to theirs, I shall speak forth my sentiments freely, and without reserve. This is no time for ceremony. The question before the House is one of awful moment to this country. For my own part, I consider it as nothing less than a question of freedom or slavery; and in proportion to the magnitude of the subject ought to be the freedom of the debate. It is only in this way that we can hope to arrive at truth, and fulfill the great responsibility which we hold to God and our country. Should I keep back my opinions at such a time, through fear of giving offence, I should consider myself as guilty of treason towards my country, and of an act of disloyalty toward the majesty of heaven, which I revere above all earthly kings.

Mr. President, it is natural to man to indulge in the illusions of hope. We are apt to shut our eyes against a painful truth, and listen to the song of that siren till she transforms us into beasts. Is this the part of wise men, engaged in a great and arduous struggle for liberty? Are we disposed to be of the number of those who, having eyes, see not, and, having ears, hear not, the things which so nearly concern their temporal salvation? For my part, whatever anguish of spirit it may cost, I am willing to know the whole truth; to know the worst, and to provide for it.

I have but one lamp by which my feet are guided; and that is the lamp of experience. I know of no way of judging of the future but by the past. And judging by the past, I wish to know what there has been in the conduct of the British ministry for the last ten years, to justify those hopes with which gentlemen have been pleased to solace themselves, and the House? Is it that insidious smile with which our petition has been lately received? Trust it not, sir; it will prove a snare to your feet. Suffer not yourselves to be betrayed with a kiss. Ask yourselves how this gracious reception of our petition comports with these war-like preparations which cover our waters and darken our land. Are fleets and armies necessary to a work of love and reconciliation? Have we shown ourselves so unwilling to be reconciled, that force must be called in to win back our love? Let us not deceive ourselves, sir. These are the implements of war and subjugation; the last arguments to which kings resort. I ask, gentlemen, sir, what means this martial array, if its purpose be not to force us to submission? Can gentlemen assign any other possible motive for it? Has Great Britain any enemy, in this quarter of the world, to call for all this accumulation of navies and armies? No, sir, she has none. They are meant for us; they can be meant for no other. They are sent over to bind and rivet upon us those chains which the British ministry have been so long forging. And what have we to oppose to them? Shall we try argument? Sir, we have been trying that for the last ten years. Have we anything new to offer upon the subject? Nothing. We have held the subject up in every light of which it is capable; but it has been all in vain. Shall we resort to entreaty and humble supplication? What terms shall we find which have not been already exhausted? Let us not, I beseech you, sir, deceive ourselves. Sir, we have done everything that could be done, to avert the storm which is now coming on. We have petitioned; we have remonstrated; we have supplicated; we have prostrated ourselves before the throne, and have implored its interposition to arrest the tyrannical hands of the ministry and Parliament. Our petitions have been slighted; our remonstrances have produced additional violence and insult; our supplications have been disregarded; and we have been spurned, with contempt, from the foot of the throne. In vain, after these things, may we indulge the fond hope of peace and reconciliation. There is no longer any room for hope. If we wish to be free, if we mean to preserve inviolate those inestimable privileges for which we have been so long contending, if we mean not basely to abandon the noble struggle in which we have been so long engaged, and which we have pledged ourselves never to abandon until the glorious object of our contest shall be obtained, we must fight! I repeat it, sir, we must fight! An appeal to arms and to the God of Hosts is all that is left us!

They tell us, sir, that we are weak; unable to cope with so formidable an adversary. But when shall we be stronger? Will it be the next week, or the next year? Will it be when we are totally disarmed, and when a British guard shall be stationed in every house? Shall we gather strength by irresolution and inaction? Shall we acquire the means of effectual resistance, by lying supinely on our backs, and hugging the delusive phantom of hope, until our enemies shall have bound us hand and foot? Sir, we are not weak if we make a proper use of those means which the God of nature hath

placed in our power. Three millions of people, armed in the holy cause of liberty, and in such a country as that which we possess, are invincible by any force which our enemy can send against us. Besides, sir, we shall not fight our battles alone. There is a just God who presides over the destinies of nations; and who will raise up friends to fight our battles for us. The battle, sir, is not to the strong alone; it is to the vigilant, the active, the brave. Besides, sir, we have no election. If we were base enough to desire it, it is now too late to retire from the contest. There is no retreat but in submission and slavery! Our chains are forged! Their clanking may be heard on the plains of Boston! The war is inevitable and let it come! I repeat it, sir, let it come.

It is in vain, sir, to extenuate the matter. Gentlemen may cry, Peace, Peace but there is no peace. The war is actually begun! The next gale that sweeps from the north will bring to our ears the clash of resounding arms! Our brethren are already in the field! Why stand we here idle? What is it that gentlemen wish? What would they have? Is life so dear, or peace so sweet, as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take; but as for me, give me liberty or give me death!

## “Second Inaugural Address” by Abraham Lincoln (1865)

*Fellow-Countrymen:*

At this second appearing to take the oath of the Presidential office there is less occasion for an extended address than there was at the first. Then a statement somewhat in detail of a course to be pursued seemed fitting and proper. Now, at the expiration of four years, during which public declarations have been constantly called forth on every point and phase of the great contest which still absorbs the attention and engrosses the energies of the nation, little that is new could be presented. The progress of our arms, upon which all else chiefly depends, is as well known to the public as to myself, and it is, I trust, reasonably satisfactory and encouraging to all. With high hope for the future, no prediction in regard to it is ventured.

On the occasion corresponding to this four years ago all thoughts were anxiously directed to an impending civil war. All dreaded it, all sought to avert it. While the inaugural address was being delivered from this place, devoted altogether to saving the Union without war, urgent agents were in the city seeking to destroy it without war—seeking to dissolve the Union and divide effects by negotiation. Both parties deprecated war, but one of them would make war rather than let the nation survive, and the other would accept war rather than let it perish, and the war came.

One-eighth of the whole population were colored slaves, not distributed generally over the Union, but localized in the southern part of it. These slaves constituted a peculiar and powerful interest. All knew that this interest was somehow the cause of the war. To strengthen, perpetuate, and extend this interest was the object for which the insurgents would rend the Union even by war, while the Government claimed no right to do more than to restrict the territorial enlargement of it. Neither party expected for the war the magnitude or the duration which it has already attained. Neither anticipated that the cause of the conflict might cease with or even before the conflict itself should cease. Each looked for an easier triumph, and a result less fundamental and astounding. Both read the same Bible and pray to the same God, and each invokes His aid against the other. It may seem strange that any men should dare to ask a just God's assistance in wringing their bread from the sweat of other men's faces, but let us judge not, that we be not judged. The prayers of both could not be answered. That of neither has been answered fully. The Almighty has His own purposes. "Woe unto the world because of offenses; for it must needs be that offenses come, but woe to that man by whom the offense cometh." If we shall suppose that American slavery is one of those offenses which, in the providence of God, must needs come, but which, having continued through His appointed time, He now wills to remove, and that He gives to both North and South this terrible war as the woe due to those by whom the offense came, shall we discern therein any departure from those divine attributes which the believers in a living God always ascribe to Him? Fondly do we hope, fervently do we pray, that this mighty scourge of war may speedily pass away. Yet, if God wills that it continue until all the wealth piled by the bondsman's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn with the lash shall be paid by another drawn with the sword, as was said three thousand years ago, so still it must be said "the judgments of the Lord are true and righteous altogether."

With malice toward none, with charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds, to care for him who shall have borne the battle and for his widow and his orphan, to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations.

## “State of the Union Address” by Franklin Delano Roosevelt (1941)

For there is nothing mysterious about the foundations of a healthy and strong democracy. The basic things expected by our people of their political and economic systems are simple. They are:

Equality of opportunity for youth and for others.

Jobs for those who can work.

Security for those who need it.

The ending of special privilege for the few.

The preservation of civil liberties for all.

The enjoyment of the fruits of scientific progress in a wider and constantly rising standard of living.

These are the simple, basic things that must never be lost sight of in the turmoil and unbelievable complexity of our modern world. The inner and abiding strength of our economic and political systems is dependent upon the degree to which they fulfill these expectations.

Many subjects connected with our social economy call for immediate improvement. As examples:

We should bring more citizens under the coverage of old-age pensions and unemployment insurance.

We should widen the opportunities for adequate medical care.

We should plan a better system by which persons deserving or needing gainful employment may obtain it.

I have called for personal sacrifice. I am assured of the willingness of almost all Americans to respond to that call.

A part of the sacrifice means the payment of more money in taxes. In my Budget Message I shall recommend that a greater portion of this great defense program be paid for from taxation than we are paying today. No person should try, or be allowed, to get rich out of this program; and the principle of tax payments in accordance with ability to pay should be constantly before our eyes to guide our legislation.

If the Congress maintains these principles, the voters, putting patriotism ahead of pocketbooks, will give you their applause.

In the future days, which we seek to make secure, we look forward to a world founded upon four essential human freedoms.

The first is freedom of speech and expression--everywhere in the world.

The second is freedom of every person to worship God in his own way--everywhere in the world.

The third is freedom from want--which, translated into world terms, means economic understandings which will secure to every nation a healthy peacetime life for its inhabitants--everywhere in the world.

The fourth is freedom from fear--which, translated into world terms, means a world-wide reduction of armaments to such a point and in such a thorough fashion that no nation will be in a position to commit an act of physical aggression against any neighbor--anywhere in the world.

## “I Am an American Day Address” by Learned Hand (1944)

We have gathered here to affirm a faith, a faith in a common purpose, a common conviction, a common devotion. Some of us have chosen America as the land of our adoption; the rest have come from those who did the same. For this reason we have some right to consider ourselves a picked group, a group of those who had the courage to break from the past and brave the dangers and the loneliness of a strange land. What was the object that nerved us, or those who went before us, to this choice? We sought liberty; freedom from oppression, freedom from want, freedom to be ourselves. This we then sought; this we now believe that we are by way of winning. What do we mean when we say that first of all we seek liberty? I often wonder whether we do not rest our hopes too much upon constitutions, upon laws and upon courts. These are false hopes; believe me, these are false hopes. Liberty lies in the hearts of men and women; when it dies there, no constitution, no law, no court can even do much to help it. While it lies there it needs no constitution, no law, no court to save it. And what is this liberty which must lie in the hearts of men and women? It is not the ruthless, the unbridled will; it is not freedom to do as one likes. That is the denial of liberty, and leads straight to its overthrow. A society in which men recognize no check upon their freedom soon becomes a society where freedom is the possession of only a savage few; as we have learned to our sorrow.

What then is the spirit of liberty? I cannot define it; I can only tell you my own faith. The spirit of liberty is the spirit which is not too sure that it is right; the spirit of liberty is the spirit which seeks to understand the mind of other men and women; the spirit of liberty is the spirit which weighs their interests alongside its own without bias; the spirit of liberty remembers that not even a sparrow falls to earth unheeded; the spirit of liberty is the spirit of Him who, near two thousand years ago, taught mankind that lesson it has never learned but never quite forgotten; that there may be a kingdom where the least shall be heard and considered side by side with the greatest. And now in that spirit, that spirit of an America which has never been, and which may never be; nay, which never will be except as the conscience and courage of Americans create it; yet in the spirit of that America which lies hidden in some form in the aspirations of us all; in the spirit of that America for which our young men are at this moment fighting and dying; in that spirit of liberty and of America I ask you to rise and with me pledge our faith in the glorious destiny of our beloved country.

## “Remarks to the Senate in Support of a Declaration of Conscience” by Margaret Chase Smith (1950)

Mr. President:

I would like to speak briefly and simply about a serious national condition. It is a national feeling of fear and frustration that could result in national suicide and the end of everything that we Americans hold dear. It is a condition that comes from the lack of effective leadership in either the Legislative Branch or the Executive Branch of our Government.

That leadership is so lacking that serious and responsible proposals are being made that national advisory commissions be appointed to provide such critically needed leadership.

I speak as briefly as possible because too much harm has already been done with irresponsible words of bitterness and selfish political opportunism. I speak as briefly as possible because the issue is too great to be obscured by eloquence. I speak simply and briefly in the hope that my words will be taken to heart.

I speak as a Republican. I speak as a woman. I speak as a United States Senator. I speak as an American.

The United States Senate has long enjoyed worldwide respect as the greatest deliberative body in the world. But recently that deliberative character has too often been debased to the level of a forum of hate and character assassination sheltered by the shield of congressional immunity.

It is ironical that we Senators can in debate in the Senate directly or indirectly, by any form of words, impute to any American who is not a Senator any conduct or motive unworthy or unbecoming an American—and without that non-Senator American having any legal redress against us—yet if we say the same thing in the Senate about our colleagues we can be stopped on the grounds of being out of order.

It is strange that we can verbally attack anyone else without restraint and with full protection and yet we hold ourselves above the same type of criticism here on the Senate Floor. Surely the United States Senate is big enough to take self-criticism and self-appraisal. Surely we should be able to take the same kind of character attacks that we “dish out” to outsiders.

I think that it is high time for the United States Senate and its members to do some soul-searching—for us to weigh our consciences—on the manner in which we are performing our duty to the people of America—on the manner in which we are using or abusing our individual powers and privileges.

I think that it is high time that we remembered that we have sworn to uphold and defend the Constitution. I think that it is high time that we remembered that the Constitution, as amended, speaks not only of the freedom of speech but also of trial by jury instead of trial by accusation.

Whether it be a criminal prosecution in court or a character prosecution in the Senate, there is little practical distinction when the life of a person has been ruined.

Those of us who shout the loudest about Americanism in making character assassinations are all too frequently those who, by our own words and acts, ignore some of the basic principles of Americanism:

The right to criticize;

The right to hold unpopular beliefs;

The right to protest;

The right of independent thought.

The exercise of these rights should not cost one single American citizen his reputation or his right to a livelihood nor should he be in danger of losing his reputation or livelihood merely because he happens to know someone who holds unpopular beliefs. Who of us doesn't? Otherwise none of us could call our souls our own. Otherwise thought control would have set in.

The American people are sick and tired of being afraid to speak their minds lest they be politically smeared as "Communists" or "Fascists" by their opponents. Freedom of speech is not what it used to be in America. It has been so abused by some that it is not exercised by others.

The American people are sick and tired of seeing innocent people smeared and guilty people whitewashed. But there have been enough proved cases, such as the Amerasia case, the Hiss case, the Coplon case, the Gold case, to cause the nationwide distrust and strong suspicion that there may be something to the unproved, sensational accusations.

I doubt if the Republican Party could—simply because I don't believe the American people will uphold any political party that puts political exploitation above national interest. Surely we Republicans aren't that desperate for victory.

I don't want to see the Republican Party win that way. While it might be a fleeting victory for the Republican Party, it would be a more lasting defeat for the American people. Surely it would ultimately be suicide for the Republican Party and the two-party system that has protected our American liberties from the dictatorship of a one party system.

As members of the Minority Party, we do not have the primary authority to formulate the policy of our Government. But we do have the responsibility of rendering constructive criticism, of clarifying issues, of allaying fears by acting as responsible citizens.

As a woman, I wonder how the mothers, wives, sisters, and daughters feel about the way in which members of their families have been politically mangled in the Senate debate—and I use the word "debate" advisedly.

As a United States Senator, I am not proud of the way in which the Senate has been made a publicity platform for irresponsible sensationalism. I am not proud of the reckless abandon in which unproved charges have been hurled from the side of the aisle. I am not proud of the obviously staged, undignified countercharges that have been attempted in retaliation from the other side of the aisle.

I don't like the way the Senate has been made a rendezvous for vilification, for selfish political gain at the sacrifice of individual reputations and national unity. I am not proud of the way we smear outsiders from the Floor of the Senate and hide behind the cloak of congressional immunity and still place ourselves beyond criticism on the Floor of the Senate.

As an American, I am shocked at the way Republicans and Democrats alike are playing directly into the Communist design of "confuse, divide, and conquer." As an American, I don't want a Democratic Administration "whitewash" or "cover-up" any more than I want a Republican smear or witch hunt.

As an American, I condemn a Republican "Fascist" just as much I condemn a Democratic "Communist." I condemn a Democrat "Fascist" just as much as I condemn a Republican "Communist." They are equally dangerous to you and me and to our country. As an American, I want to see our nation recapture the strength and unity it once had when we fought the enemy instead of ourselves.

It is with these thoughts that I have drafted what I call a "Declaration of Conscience." I am gratified that Senator Tobey, Senator Aiken, Senator Morse, Senator Ives, Senator Thye, and Senator Hendrickson have concurred in that declaration and have authorized me to announce their concurrence.

[...]

## “Address at the March on Washington” by Martin Luther King, Jr. (1963)

Five score years ago, a great American, in whose symbolic shadow we stand today, signed the Emancipation Proclamation. This momentous decree came as a great beacon light of hope to millions of Negro slaves who had been seared in the flames of withering injustice. It came as a joyous daybreak to end the long night of their captivity.

But one hundred years later, the Negro still is not free. One hundred years later, the life of the Negro is still sadly crippled by the manacles of segregation and the chains of discrimination. One hundred years later, the Negro lives on a lonely island of poverty in the midst of a vast ocean of material prosperity. One hundred years later, the Negro is still languished in the corners of American society and finds himself an exile in his own land. And so we've come here today to dramatize a shameful condition.

In a sense we've come to our nation's capital to cash a check. When the architects of our republic wrote the magnificent words of the Constitution and the Declaration of Independence, they were signing a promissory note to which every American was to fall heir. This note was a promise that all men, yes, black men as well as white men, would be guaranteed the "unalienable Rights" of "Life, Liberty and the pursuit of Happiness."

It is obvious today that America has defaulted on this promissory note, insofar as her citizens of color are concerned. Instead of honoring this sacred obligation, America has given the Negro people a bad check, a check which has come back marked "insufficient funds." But we refuse to believe that the bank of justice is bankrupt. We refuse to believe that there are insufficient funds in the great vaults of opportunity of this nation. And so, we've come to cash this check, a check that will give us upon demand the riches of freedom and the security of justice.

We have also come to this hallowed spot to remind America of the fierce urgency of *now*. This is no time to engage in the luxury of cooling off or to take the tranquilizing drug of gradualism. *Now* is the time to make real the promises of democracy. *Now* is the time to rise from the dark and desolate valley of segregation to the sunlit path of racial justice. *Now* is the time to lift our nation from the quicksands of racial injustice to the solid rock of brotherhood. *Now* is the time to make justice a reality for all of God's children.

It would be fatal for the nation to overlook the urgency of the moment. This sweltering summer of the Negro's legitimate discontent will not pass until there is an invigorating autumn of freedom and equality. Nineteen sixty-three is not an end, but a beginning. And those who hope that the Negro needed to blow off steam and will now be content will have a rude awakening if the nation returns to business as usual. And there will be neither rest nor tranquility in America until the Negro is granted his citizenship rights. The whirlwinds of revolt will continue to shake the foundations of our nation until the bright day of justice emerges.

But there is something that I must say to my people, who stand on the warm threshold which leads into the palace of justice: In the process of gaining our rightful place, we must not be guilty of wrongful deeds. Let us not seek to satisfy our thirst for freedom by drinking from the cup of bitterness and hatred. We must forever conduct our struggle on the high plane of dignity and discipline. We must not allow our creative protest to degenerate into physical violence. Again and again, we must rise to the majestic heights of meeting physical force with soul force.

The marvelous new militancy which has engulfed the Negro community must not lead us to a distrust of all white people, for many of our white brothers, as evidenced by their presence here today, have come to realize that their destiny is tied up with our destiny. And they have come to realize that their freedom is inextricably bound to our freedom. We cannot walk alone.

And as we walk, we must make the pledge that we shall always march ahead.

We cannot turn back. There are those who are asking the devotees of civil rights, "When will you be satisfied?"

We can never be satisfied as long as the Negro is the victim of the unspeakable horrors of police brutality.

We can never be satisfied as long as our bodies, heavy with the fatigue of travel, cannot gain lodging in the motels of the highways and the hotels of the cities.

We cannot be satisfied as long as the negro's basic mobility is from a smaller ghetto to a larger one.

We can never be satisfied as long as our children are stripped of their self-hood and robbed of their dignity by signs stating: "For Whites Only."

We cannot be satisfied as long as a Negro in Mississippi cannot vote and a Negro in New York believes he has nothing for which to vote.

No, no, we are not satisfied, and we will not be satisfied until "justice rolls down like waters, and righteousness like a mighty stream."

I am not unmindful that some of you have come here out of great trials and tribulations. Some of you have come fresh from narrow jail cells. And some of you have come from areas where your quest -- quest for freedom left you battered by the storms of persecution and staggered by the winds of police brutality. You have been the veterans of creative suffering. Continue to work with the faith that unearned suffering is redemptive.

Go back to Mississippi, go back to Alabama, go back to South Carolina, go back to Georgia, go back to Louisiana, go back to the slums and ghettos of our northern cities, knowing that somehow this situation can and will be changed. Let us not wallow in the valley of despair.

I say to you today, my friends, that in spite of the difficulties and frustrations of the moment, I still have a dream. It is a dream deeply rooted in the American dream.

I have a dream that one day this nation will rise up and live out the true meaning of its creed: "We hold these truths to be self-evident, that all men are created equal."

I have a dream that one day on the red hills of Georgia, the sons of former slaves and the sons of former slave owners will be able to sit down together at the table of brotherhood.

I have a dream that one day even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice.

I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.

I have a *dream* today!

I have a dream that one day, down in Alabama, with its vicious racists, with its governor having his lips dripping with the words of "interposition" and "nullification" -- one day right there in Alabama little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers.

I have a *dream* today!

I have a dream that one day every valley shall be exalted, and every hill and mountain shall be made low, the rough places will be made plain, and the crooked places will be made straight; "and the glory of the Lord shall be revealed and all flesh shall see it together."

This is our hope, and this is the faith with which I return to the South. With this faith, we will be able to hew out of the mountain of despair a stone of hope. With this faith, we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood.

With this faith, we will be able to work together, to pray together, to struggle together, to go to jail together, to stand up for freedom together, knowing that we will be free one day.

And this will be the day -- this will be the day when all of God's children will be able to sing with new meaning:

*My country 'tis of thee, sweet land of liberty, of thee I sing.  
Land where my fathers died, land of the Pilgrim's pride,  
From every mountainside, let freedom ring!*

And if America is to be a great nation, this must become true.

And so let freedom ring from the prodigious hilltops of New Hampshire.

Let freedom ring from the mighty mountains of New York.

Let freedom ring from the heightening Alleghenies of Pennsylvania.

Let freedom ring from the snow-capped Rockies of Colorado.

Let freedom ring from the curvaceous slopes of California.

But not only that:

Let freedom ring from Stone Mountain of Georgia.

Let freedom ring from Lookout Mountain of Tennessee.

Let freedom ring from every hill and molehill of Mississippi.

From every mountainside, let freedom ring.

And when this happens, when we allow freedom ring, when we let it ring from every village and every hamlet, from every state and every city, we will be able to speed up that day when *all* of God's children, black men and white men, Jews and Gentiles, Protestants and Catholics, will be able to join hands and sing in the words of the old Negro spiritual:

*Free at last! Free at last! Thank God Almighty, we are free at last!*

## “Nobel Prize Acceptance Speech” by Elie Wiesel (1986)

It is with a profound sense of humility that I accept the honor - the highest there is - that you have chosen to bestow upon me. I know your choice transcends my person.

Do I have the right to represent the multitudes who have perished? Do I have the right to accept this great honor on their behalf? I do not. No one may speak for the dead, no one may interpret their mutilated dreams and visions. And yet, I sense their presence. I always do - and at this moment more than ever. The presence of my parents, that of my little sister. The presence of my teachers, my friends, my companions...

This honor belongs to all the survivors and their children and, through us to the Jewish people with whose destiny I have always identified.

I remember: it happened yesterday, or eternities ago. A young Jewish boy discovered the Kingdom of Night. I remember his bewilderment, I remember his anguish. It all happened so fast. The ghetto. The deportation. The sealed cattle car. The fiery altar upon which the history of our people and the future of mankind were meant to be sacrificed.

I remember he asked his father: "Can this be true? This is the twentieth century, not the Middle Ages. Who would allow such crimes to be committed? How could the world remain silent?"

And now the boy is turning to me. "Tell me," he asks, "what have you done with my future, what have you done with your life?" And I tell him that I have tried. That I have tried to keep memory alive, that I have tried to fight those who would forget. Because if we forget, we are guilty, we are accomplices.

And then I explain to him how naïve we were, that the world did know and remained silent. And that is why I swore never to be silent whenever wherever human beings endure suffering and humiliation. We must take sides. Neutrality helps the oppressor, never the victim. Silence encourages the tormentor, never the tormented. Sometimes we must interfere. When human lives are endangered, when human dignity is in jeopardy, national borders and sensitivities become irrelevant. Wherever men and women are persecuted because of their race, religion, or political views, that place must - at that moment - become the center of the universe.

## “A Quilt of a Country” by Anna Quindlen (2001)

America is an improbable idea. A mongrel nation built of ever-changing disparate parts, it is held together by a notion, the notion that all men are created equal, though everyone knows that most men consider themselves better than someone. "Of all the nations in the world, the United States was built in nobody's image," the historian Daniel Boorstin wrote. That's because it was built of bits and pieces that seem discordant, like the crazy quilts that have been one of its great folk-art forms, velvet and calico and checks and brocades. Out of many, one. That is the ideal.

The reality is often quite different, a great national striving consisting frequently of failure. Many of the oft-told stories of the most pluralistic nation on earth are stories not of tolerance, but of bigotry. Slavery and sweatshops, the burning of crosses and the ostracism of the other. Children learn in social-studies class and in the news of the lynching of blacks, the denial of rights to women, the murders of gay men. It is difficult to know how to convince them that this amounts to "crown thy good with brotherhood," that amid all the failures is something spectacularly successful. Perhaps they understand it at this moment, when enormous tragedy, as it so often does, demands a time of reflection on enormous blessings.

This is a nation founded on a conundrum, what Mario Cuomo has characterized as "community added to individualism." These two are our defining ideals; they are also in constant conflict. Historians today bemoan the ascendancy of a kind of prideful apartheid in America, saying that the clinging to ethnicity, in background and custom, has undermined the concept of unity. These historians must have forgotten the past, or have gilded it. The New York of my children is no more Balkanized, probably less so, than the Philadelphia of my father, in which Jewish boys would walk several blocks out of their way to avoid the Irish divide of Chester Avenue. (I was the product of a mixed marriage, across barely bridgeable lines: an Italian girl, an Irish boy. How quaint it seems now, how incendiary then.) The Brooklyn of Francie Nolan's famous tree, the Newark of which Portnoy complained, even the uninflected WASP suburbs of Cheever's characters: they are ghettos, pure and simple. Do the Cambodians and the Mexicans in California coexist less easily today than did the Irish and Italians of Massachusetts a century ago? You know the answer.

[...]

## Grades 11–12

### Grades 11–12: Narratives

#### *Pride and Prejudice* by Jane Austen (1813)

From Chapter 1

It is a truth universally acknowledged that a single man in possession of a good fortune, must be in want of a wife.

However little known the feelings or views of such a man may be on his first entering a neighbourhood, this truth is so well fixed in the minds of the surrounding families that he is considered as the rightful property of someone or other of their daughters.

"My dear Mr. Bennet," said his lady to him one day, "have you heard that Netherfield Park is let at last?"

Mr. Bennet replied that he had not.

"But it is," returned she; "for Mrs. Long has just been here, and she told me all about it."

Mr. Bennet made no answer.

"Do not you want to know who has taken it?" cried his wife impatiently.

"You want to tell me, and I have no objection to hearing it."

This was invitation enough.

"Why, my dear, you must know, Mrs. Long says that Netherfield is taken by a young man of large fortune from the north of England; that he came down on Monday in a chaise and four to see the place, and was so much delighted with it, that he agreed with Mr. Morris immediately; that he is to take possession before Michaelmas, and some of his servants are to be in the house by the end of next week."

"What is his name?"

"Bingley."

"Is he married or single?"

"Oh! single, my dear, to be sure! A single man of large fortune; four or five thousand a year. What a fine thing for our girls!"

"How so? how can it affect them?"

"My dear Mr. Bennet," replied his wife, "how can you be so tiresome! You must know that I am thinking of his marrying one of them."

"Is that his design in settling here?"

"Design! nonsense, how can you talk so! But it is very likely that he *may* fall in love with one of them, and therefore you must visit him as soon as he comes."

"I see no occasion for that. You and the girls may go, or you may send them by themselves, which perhaps will be still better, for as you are as handsome as any of them, Mr. Bingley might like you the best of the party."

"My dear, you flatter me. I certainly *have* had my share of beauty, but I do not pretend to be anything extraordinary now. When a woman has five grown-up daughters she ought to give over thinking of her own beauty."

"In such cases a woman has not often much beauty to think of."

"But, my dear, you must indeed go and see Mr. Bingley when he comes into the neighbourhood."

"It is more than I engage for, I assure you."

"But consider your daughters. Only think what an establishment it would be for one of them. Sir William and Lady Lucas are determined to go, merely on that account, for in general, you know, they visit no new-comers. Indeed you must go, for it will be impossible for us to visit him if you do not."

"You are over-scrupulous surely. I dare say Mr. Bingley will be very glad to see you; and I will send a few lines by you to assure him of my hearty consent to his marrying whichever he chooses of the girls: though I must throw in a good word for my little Lizzy."

"I desire you will do no such thing. Lizzy is not a bit better than the others; and I am sure she is not half so handsome as Jane, nor half so good-humoured as Lydia. But you are always giving *her* the preference."

"They have none of them much to recommend them," replied he; "they are all silly and ignorant, like other girls; but Lizzy has something more of quickness than her sisters."

"Mr. Bennet, how can you abuse your own children in such a way! You take delight in vexing me. You have no compassion on my poor nerves."

"You mistake me, my dear. I have a high respect for your nerves. They are my old friends. I have heard you mention them with consideration these twenty years at least."

"Ah! you do not know what I suffer."

"But I hope you will get over it, and live to see many young men of four thousand a year come into the neighbourhood."

"It will be no use to us if twenty such should come, since you will not visit them."

"Depend upon it, my dear, that when there are twenty, I will visit them all."

Mr. Bennet was so odd a mixture of quick parts, sarcastic humour, reserve, and caprice, that the experience of three-and-twenty years had been insufficient to make his wife understand his character. *Her* mind was less difficult to develop. She was a woman of mean understanding, little information, and uncertain temper. When she was discontented she fancied herself nervous. The business of her life was to get her daughters married; its solace was visiting and news.

[...]

## *Jane Eyre* by Charlotte Brontë (1848)

There was no possibility of taking a walk that day. We had been wandering, indeed, in the leafless shrubbery an hour in the morning; but since dinner (Mrs. Reed, when there was no company, dined early) the cold winter wind had brought with it clouds so sombre, and a rain so penetrating, that further out-door exercise was now out of the question.

I was glad of it: I never liked long walks, especially on chilly afternoons: dreadful to me was the coming home in the raw twilight, with nipped fingers and toes, and a heart saddened by the chidings of Bessie, the nurse, and humbled by the consciousness of my physical inferiority to Eliza, John, and Georgiana Reed.

The said Eliza, John, and Georgiana were now clustered round their mama in the drawing-room: she lay reclined on a sofa by the fireside, and with her darlings about her (for the time neither quarrelling nor crying) looked perfectly happy. Me, she had dispensed from joining the group; saying, "She regretted to be under the necessity of keeping me at a distance; but that until she heard from Bessie, and could discover by her own observation, that I was endeavouring in good earnest to acquire a more sociable and childlike disposition, a more attractive and sprightly manner—something lighter, franker, more natural, as it were—she really must exclude me from privileges intended only for contented, happy, little children."

"What does Bessie say I have done?" I asked.

"Jane, I don't like cavillers or questioners; besides, there is something truly forbidding in a child taking up her elders in that manner. Be seated somewhere; and until you can speak pleasantly, remain silent."

A breakfast-room adjoined the drawing-room, I slipped in there. It contained a bookcase: I soon possessed myself of a volume, taking care that it should be one stored with pictures. I mounted into the window-seat: gathering up my feet, I sat cross-legged, like a Turk; and, having drawn the red moreen curtain nearly close, I was shrined in double retirement.

Folds of scarlet drapery shut in my view to the right hand; to the left were the clear panes of glass, protecting, but not separating me from the drear November day. At intervals, while turning over the leaves of my book, I studied the aspect of that winter afternoon. Afar, it offered a pale blank of mist and cloud; near a scene of wet lawn and storm-beat shrub, with ceaseless rain sweeping away wildly before a long and lamentable blast.

**“At Home” by Anton Chekov (1887) translated by Constance Garnett**

‘Somebody came from the Grigorievs’ to fetch a book, but I said you were not at home. The postman has brought the newspapers and two letters. And, by the way, sir, I wish you would give your attention to Seriozha. I saw him smoking today and also the day before yesterday. When I told him how wrong it was he put his fingers in his ears, as he always does, and began to sing loudly so as to drown my voice.’

Eugene Bilovsky, an attorney of the circuit court, who had just come home from a session and was taking off his gloves in his study, looked at the governess who was making this statement and laughed.

‘So Seriozha has been smoking!’ he said with a shrug of his shoulders. ‘Fancy the little beggar with a cigarette in his mouth! How old is he?’

‘Seven years old. It seems of small consequence to you, but at his age smoking is a bad, a harmful habit; and bad habits should be nipped in the bud.’

‘You are absolutely right. Where does he get the tobacco?’

‘From your table.’

‘He does? In that case, send him to me.’

When the governess had gone, Bilovsky sat down in an easy-chair before his writing-table and began to think. For some reason he pictured to himself his Seriozha enveloped in clouds of tobacco smoke, with a huge, yard-long cigarette in his mouth, and this caricature made him smile. At the same time the earnest, anxious face of the governess awakened in him memories of days long past and half-forgotten, when smoking at school and in the nursery aroused in masters and parents a strange, almost incomprehensible horror. It really was horror. Children were unmercifully flogged, and expelled from school, and their lives were blighted, although not one of the teachers nor fathers knew exactly what constituted the harm and offence of smoking. Even very intelligent people did not hesitate to combat the vice they did not understand. Bilovsky called to mind the principal of his school, a highly educated, good-natured old man, who was so shocked when he caught a scholar with a cigarette that he would turn pale and immediately summon a special session of the school board and sentence the offender to expulsion. No doubt that is one of the laws of society—the less an evil is understood the more bitterly and harshly it is attacked.

The attorney thought of the two or three boys who had been expelled and of their subsequent lives, and could not but reflect that punishment is, in many cases, more productive of evil than crime itself. The living organism possesses the faculty of quickly adapting itself to every condition; if it were not so man would be conscious every moment of the unreasonable foundations on which his reasonable actions rest and how little of justice and assurance are to be found even in those activities which are fraught with so much responsibility and which are so appalling in their consequences, such as education, literature, the law—

And thoughts such as these came floating into Bilovsky’s head; light, evanescent thoughts such as only enter weary, resting brains. One knows not whence they are nor why they come; they stay but a short while and seem to spread across the surface of the brain without ever sinking very far into its depths. For those whose minds for hours and days together are forced to be occupied with business and to travel always along the same lines, these homelike, untrammelled musings bring a sort of comfort and a pleasant restfulness of their own.

It was nine o’clock. On the floor overhead someone was pacing up and down, and still higher up, on the third storey, four hands were playing scales on the piano. The person who was pacing the floor seemed, from his nervous strides, to be the victim of tormenting thoughts or of the toothache; his footsteps and the monotonous scales added to the quiet of the evening something somnolent that predisposed the mind to idle reveries.

In the nursery, two rooms away, Seriozha and his governess were talking.

'Pa-pa has come!' sang the boy. "Papa has co-ome! Pa! Pa! Pa!"

'Votre père vous appelle, allez vite!' cried the governess, twittering like a frightened bird.

'What shall I say to him?' thought Bilovsky.

But before he had time to think of anything to say his son Seriozha had already entered the study. This was a little person whose sex could only be divined from his clothes—he was so delicate, and fair, and frail. His body was as languid as a hot-house plant and everything about him looked wonderfully dainty and soft—his movements, his curly hair, his glance, his velvet tunic.

'Good evening, papa,' he said in a gentle voice, climbing on to his father's knee and swiftly kissing his neck. 'Did you send for me?'

'Wait a bit, wait a bit, master,' answered the lawyer, putting him aside. 'Before you and I kiss each other we must have a talk, a serious talk. I am angry with you, and I don't love you any more; do you understand that, young man? I don't love you, and you are no son of mine.'

Seriozha looked steadfastly at his father and then turned his regard to the table and shrugged his shoulders.

'What have I done?' he asked, perplexed, and blinked. 'I didn't go into your study once today, and I haven't touched a thing.'

'Miss Natalie has just been complaining to me that you have been smoking; is that so? Have you been smoking?'

'Yes, I smoked once. That is so.'

'There! So now you have told a lie into the bargain!' said the lawyer, disguising his smile by a frown. 'Miss Natalie saw you smoking twice. That means that you have been caught doing three naughty things: smoking, taking tobacco that doesn't belong to you off my table, and telling a lie. Three accusations!'

## *The Great Gatsby* by F. Scott Fitzgerald (1925)

There was music from my neighbor's house through the summer nights. In his blue gardens men and girls came and went like moths among the whisperings and the champagne and the stars. At high tide in the afternoon I watched his guests diving from the tower of his raft, or taking the sun on the hot sand of his beach while his two motorboats slit the waters of the Sound, drawing aquaplanes over cataracts of foam. On week ends his Rolls-Royce became an omnibus, bearing parties to and from the city between nine in the morning and long past midnight, while his station wagon scampered like a brisk yellow bug to meet all trains. And on Mondays eight servants, including an extra gardener, toiled all day with mops and scrubbing brushes and hammers and garden shears, repairing the ravages of the night before.

Every Friday five crates of oranges and lemons arrived from a fruiterer in New York – every Monday these same oranges and lemons left his back door in a pyramid of pulpless halves. There was a machine in the kitchen which could extract the juice of two hundred oranges in half an hour if a little button was pressed two hundred times by a butler's thumb.

At least once a fortnight a corps of caterers came down with several hundred feet of canvas and enough colored lights to make a Christmas tree of Gatsby's enormous garden. On buffet tables, garnished with glistening hors d'oeuvres, spiced baked hams crowded against salads of harlequin designs and pastry pigs and turkeys bewitched to a dark gold. In the main hall a bar with a real brass rail was set up, and stocked with gins and liquors and with cordials so long forgotten that most of his female guests were too young to know one from another.

By seven o'clock the orchestra has arrived, no thin five piece affair, but a whole pitful of oboes and trombones and saxophones and viols and cornets and piccolos, and low and high drums. The last swimmers have come in from the beach now and are dressing upstairs; the cars from New York are parked five deep in the drive, and already the halls and salons and verandas are gaudy with primary colors, and hair bobbed in strange new ways, and shawls beyond the dreams of Castile. The bar is in full swing, and floating rounds of cocktails permeate the garden outside, until the air is alive with chatter and laughter, and casual innuendo and introductions forgotten on the spot, and enthusiastic meetings between women who never knew each other's names.

The lights grow brighter as the earth lurches away from the sun, and now the orchestra is playing yellow cocktail music, and the opera of voices pitches a key higher. Laughter is easier minute by minute, spilled with prodigality, tipped out at a cheerful word. The groups change more swiftly, swell with new arrivals, dissolve and form in the same breath; already there are wanderers, confident girls who weave here and there among the stouter and more stable, become for a sharp, joyous moment the center of the group, and then, excited with triumph, glide on through the sea change of faces and voices and color under the constantly changing light.

Suddenly one of these gypsies, in trembling opal, seizes a cocktail out of the air, dumps it down for courage and, moving her hands like Frisco, dances out alone on the canvas platform. A momentary hush; the orchestra leader varies his rhythm obligingly for her, and there is a burst of chatter as the erroneous news goes around that she is Gilda Gray's understudy from the Follies. The party has begun.

*As I Lay Dying* by William Faulkner (1930)

Jewel and I come up from the field, following the path in single file. Although I am fifteen feet ahead of him, anyone watching us from the cottonhouse can see Jewel's frayed and broken straw hat a full head above my own.

The path runs straight as a plumb-line, worn smooth by feet and baked brick-hard by July, between the green rows of laidby cotton, to the cottonhouse at four soft right angles and goes on across the field again, worn so by feet in fading precision.

The cottonhouse is of rough logs, from between which the chinking has long fallen. Square, with a broken roof set at a single pitch, it leans in empty and shimmering dilapidation in the sunlight, a single broad window in two opposite walls giving onto the approaches of the path. When we reach it I turn and follow the path which circles the house. Jewel, fifteen feet behind me, looking straight ahead, steps in a single stride through the window. Still staring straight ahead, his pale eyes like wood set into his wooden face, he crosses the floor in four strides with the rigid gravity of a cigar store Indian dressed in patched overalls and endued with life from the hips down, and steps in a single stride through the opposite window and into the path again just as I come around the corner. In single file and five feet apart and Jewel now in front, we go on up the path toward the foot of the bluff.

Tull's wagon stands beside the spring, hitched to the rail, the reins wrapped about the seat stanchion. In the wagon bed are two chairs. Jewel stops at the spring and takes the gourd from the willow branch and drinks. I pass him and mount the path, beginning to hear Cash's saw.

When I reach the top he has quit sawing. Standing in a litter of chips, he is fitting two of the boards together. Between the shadow spaces they are yellow as gold, like soft gold, bearing on their flanks in smooth undulations the marks of the adze blade: a good carpenter, Cash is. He holds the two planks on the trestle, fitted along the edges in a quarter of the finished box. He kneels and squints along the edge of them, then he lowers them and takes up the adze. A good carpenter. Addie Bundren could not want a better one, a better box to lie in. It will give her confidence and comfort. I go on to the house, followed by the

Chuck.                      Chuck.                      Chuck.  
of the adze.

*Their Eyes Were Watching God* by Zora Neale Hurston (1937)

Ships at a distance have every man's wish on board. For some they come in with the tide. For others they sail forever on the horizon, never out of sight, never landing until the Watcher turns his eyes away in resignation, his dreams mocked to death by Time. That is the life of men.

Now, women forget all those things they don't want to remember, and remember everything they don't want to forget. The dream is the truth. Then they act and do things accordingly.

So the beginning of this was a woman and she had come back from burying the dead. Not the dead of sick and ailing with friends at the pillow and the feet. She had come back from the sodden and the bloated; the sudden dead, their eyes flung wide open in judgment.

The people all saw her come because it was sundown. The sun was gone, but he had left his footprints in the sky. It was the time for sitting on porches beside the road. It was the time to hear things and talk. These sitters had been tongueless, earless, eyeless conveniences all day long. Mules and other brutes had occupied their skins. But now, the sun and the bossman were gone, so the skins felt powerful and human. They became lords of sounds and lesser things. They passed nations through their mouths. They sat in judgment.

Seeing the woman as she was made them remember the envy they had stored up from other times. So they chewed up the back parts of their minds and swallowed with relish. They made burning statements with questions, and killing tools out of laughs. It was mass cruelty. A mood come alive, Words walking without masters; walking altogether like harmony in a song.

"What she doin coming back here in dem overalls? Can't she find no dress to put on? -- Where's dat blue satin dress she left here in? -- Where all dat money her husband took and died and left her? -- What dat ole forty year ole 'oman doin' wid her hair swingin' down her back lak some young gal? Where she left dat young lad of a boy she went off here wid? -- Thought she was going to marry? -- Where he left her? -- What he done wid all her money? -- Betcha he off wid some gal so young she ain't even got no hairs -- why she don't stay in her class?"

When she got to where they were she turned her face on the bander log and spoke. They scrambled a noisy "good evenin'" and left their mouths setting open and their ears full of hope. Her speech was pleasant enough, but she kept walking straight on to her gate. The porch couldn't talk for looking.

[...]

## ***Black Boy* by Richard Wright (1945)**

That night in my rented room, while letting the hot water run over my can of pork and beans in the sink, I opened *A Book of Prefaces* and began to read. I was jarred and shocked by the style, the clear, clean, sweeping sentences. Why did he write like that? And how did one write like that? I pictured the man as a raging demon, slashing with his pen, consumed with hate, denouncing everything American, extolling everything European or German, laughing at the weakness of people, mocking God, authority. What was this? I stood up, trying to realize what reality lay behind the meaning of the words... Yes, this man was fighting, fighting with words. He was using words as a weapon, using them as one would use a club. Could words be weapons? Well, yes, for here they were. Then maybe, perhaps, I could use them as a weapon? No. It frightened me. I read on and what amazed me was not what he said, but how on earth anybody had the courage to say it.

Occasionally I glance up to reassure myself that I was alone in the room. Who were these men about whom Mencken was talking so passionately? Who was Anatole France? Joseph Conrad? Sinclair Lewis, Sherwood Anderson, Dostoevski, George Moore, Gustave Flaubert, Maupassant, Tolstoy, Frank Harris, Mark Twain, Thomas Hardy, Arnold Bennett, Stephen Crane, Zola, Norris, Gorky, Bergson, Ibsen, Balzac, Bernard Shaw, Dumas, Poe, Thomas Mann, O. Henry, Dreiser, H.G. Wells, Gogol, T.S. Eliot, Gide, Baudelaire, Edgar Lee masters, Stendhal, Turgenev, Huneker, Nietzsche, and scores of others? Were these men real? Did they exist or had they existed? And how did one pronounce their names?

I ran across many words whose meanings I did not know, and I either looked them up in a dictionary or, before I had a chance to do that, encountered the word in a context that made its meaning clear. But what strange world was this? I concluded the book with the conviction that I had somehow overlooked something terribly important in my life. I had once tried to write, had once reveled in feeling, had let my crude imagination roam, but the impulse to dream had been slowly beaten out of me by experience. Now it surged up again and I hungered for books, new ways of looking and seeing. It was not a matter of believing or disbelieving what I read, but of feeling something new, of being affected by something that made the look of the world different.

As dawn broke I ate my pork and beans, feeling dopey, sleepy. I went to work, but the mood of the book would not die; it lingered, coloring everything I saw, heard, did. I now felt that I knew what the white men were feeling. Merely because I had read a book that had spoken of how they lived and thought, I identified myself with that book. I felt vaguely guilty. Would I, filled with bookish notions, act in a manner that would make the whites dislike me?

I forged more notes and my trips to the library became frequent. Reading grew into a passion.

[...]

*The Adventures of Augie March* by Saul Bellow (1949)

"I haven't been wasting my time," he said. "I've been working on something. I think I'm getting married soon," he said, and didn't allow himself to smile with the announcement or temper it in some pleasant way.

"When? To whom?"

"To a woman with money."

"A woman? An older woman?" That was how I interpreted it.

"Well, what's the matter with *you*? Yes, I'd marry an older woman. Why not?"

"I bet you wouldn't." He was still able to amaze me, as though we had remained kids.

"We don't have to argue about it because she's not old. She's about twenty-two, I'm told."

"By whom? And you haven't even seen her?"

"No, I haven't. You remember the buyer, my old boss? He's fixing me up. I have her picture. She's not bad. Heavy—but I'm getting heavy too. She's sort of pretty. Anyhow, even if she weren't pretty, and if the buyer isn't lying about the dough—her family is supposed to have a mountain of dough—I'd marry her."

"You've already made up your mind?"

"I'll say I have!"

"And suppose she doesn't want to marry you?"

"I'll see that she does. Don't you think I can?"

"Maybe you can, but I don't like it. It's cold-blooded."

"Cold-blooded!" he said with sudden emotion. "What's cold-blooded about it? I'd be cold-blooded if I stayed as I am. I see around this marriage and beyond it. I'll never again go for all the nonsense about marriage. Everybody you lay eyes on, except perhaps a few like you and me, is born of marriage. Do you see anything so exceptional or wonderful about it that it makes it such a big deal? Why be fooling around to make this perfect great marriage? What's it going to save you from? Has it saved anybody—the jerks, the fools, the morons, the *schleppers*, the jag-offs, the monkeys, rats, rabbits, or the decent unhappy people or what you call nice people? They're all married or are born of marriages, so how can you pretend to me that it makes a difference that Bob loves Mary who loves Jerry? That's for the movies. Don't you see people pondering how to marry for love and getting the blood gypped out of them? Because while they're looking for the best there is—and I figure that's what's wrong with you—everything else gets lost. It's sad. It's a pity, but it's that way."

I was all the same strongly against him; that he saw. Even if I couldn't just then consider myself on the active list of lovers and wasn't carrying a live torch any more for Esther Fenchel. I recognized his face as the face of a man in the wrong.

[...]

*The Bluest Eye* by Toni Morrison (1970)

One winter Pauline discovered she was pregnant. When she told Cholly, he surprised her by being pleased. He began to drink less and come home more often. They eased back into a relationship more like the early days of their marriage, when he asked if she were tired or wanted him to bring her something from the store. In this state of ease, Pauline stopped doing day work and returned to her own housekeeping. But the loneliness in those two rooms had not gone away. When the winter sun hit the peeling green paint of the kitchen chairs, when the smoked hocks were boiling in the pot, when all she could hear was the truck delivering furniture downstairs, she thought about back home, about how she had been all alone most of the time then too, but that this lonesomeness was different. Then she stopped staring at the green chairs, at the delivery truck; she went to the movies instead. There in the dark her memory was refreshed, and she succumbed to her earlier dreams. Along with the idea of romantic love, she was introduced to another—physical beauty. Probably the most destructive ideas in the history of human thought. Both originated in envy, thrived in insecurity, and ended in disillusion. In equating physical beauty with virtue, she stripped her mind, bound it, and collected self-contempt by the heap. She forgot lust and simple caring for. She regarded love as possessive mating, and romance as the goal of the spirit. It would be for her a well-spring from which she would draw the most destructive emotions, deceiving the lover and seeking to imprison the beloved, curtailing freedom in every way.

She was never able, after her education in the movies, to look at a face and not assign it some category in the scale of absolute beauty, and the scale was one she absorbed in full from the silver screen. There at last were the darkened woods, the lonely roads, the river banks, the gentle knowing eyes. There the flawed became whole, the blind sighted, and the lame and halt threw away their crutches. There death was dead, and people made every gesture in a cloud of music. There the black-and-white images came together, making a magnificent whole—all projected through the ray of light from above and beyond.

It was really a simple pleasure, but she learned all there was to love and all there was to hate.

[...]

*Dreaming in Cuban* by Cristina García (1992)

Abuela gives me a box of letters she wrote to her onetime lover in Spain, but never sent. She shows me his photograph, too. It's very well preserved. He'd be good-looking by today's standards, well built with a full beard and kind eyes, almost professorial. He wore a crisp linen suit and a boater tilted slightly to the left. Abuela tells me she took the picture herself one Sunday on the Malecón,

She also gives me a book of poems she's had since 1930, we she heard García Lorca read at the Principal de la Comedia Theater. Abuela knows each poem by heart, and recites them quite dramatically.

I've started dreaming in Spanish, which has never happened before. I wake up feeling different, like something inside me is changing, something chemical and irreversible. There's a magic here working its way through my veins. There's something about the vegetation, too, that I respond to instinctively—the stunning bougainvillea, the flamboyants and jacarandas, the orchids growing from the trunks of the mysterious ceiba trees. And I love Havana, its noise and decay and painted ladyness. I could happily sit on one of those wrought-iron balconies for days, or keep my grandmother company on her porch, with its ringside view of the sea. I'm afraid to lose all this. To lose Abuela Celia again. But I know that sooner or later I'd have to return to New York. I know now it's where I belong—not *instead* of here, but *more* than here. How can I tell my grandmother this?

[...]

**Media Text:**

Portal to selected interviews with author Cristina García:

<http://www.cristinagarcianovelist.com/index.php?page=selectedinterviews>

*The Namesake* by Jhumpa Lahiri (2003)

One day he attends a panel discussion about Indian novels written in English. He feels obligated to attend; one of the presenters on the panel, Amit, is a distant cousin who lives in Bombay, whom Gogol has never met. His mother has asked him to greet Amit on her behalf. Gogol is bored by the panelists, who keep referring to something called “marginality,” as if it were some sort of medical condition. For most of the hour, he sketches portraits of the panelists, who sit hunched over their papers along a rectangular table. “Teleologically speaking, ABCDs are unable to answer the question ‘Where are you from?’” the sociologist on the panel declares. Gogol has never heard the term ABCD. He eventually gathers that it stands for “American-born confused deshi.” In other words, him. He learns that the *C* could also stand for “conflicted.” He knows that *deshi*, a generic word for “countryman,” means “Indian,” knows that his parents and all their friends always refer to India simply as *desh*. But Gogol never thinks of India as *desh*. He thinks of it as Americans do, as India.

Gogol slouches in his seat and ponders certain awkward truths. For instance, although he can understand his mother tongue, and speak it fluently, he cannot read or write it with even modest proficiency. On trips to India his American-accented English is a source of endless amusement to his relatives, and when he and Sonia speak to each other, aunts and uncles and cousins always shake their heads in disbelief and say, “I didn’t understand a word!” Living with a pet name and a good name, in a place where such distinctions do not exist—surely that was emblematic of the greatest confusion of all. He searches the audience for someone he knows, but it isn’t his crowd—lots of lit majors with leather satchels and gold-rimmed glasses and fountain pens, lots of people Ruth would have waved to. There are also lots of ABCDs. He has no idea there are this many on campus. He has no ABCD friends at college. He avoids them, for they remind him too much of the way his parents choose to live, befriending people not so much because they like them, but because of a past they happen to share. “Gogol, why aren’t you a member of the Indian association here?” Amit asks later when they go for a drink at the Anchor. “I just don’t have the time,” Gogol says, not telling his well-meaning cousin that he can think of no greater hypocrisy than joining an organization that willingly celebrates occasions his parents forced him, throughout his childhood and adolescence, to attend. “I’m Nikhil now,” Gogol says, suddenly depressed by how many more times he will have to say this, asking people to remember, reminding them to forget, feeling as if an errata slip were perpetually pinned to his chest.

[...]

## Grades 11–12: Drama

### *Macbeth* by William Shakespeare (c1611)

ACT V. SCENE I.

Dunsinane. Anteroom in the castle.

Enter a Doctor of Physic and a Waiting Gentlewoman.

DOCTOR. I have two nights watched with you, but can perceive no truth in your report. When was it she last walked?

GENTLEWOMAN. Since his Majesty went into the field, have seen  
Her rise from her bed, throw her nightgown upon her, unlock her closet, take forth paper, fold it, write upon't, read it, afterwards seal it, and again return to bed; yet all this while in a most fast sleep.

DOCTOR. A great perturbation in nature, to receive at once the benefit of sleep and do the effects of watching! In this slumbry agitation, besides her walking and other actual performances, what, at any time, have you heard her say?

GENTLEWOMAN. That, sir, which I will not report after her.

DOCTOR. You may to me, and 'tis most meet you should.

GENTLEWOMAN. Neither to you nor anyone, having no witness to confirm my speech.

Enter Lady Macbeth with a taper.

Lo you, here she comes! This is her very guise, and, upon my life, fast asleep. Observe her; stand close.

DOCTOR. How came she by that light?

GENTLEWOMAN. Why, it stood by her. She has light by her continually; 'tis her command.

DOCTOR. You see, her eyes are open.

GENTLEWOMAN. Ay, but their sense is shut.

DOCTOR. What is it she does now? Look how she rubs her hands.

GENTLEWOMAN. It is an accustomed action with her, to seem thus washing her hands. I have known her continue in this a quarter of an hour.

LADY MACBETH. Yet here's a spot.

DOCTOR. Hark, she speaks! I will set down what comes from her, to satisfy my remembrance the more strongly.

LADY MACBETH. Out, damned spot! Out, I say! One- two -why then 'tis time to do't. Hell is murky. Fie, my lord, fie! A soldier, and afeard? What need we fear who knows it, when none can call our power to account? Yet who would have thought the old man to have had so much blood in him?

DOCTOR. Do you mark that?

LADY MACBETH. The Thane of Fife had a wife; where is she now?

What, will these hands neer be clean? No more o' that, my lord, no more o' that. You mar all with this starting.

DOCTOR. Go to, go to; you have known what you should not.

GENTLEWOMAN. She has spoke what she should not, I am sure of that. Heaven knows what she has known.

LADY MACBETH. Here's the smell of the blood still. All the perfumes of Arabia will not sweeten this little hand.  
Oh, oh, oh!

DOCTOR. What a sigh is there! The heart is sorely charged.

GENTLEWOMAN. I would not have such a heart in my bosom for the dignity of the whole body.

DOCTOR. Well, well, well-

GENTLEWOMAN. Pray God it be, sir.

DOCTOR. This disease is beyond my practice. Yet I have known those which have walked in their sleep who have died holily in their beds.

LADY MACBETH. Wash your hands, put on your nightgown, look not so pale. I tell you yet again, Banquo's buried; he cannot come out on's grave.

DOCTOR. Even so?

LADY MACBETH. To bed, to bed; there's knocking at the gate.

Come, come, come, come, give me your hand. What's done cannot be undone. To bed, to bed, to bed.  
Exit.

DOCTOR. Will she go now to bed?

GENTLEWOMAN. Directly.

DOCTOR. Foul whisperings are abroad. Unnatural deeds

Do breed unnatural troubles; infected minds

To their deaf pillows will discharge their secrets.

More needs she the divine than the physician.

God, God, forgive us all! Look after her;

Remove from her the means of all annoyance,

And still keep eyes upon her. So good night.

My mind she has mated and amazed my sight.

I think, but dare not speak.

GENTLEWOMAN. Good night, good doctor.

Exeunt.

### Media Texts:

Judi Dench (Lady Macbeth) performs this scene in a 1979 production with Ian McKellen:

<http://www.youtube.com/watch?v=IOkyZWQ2bmQ>

McKellen analyzes the "To-morrow and to-morrow and to-morrow" speech from Act V, Scene 5:

<http://video.google.com/videoplay?docid=883718043846080512#docid=7225091828250988008>

*The Importance of Being Earnest* by Oscar Wilde (1895)

Excerpt from Act II, Part 2

**Cecily** [rather shy and confidingly]: Dearest Gwendolen, there is no reason why I should make a secret of it to you. Our little county newspaper is sure to chronicle the fact next week. Mr. Ernest Worthing and I are engaged to be married.

**Gwendolen** [quite politely, rising]: My darling Cecily, I think there must be some slight error. Mr. Ernest Worthing is engaged to me. The announcement will appear in the *Morning Post* on Saturday at the latest.

**Cecily** [very politely, rising]: I am afraid you must be under some misconception. Ernest proposed to me exactly ten minutes ago. [Shows diary.]

**Gwendolen** [examines diary through her lorgnette carefully]: It is certainly very curious, for he asked me to be his wife yesterday afternoon at 5.30. If you would care to verify the incident, pray do so. [Produces diary of her own.] I never travel without my diary. One should always have something sensational to read in the train. I am so sorry, dear Cecily, if it is any disappointment to you, but I am afraid I have the prior claim.

**Cecily**: It would distress me more than I can tell you, dear Gwendolen, if it caused you any mental or physical anguish, but I feel bound to point out that since Ernest proposed to you he clearly has changed his mind.

**Gwendolen** [meditatively]: If the poor fellow has been entrapped into any foolish promise I shall consider it my duty to rescue him at once, and with a firm hand.

**Cecily** [thoughtfully and sadly]: Whatever unfortunate entanglement my dear boy may have got into, I will never reproach him with it after we are married.

**Gwendolen**: Do you allude to me, Miss Cardew, as an entanglement? You are presumptuous. On an occasion of this kind it becomes more than a moral duty to speak one's mind. It becomes a pleasure.

**Cecily**: Do you suggest, Miss Fairfax, that I entrapped Ernest into an engagement? How dare you? This is no time for wearing the shallow mask of manners. When I see a spade I call it a spade.

**Gwendolen** [satirically]: I am glad to say that I have never seen a spade. It is obvious that our social spheres have been widely different.

[Enter **Merriman**, followed by the footman. He carries a salver, table cloth, and plate stand. **Cecily** is about to retort. The presence of the servants exercises a restraining influence, under which both girls chafe.]

**Merriman**: Shall I lay tea here as usual, Miss?

**Cecily** [sternly, in a calm voice]: Yes, as usual. [**Merriman** begins to clear table and lay cloth. A long pause. **Cecily** and **Gwendolen** glare at each other.]

**Gwendolen**: Are there many interesting walks in the vicinity, Miss Cardew?

**Cecily**: Oh! yes! a great many. From the top of one of the hills quite close one can see five counties.

**Gwendolen**: Five counties! I don't think I should like that; I hate crowds.

**Cecily** [sweetly]: I suppose that is why you live in town? [**Gwendolen** bites her lip, and beats her foot nervously with her parasol.]

**Gwendolen**: [Looking round.] Quite a well-kept garden this is, Miss Cardew.

**Cecily**: So glad you like it, Miss Fairfax.

**Gwendolen**: I had no idea there were any flowers in the country.

**Cecily**: Oh, flowers are as common here, Miss Fairfax, as people are in London.

**Gwendolen**: Personally I cannot understand how anybody manages to exist in the country, if anybody who is anybody does. The country always bores me to death.

**Cecily**: Ah! This is what the newspapers call agricultural depression, is it not? I believe the aristocracy are suffering very much from it just at present. It is almost an epidemic amongst them, I have been told. May I offer you some tea, Miss Fairfax?

**Gwendolen** [with elaborate politeness]: Thank you. [Aside.] Detestable girl! But I require tea!

**Cecily** [sweetly]: Sugar?

**Gwendolen** [superciliously]: No, thank you. Sugar is not fashionable any more. [**Cecily** looks angrily at her, takes up the tongs and puts four lumps of sugar into the cup.]

**Cecily** [severely]: Cake or bread and butter?

**Gwendolen** [in a bored manner]: Bread and butter, please. Cake is rarely seen at the best houses nowadays.

**Cecily** [cuts a very large slice of cake, and puts it on the tray]: Hand that to Miss Fairfax.

[**Merriman** does so, and goes out with footman. **Gwendolen** drinks the tea and makes a grimace. Puts down cup at once, reaches out her hand to the bread and butter, looks at it, and finds it is cake. Rises in indignation.]

**Gwendolen**: You have filled my tea with lumps of sugar, and though I asked most distinctly for bread and butter, you have given me cake. I am known for the gentleness of my disposition, and the extraordinary sweetness of my nature, but I warn you, Miss Cardew, you may go too far.

**Cecily** [rising]: To save my poor, innocent, trusting boy from the machinations of any other girl there are no lengths to which I would not go.

**Gwendolen**: From the moment I saw you I distrusted you. I felt that you were false and deceitful. I am never deceived in such matters. My first impressions of people are invariably right.

**Cecily**: It seems to me, Miss Fairfax, that I am trespassing on your valuable time. No doubt you have many other calls of a similar character to make in the neighbourhood.

*Death of a Salesman* by Arthur Miller (1949)

Oh, yeah, my father lived many years in Alaska. He was an adventurous man. We've got quite a little streak of self-reliance in our family. I thought I'd go out with my older brother and try to locate him, and maybe settle in the North with the old man. And I was almost decided to go, when I met a salesman in the Parker House. His name was Dave Singleman. And he was eighty-four years old, and he'd drummed merchandise in thirty-one states. And old Dave, he'd go up to his room, y'understand, put on his green velvet slippers—I'll never forget—and pick up his phone and call the buyers, and without ever leaving his room, at the age of eighty-four, he made his living. And when I saw that, I realized that selling was the greatest career a man could want. 'Cause what could be more satisfying than to be able to go, at the age of eighty-four, into twenty or thirty different cities, and pick up a phone, and be remembered and loved and helped by so many different people? Do you know? When he died—and by the way he died the death of a salesman, in his green velvet slippers in the smoker of the New York, New Haven and Hartford, going into Boston—when he died, hundreds of salesmen and buyers were at his funeral. Things were sad on a lotta trains for months after that. He stands up. Howard has not looked at him. In those days there was personality in it, Howard. There was respect, and comradeship, and gratitude in it. Today, it's all cut and dried, and there's no chance for bringing friendship to bear—or personality. You see what I mean? They don't know me anymore.

**A Raisin in the Sun by Lorraine Hansberry (1959)**

From Act III

BENEATHA: He's no brother of mine.

MAMA: What you say?

BENEATHA: I said that that individual is that room is no brother of mine.

MAMA: That's what I thought you said. You feeling like you better than he is today? [BENEATHA *does not answer.*] Yes? What you tell him a minute ago? That he wasn't a man? Yes? You give him up for me? You done wrote his epitaph too—like the rest of the world? Well who give you the privilege?

BENEATHA: Be on my side for once! You say what he just did, Mama! You saw him—down on his knees. Wasn't it you who taught me—to despise any man who would do that. Do what he's going to do.

MAMA: Yes—I taught you that. Me and your daddy. But I thought I taught you something else too... I thought I taught you to love him.

BENEATHA: Love him? There is nothing left to love.

MAMA: There is always something left to love. And if you ain't learned that you ain't learned nothing. [*Looking at her.*] Have you cried for that boy today? I don't mean for yourself and for the family 'cause we lost the money. I mean for him; what he been through and what it done to him. Child, when do you think is the time to love somebody the most; when they done good and made things easy for everybody? Well then, you ain't through learning—because that ain't the time at all. It's when he's at him lowest and can't believe in hisself 'cause the world done whipped him so. When you starts measuring somebody, measure him right, child, measure him right. Make sure you done taken into account what hills and valleys he come through before he got to wherever he is.

## Grades 11–12: Poetry

### “A Valediction Forbidding Mourning” by John Donne (1633)

As virtuous men pass mildly' away,  
And whisper to their souls to go,  
Whilst some of their sad friends do say  
The breath goes now, and some say, no;

So let us melt, and make no noise,  
No tear floods, nor sigh-tempests move,  
'Twere profanation of our joys  
To tell the laity our love.

Moving of th' earth brings harms and fears,  
Men reckon what it did and meant;  
But trepidation of the spheres,  
Though greater far, is innocent.

Dull sublunary lovers' love  
(Whose soul is sense) cannot admit  
Absence, because it doth remove  
Those things which elemented it.

But we by' a love so much refined  
That our selves know not what it is,  
Inter-assured of the mind,  
Care less, eyes, lips, and hands to miss.

Our two souls therefore, which are one,  
Though I must go, endure not yet  
A breach, but an expansion,  
Like gold to airy thinness beat.

If they be two, they are two so  
As stiff twin compasses are two;  
Thy soul, the fixed foot, makes no show  
To move, but doth, if th' other do.

And though it in the center sit,  
Yet when the other far doth roam,  
It leans and hearkens after it,  
And grows erect, as that comes home.

Such wilt thou be to me, who must  
Like th' other foot, obliquely run.  
Thy firmness makes my circle just.  
And makes me end where I begun.

**“Ode on a Grecian Urn” by John Keats (1820)**

Thou still unravish'd bride of quietness,  
Thou foster-child of silence and slow time,  
Sylvan historian, who canst thus express  
A flowery tale more sweetly than our rhyme:  
What leaf-fring'd legend haunts about thy shape  
Of deities or mortals, or of both,  
In Tempe or the dales of Arcady?  
What men or gods are these? What maidens loth?  
What mad pursuit? What struggle to escape?  
What pipes and timbrels? What wild ecstasy?

Heard melodies are sweet, but those unheard  
Are sweeter; therefore, ye soft pipes, play on;  
Not to the sensual ear, but, more endear'd,  
Pipe to the spirit ditties of no tone:  
Fair youth, beneath the trees, thou canst not leave  
Thy song, nor ever can those trees be bare;  
Bold Lover, never, never canst thou kiss,  
Though winning near the goal—yet, do not grieve;  
She cannot fade, though thou hast not thy bliss,  
For ever wilt thou love, and she be fair!

Ah, happy, happy boughs! that cannot shed  
Your leaves, nor ever bid the Spring adieu;  
And, happy melodist, unwearied,  
For ever piping songs for ever new;  
More happy love! more happy, happy love!  
For ever warm and still to be enjoy'd,  
For ever panting, and for ever young; All breathing human passion far above,  
That leaves a heart high-sorrowful and cloy'd,  
A burning forehead, and a parching tongue.

Who are these coming to the sacrifice?  
To what green altar, O mysterious priest,  
Lead'st thou that heifer lowing at the skies,  
And all her silken flanks with garlands drest?  
What little town by river or sea shore,  
Or mountain-built with peaceful citadel,  
Is emptied of this folk, this pious morn?  
And, little town, thy streets for evermore  
Will silent be; and not a soul to tell  
Why thou art desolate, can e'er return.

O Attic shape! Fair attitude! with brede  
Of marble men and maidens overwrought,  
With forest branches and the trodden weed;  
Thou, silent form, dost tease us out of thought  
As doth eternity: Cold Pastoral!  
When old age shall this generation waste,  
Thou shalt remain, in midst of other woe  
Than ours, a friend to man, to whom thou say'st,

"Beauty is truth, truth beauty,"—that is all  
Ye know on earth, and all ye need to know.

**“Song of Myself” from *Leaves of Grass* by Walt Whitman (c1860)**

I celebrate myself, and sing myself,  
And what I assume you shall assume,  
For every atom belonging to me as good belongs to you.

I loafe and invite my soul,  
I lean and loafe at my ease observing a spear of summer grass.

My tongue, every atom of my blood, form'd from this soil, this air,  
Born here of parents born here from parents the same, and their parents the same,  
I, now thirty-seven years old in perfect health begin,  
Hoping to cease not till death.

Creeds and schools in abeyance,  
Retiring back a while sufficed at what they are, but never forgotten,  
I harbor for good or bad, I permit to speak at every hazard,  
Nature without check with original energy.

**“Because I Could Not Stop for Death” by Emily Dickinson (1890)**

Because I could not stop for Death—  
He kindly stopped for me—  
The Carriage held but just Ourselves—  
And Immortality.

We slowly drove—He knew no haste  
And I had put away  
My labor and my leisure too,  
For His Civility—

We passed the School, where Children strove  
At Recess—in the Ring—  
We passed the Fields of Grazing Grain—  
We passed the Setting Sun—

We paused before a House that seemed  
A Swelling of the Ground—  
The Room was scarcely visible—  
The Cornice—in the Ground—

Since then—‘tis Centuries—and yet  
Feels shorter than the Day  
I first surmised the Horses’ Heads  
Were toward Eternity—

## “Mending Wall” by Robert Frost (1914)

SOMETHING there is that doesn't love a wall,  
That sends the frozen-ground-swell under it,  
And spills the upper boulders in the sun;  
And makes gaps even two can pass abreast.  
The work of hunters is another thing:  
I have come after them and made repair  
Where they have left not one stone on stone,  
But they would have the rabbit out of hiding,  
To please the yelping dogs. The gaps I mean,  
No one has seen them made or heard them made,  
But at spring mending-time we find them there.  
I let my neighbor know beyond the hill;  
And on a day we meet to walk the line  
And set the wall between us once again.  
We keep the wall between us as we go.  
To each the boulders that have fallen to each.  
And some are loaves and some so nearly balls  
We have to use a spell to make them balance:  
"Stay where you are until our backs are turned!"  
We wear our fingers rough with handling them.  
Oh, just another kind of outdoor game,  
One on a side. It comes to little more:  
He is all pine and I am apple-orchard.  
My apple trees will never get across  
And eat the cones under his pines, I tell him.  
He only says, "Good fences make good neighbors."  
Spring is the mischief in me, and I wonder  
If I could put a notion in his head:  
"Why do they make good neighbors? Isn't it  
Where there are cows? But here there are no cows.  
Before I built a wall I'd ask to know  
What I was walling in or walling out,  
And to whom I was like to give offence.  
Something there is that doesn't love a wall,  
That wants it down!" I could say "Elves" to him,  
But it's not elves exactly, and I'd rather  
He said it for himself. I see him there,  
Bringing a stone grasped firmly by the top  
In each hand, like an old-stone savage armed.  
He moves in darkness as it seems to me,  
Not of woods only and the shade of trees.  
He will not go behind his father's saying,  
And he likes having thought of it so well  
He says again, "Good fences make good neighbors."

### Media Text:

The Frost Free Library, with essays, interviews, and audio:  
<http://www.frostfriends.org/library.html>

**“Ode to My Suit” by Pablo Neruda (1954) translated by Margaret Sayers Peden**

Every morning, suit,  
you are waiting on a chair  
to be filled,  
by my vanity, my love,  
my hope, my body.

[...]

**“Sestina” by Elizabeth Bishop (1983)**

September rain falls on the house.  
In the failing light, the old grandmother  
sits in the kitchen with the child  
beside the Little Marvel Stove,  
reading the jokes from the almanac,  
laughing and talking to hide her tears.

[...]

**“The Latin Deli: An Ars Poetica” by Judith Ortiz Cofer (1988)**

Presiding over a formica counter,  
Plastic Mother and Child magnetized  
to the top of an ancient register,  
the heady mix of smells from the open bins  
of dried codfish, the green plantains  
hanging in stalks like votive offerings,  
she is the Patroness of Exiles,

[...]

**“Demeter’s Prayer to Hades” by Rita Dove (1995)**

This alone is what I wish for you: knowledge.  
To understand each desire has an edge,  
To know we are responsible for the lives  
we change.

[...]

**“Man Listening to Disc” by Billy Collins (2001)**

This is not bad --  
ambling along 44th Street  
with Sonny Rollins for company,  
his music flowing through the soft calipers  
of these earphones,

[...]

## Grades 11–12: Informational Texts (English Language Arts)

### *The Declaration of Independence* by Thomas Jefferson (1776)

IN CONGRESS, July 4, 1776

The unanimous Declaration of the thirteen united States of America

When in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume, among the Powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness.--That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed,--That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shown, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security.--Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his

Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their Public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative Powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the mean time exposed to all the dangers of invasion from without, and convulsions within.

He has endeavoured to prevent the population of these States; for that purpose obstructing the Laws of Naturalization of Foreigners; refusing to pass others to encourage their migration hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary Powers.

He has made judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our People, and eat out their substance.

He has kept among us, in times of peace, Standing Armies without the Consent of our legislatures.

He has affected to render the Military independent of and superior to the Civil Power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock Trial, from Punishment for any Murders which they should commit on the Inhabitants of these States:

For cutting off our Trade with all parts of the world:

For imposing taxes on us without our Consent:

For depriving us, in many cases, of the benefits of Trial by Jury:

For transporting us beyond Seas to be tried for pretended offences:

For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies:

For taking away our Charters, abolishing our most valuable Laws, and altering fundamentally the Forms of our Governments:

For suspending our own Legislatures and declaring themselves invested with Power to legislate for us in all cases whatsoever.

He has abdicated Government here, by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large armies of foreign mercenaries to complete the works of death, desolation and tyranny, already begun with circumstances of Cruelty & perfidy scarcely paralleled in the most barbarous ages, and totally unworthy of the Head of a civilized nation.

He has constrained our fellow Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes and conditions.

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free People.

Nor have We been wanting in attention to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

We, therefore, the Representatives of the United States of America, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by the Authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be Free and Independent States; that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do. And for the support of this Declaration, with a firm reliance on the Protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

## *The Crisis* by Thomas Paine (1776)

From Number I

These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly: it is dearness only that gives every thing its value. Heaven knows how to put a proper price upon its goods; and it would be strange indeed if so celestial an article as FREEDOM should not be highly rated. Britain, with an army to enforce her tyranny, has declared that she has a right (not only to TAX) but "to BIND us in ALL CASES WHATSOEVER," and if being bound in that manner, is not slavery, then is there not such a thing as slavery upon earth. Even the expression is impious; for so unlimited a power can belong only to God.

Whether the independence of the continent was declared too soon, or delayed too long, I will not now enter into as an argument; my own simple opinion is, that had it been eight months earlier, it would have been much better. We did not make a proper use of last winter, neither could we, while we were in a dependent state. However, the fault, if it were one, was all our own; we have none to blame but ourselves. But no great deal is lost yet. All that Howe has been doing for this month past, is rather a ravage than a conquest, which the spirit of the Jerseys, a year ago, would have quickly repulsed, and which time and a little resolution will soon recover.

I have as little superstition in me as any man living, but my secret opinion has ever been, and still is, that God Almighty will not give up a people to military destruction, or leave them unsupportedly to perish, who have so earnestly and so repeatedly sought to avoid the calamities of war, by every decent method which wisdom could invent. Neither have I so much of the infidel in me, as to suppose that He has relinquished the government of the world, and given us up to the care of devils; and as I do not, I cannot see on what grounds the king of Britain can look up to heaven for help against us: a common murderer, a highwayman, or a house-breaker, has as good a pretence as he.

*Walden* by Henry David Thoreau (1854)

I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practise resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life, to live so sturdily and Spartan-like as to put to rout all that was not life, to cut a broad swath and shave close, to drive life into a corner, and reduce it to its lowest terms, and, if it proved to be mean, why then to get the whole and genuine meanness of it, and publish its meanness to the world; or if it were sublime, to know it by experience, and be able to give a true account of it in my next excursion. For most men, it appears to me, are in a strange uncertainty about it, whether it is of the devil or of God, and have somewhat hastily concluded that it is the chief end of man here to "glorify God and enjoy him forever."

## “Society and Solitude” by Ralph Waldo Emerson (1857)

'T is hard to mesmerize ourselves, to whip our own top; but through sympathy we are capable of energy and endurance. Concert fires people to a certain fury of performance they can rarely reach alone. Here is the use of society: it is so easy with the great to be great; so easy to come up to an existing standard; — as easy as it is to the lover to swim to his maiden through waves so grim before. The benefits of affection are immense; and the one event which never loses its romance, is the encounter with superior persons on terms allowing the happiest intercourse.

It by no means follows that we are not fit for society, because *soirées* are tedious, and because the *soirée* finds us tedious. A backwoodsman, who had been sent to the university, told me that, when he heard the best-bred young men at the law school talk together, he reckoned himself a boor; but whenever he caught them apart, and had one to himself alone, then they were the boors, and he the better man. And if we recall the rare hours when we encountered the best persons, we then found ourselves, and then first society seemed to exist. That was society, though in the transom of a brig, or on the Florida Keys.

A cold, sluggish blood thinks it has not facts enough to the purpose, and must decline its turn in the conversation. But they who speak have no more, --have less. 'Tis not new facts that avail, but the heat to dissolve everybody's facts. The capital defect of cold, arid natures is the want of animal spirits. They seem a power incredible, as if God should raise the dead. The recluse witnesses what others perform by their aid, with a kind of fear. It is as much out of his possibility as the prowess of Cœur-de-Lion, or an Irishman's day's-work on the railroad. 'Tis said, the present and the future are always rivals. Animal spirits constitute the power of the present, and their feats are like the structure of a pyramid. Their result is a lord, a general, or a boon companion. Before these, what a base mendicant is Memory with his leathern badge! But this genial heat is latent in all constitutions, and is disengaged only by the friction of society. As Bacon said of manners, "To obtain them, it only needs not to despise them," so we say of animal spirits, that they are the spontaneous product of health and of a social habit. "For behavior, men learn it, as they take diseases, one of another."

But the people are to be taken in very small doses. If solitude is proud, so is society vulgar. In society, high advantages are set down to the individual as disqualifications. We sink as easily as we rise, through sympathy. So many men whom I know are degraded by their sympathies, their native aims being high enough, but their relation all too tender to the gross people about them. Men cannot afford to live together by their merits, and they adjust themselves by their demerits, --by their love of gossip, or by sheer tolerance and animal good-nature. They untune and dissipate the brave aspirant.

The remedy is, to reinforce each of these moods from the other. Conversation will not corrupt us, if we come to the assembly in our own garb and speech, and with the energy of health to select what is ours and reject what is not. Society we must have; but let it be society, and not exchanging news, or eating from the same dish. Is it society to sit in one of your chairs? I cannot go into the houses of my nearest relatives, because I do not wish to be alone. Society exists by chemical affinity, and not otherwise.

Put any company of people together with freedom for conversation, and a rapid self-distribution takes place, into sets and pairs. The best are accused of exclusiveness. It would be more true to say, they separate as oil from water, as children from old people, without love or hatred in the matter, each seeking his like; and any interference with the affinities would produce constraint and suffocation. All conversation is a magnetic experiment. I know that my friend can talk eloquently; you know that he cannot articulate a sentence: we have seen him in different company. Assort your party, or invite none. Put Stubbs and Coleridge, Quintilian and Aunt Miriam, into pairs, and you make them all wretched. 'Tis an extempore Sing-Sing built in a parlor. Leave them to seek their own mates, and they will be as merry as sparrows.

A higher civility will re-establish in our customs a certain reverence which we have lost. What to do with these brisk young men who break through all fences, and make themselves at home in every house? I find out in an instant if my companion does not want me, and ropes cannot hold me when my welcome is gone. One would think that the affinities would pronounce themselves with a surer reciprocity.

Here again, as so often, Nature delights to put us between extreme antagonisms, and our safety is in the skill with which we keep the diagonal line. Solitude is impracticable, and society fatal. We must keep our head in the one and our hands in the other. The conditions are met, if we keep our independence, yet do not lose our sympathy. These wonderful horses need to be driven by fine hands. We require such a solitude as shall hold us to its revelations when we are in the street and in palaces; for most men are cowed in society, and say good things to you in private, but will not stand to them in public. But let us not be the victims of words. Society and solitude are deceptive names. It is not the circumstance of seeing more or fewer people, but the readiness of sympathy, that imports; and a sound mind will derive its principles from insight, with ever a purer ascent to the sufficient and absolute right, and will accept society as the natural element in which they are to be applied.

## “The Fallacy of Success” by G. K. Chesterton (1909)

There has appeared in our time a particular class of books and articles which I sincerely and solemnly think may be called the silliest ever known among men. They are much more wild than the wildest romances of chivalry and much more dull than the dullest religious tract. Moreover, the romances of chivalry were at least about chivalry; the religious tracts are about religion. But these things are about nothing; they are about what is called Success. On every bookstall, in every magazine, you may find works telling people how to succeed. They are books showing men how to succeed in everything; they are written by men who cannot even succeed in writing books. To begin with, of course, there is no such thing as Success. Or, if you like to put it so, there is nothing that is not successful. That a thing is successful merely means that it is; a millionaire is successful in being a millionaire and a donkey in being a donkey. Any live man has succeeded in living; any dead man may have succeeded in committing suicide. But, passing over the bad logic and bad philosophy in the phrase, we may take it, as these writers do, in the ordinary sense of success in obtaining money or worldly position. These writers profess to tell the ordinary man how he may succeed in his trade or speculation—how, if he is a builder, he may succeed as a builder; how, if he is a stockbroker, he may succeed as a stockbroker. They profess to show him how, if he is a grocer, he may become a sporting yachtsman; how, if he is a tenth-rate journalist, he may become a peer; and how, if he is a German Jew, he may become an Anglo-Saxon. This is a definite and business-like proposal, and I really think that the people who buy these books (if any people do buy them) have a moral, if not a legal, right to ask for their money back. Nobody would dare to publish a book about electricity which literally told one nothing about electricity; no one would dare publish an article on botany which showed that the writer did not know which end of a plant grew in the earth. Yet our modern world is full of books about Success and successful people which literally contain no kind of idea, and scarcely and kind of verbal sense.

It is perfectly obvious that in any decent occupation (such as bricklaying or writing books) there are only two ways (in any special sense) of succeeding. One is by doing very good work, the other is by cheating. Both are much too simple to require any literary explanation. If you are in for the high jump, either jump higher than any one else, or manage somehow to pretend that you have done so. If you want to succeed at whist, either be a good whist-player, or play with marked cards. You may want a book about jumping; you may want a book about whist; you may want a book about cheating at whist. But you cannot want a book about Success. Especially you cannot want a book about Success such as those which you can now find scattered by the hundred about the book-market. You may want to jump or to play cards; but you do not want to read wandering statements to the effect that jumping is jumping, or that games are won by winners. If these writers, for instance, said anything about success in jumping it would be something like this: ‘The jumper must have a clear aim before him. He must desire definitely to jump higher than the other men who are in for the same competition. He must let no feeble feelings of mercy (sneaked from the sickening Little Englanders and Pro-Boers) prevent him from trying to *do his best*. He must remember that a competition in jumping is distinctly competitive, and that, as Darwin has gloriously demonstrated, THE WEAKEST GO TO THE WALL.’ That is the kind of thing the book would say, and very useful it would be, no doubt, if read out in a low and tense voice to a young man just about to take the high jump. Or suppose that in the course of his intellectual rambles the philosopher of Success dropped upon our other case, that of playing cards, his bracing advice would run—‘In playing cards it is very necessary to avoid the mistake (commonly made by maudlin humanitarians and Free Traders) of permitting your opponent to win the game. You must have grit and snap and *go in to win*. The days of idealism and superstition are over. We live in a time of science and hard common sense, and it has now been definitely proved that in any game where two are playing IF ONE DOES NOT WIN THE OTHER WILL.’ It is all very stirring, of course; but I confess that if I were playing cards I would rather have some decent little book which told me the rules of the game. Beyond the rules of the game it is all a question either of talent or dishonesty; and I will undertake to provide either one or the other—which, it is not for me to say.

*The American Language* by H. L. Mencken (1938)

Excerpt from Section I, "The Nature of Slang," from Chapter XI, "American Slang,"

... What chiefly lies behind (slang) is simply a kind of linguistic exuberance, an excess of word-making energy. It relates itself to the standard language a great deal as dancing relates itself to music. But there is also something else. The best slang is not only ingenious and amusing; it also embodies a kind of social criticism. It not only provides new names for a series of every-day concepts, some new and some old; it also says something about them. "Words which produce the slang effect," observes Frank Sechrist, "arouse associations what are incongruous or incompatible with those of customary thinking."

Everyone, including the metaphysician in his study or the eremite in his cell, has a large vocabulary of slang, but the vocabulary of the vulgar is likely to be larger than that of the cultured, and it is harder worked. Its content may be divided into two categories: (a) old words, whether used singly or in combination, that have been put to new uses, usually metaphorical, and (b) new words that have not yet been admitted to the standard vocabulary. Examples of the first type are *rubberneck*, for a gaping and prying person, and *iceberg*, for a cold woman; examples of the second are *hoosegow*, *flim-flam*, *blurb*, *bazoo* and *blah*. There is a constant movement of slang into accepted usage. *Nice*, as an adjective of all work, signifying anything satisfactory, was once used in slang only, but today no one would question "a nice day," "a nice time," or "a nice hotel."... The verb-phrase *to hold up* is now perfectly good American, but so recently as 1901 the late Brander Matthews was sneering at it as slang. In the same way many other verb-phrases, e.g., *to cave in*, *fill the bill* and *to fly off the handle*, once viewed askance, have gradually worked their way to a relatively high level of the standard speech. On some indeterminate tomorrow *to stick up* and *to take for a ride* may follow them. ...

## “Politics and the English Language” by George Orwell (1946)

Most people who bother with the matter at all would admit that the English language is in a bad way, but it is generally assumed that we cannot by conscious action do anything about it. Our civilization is decadent and our language—so the argument runs—must inevitably share in the general collapse. It follows that any struggle against the abuse of language is a sentimental archaism, like preferring candles to electric light or hansom cabs to aeroplanes. Underneath this lies the half-conscious belief that language is a natural growth and not an instrument which we shape for our own purposes.

Now, it is clear that the decline of a language must ultimately have political and economic causes: it is not due simply to the bad influence of this or that individual writer. But an effect can become a cause, reinforcing the original cause and producing the same effect in an intensified form, and so on indefinitely. A man may take to drink because he feels himself to be a failure, and then fail all the more completely because he drinks. It is rather the same thing that is happening to the English language. It becomes ugly and inaccurate because our thoughts are foolish, but the slovenliness of our language makes it easier for us to have foolish thoughts. The point is that the process is reversible. Modern English, especially written English, is full of bad habits which spread by imitation and which can be avoided if one is willing to take the necessary trouble. If one gets rid of these habits one can think more clearly, and to think clearly is a necessary first step toward political regeneration: so that the fight against bad English is not frivolous and is not the exclusive concern of professional writers. I will come back to this presently, and I hope that by that time the meaning of what I have said here will have become clearer. Meanwhile, here are five specimens of the English language as it is now habitually written.

These five passages have not been picked out because they are especially bad—I could have quoted far worse if I had chosen—but because they illustrate various of the mental vices from which we now suffer. They are a little below the average, but are fairly representative examples. I number them so that I can refer back to them when necessary:

“(1) I am not, indeed, sure whether it is not true to say that the Milton who once seemed not unlike a seventeenth-century Shelley had not become, out of an experience ever more bitter in each year, more alien [sic] to the founder of that Jesuit sect which nothing could induce him to tolerate.”

Professor Harold Laski (*Essay in Freedom of Expression*)

“(2) Above all, we cannot play ducks and drakes with a native battery of idioms which prescribes egregious collocations of vocables as the Basic *put up with* for *tolerate*, or *put at a loss* for *bewilder*.”

Professor Lancelot Hogben (*Interglossa*)

“(3) On the one side we have the free personality: by definition it is not neurotic, for it has neither conflict nor dream. Its desires, such as they are, are transparent, for they are just what institutional approval keeps in the forefront of consciousness; another institutional pattern would alter their number and intensity; there is little in them that is natural, irreducible, or culturally dangerous. But *on the other side*, the social bond itself is nothing but the mutual reflection of these self-secure integrities. Recall the definition of love. Is not this the very picture of a small academic? Where is there a place in this hall of mirrors for either personality or fraternity?”

Essay on psychology in *Politics* (New York)

“(4) All the ‘best people’ from the gentlemen’s clubs, and all the frantic fascist captains, united in common hatred of Socialism and bestial horror at the rising tide of the mass revolutionary movement, have turned to acts of provocation, to foul incendiarism, to medieval legends of poisoned wells, to legalize their own destruction of proletarian organizations, and rouse the agitated petty-bourgeoisie to chauvinistic fervor on behalf of the fight against the revolutionary way out of the crisis.”

Communist pamphlet

“(5) If a new spirit is to be infused into this old country, there is one thorny and contentious reform which must be tackled, and that is the humanization and galvanization of the B.B.C. Timidity here will bespeak canker and atrophy of the soul. The heart of Britain may be sound and of strong beat, for instance, but the British lion's roar at present is like that of Bottom in Shakespeare's *Midsummer Night's Dream*—as gentle as any sucking dove. A virile new Britain cannot continue indefinitely to be traduced in the eyes or rather ears, of the world by the effete languors of Langham Place, brazenly masquerading as ‘standard English.’ When the Voice of Britain is heard at nine o'clock, better far and infinitely less ludicrous to hear aitches honestly dropped than the present priggish, inflated, inhibited, school-ma'amish arch braying of blameless bashful mewling maidens!”

Letter in *Tribune*

Each of these passages has faults of its own, but, quite apart from avoidable ugliness, two qualities are common to all of them. The first is staleness of imagery; the other is lack of precision. The writer either has a meaning and cannot express it, or he inadvertently says something else, or he is almost indifferent as to whether his words mean anything or not. This mixture of vagueness and sheer incompetence is the most marked characteristic of modern English prose, and especially of any kind of political writing. As soon as certain topics are raised, the concrete melts into the abstract and no one seems able to think of turns of speech that are not hackneyed: prose consists less and less of *words* chosen for the sake of their meaning, and more and more of *phrases* tacked together like the sections of a prefabricated hen-house.

## **“Abraham Lincoln and the Self-Made Myth” by Richard Hofstadter (1948)**

Lincoln was shaken by the presidency. Back in Springfield, politics had been a sort of exhilarating game; but in the White House, politics was power, and power was responsibility. Never before had Lincoln held executive office. In public life he had always been an insignificant legislator whose votes were cast in concert with others and whose decisions in themselves had neither finality nor importance. As President he might consult with others, but innumerable grave decisions were in the end his own, and with them came a burden of responsibility terrifying in its dimensions.

Lincoln's rage for personal success, his external and worldly ambition, was quieted when he entered the White House, and he was at last left alone to reckon with himself. To be confronted with the fruits of his victory only to find that it meant choosing between life and death for others was immensely sobering. That Lincoln should have shouldered the moral burden of the war was characteristic of the high seriousness into which he had grown since 1854; and it may be true, as Professor Charles W. Ramsdell suggested, that he was stricken by an awareness of his own part in whipping up the crisis. This would go far to explain the desperation with which he issued pardons and the charity that he wanted to extend to the conquered South at the war's close. In one of his rare moments of self-revelation he is reported to have said: "Now I don't know what the soul is, but whatever it is, I know that it can humble itself." The great prose of the presidential years came from a soul that had been humbled. Lincoln's utter lack of personal malice during these years, his humane detachment, his tragic sense of life, have no parallel in political history.

"Lincoln," said Herndon, "is a man of heart—aye, as gentle as a woman's and as tender. . . ." Lincoln was moved by the wounded and dying men, moved as no one in a place of power can afford to be. He had won high office by means sometimes rugged, but once there, he found that he could not quite carry it off. For him it was impossible to drift into the habitual callousness of the sort of officialdom that sees men only as pawns to be shifted here and there and "expended" at the will of others. It was a symbolic thing that his office was so constantly open, that he made himself more accessible than any other chief executive in our history. "Men moving only in an official circle," he told Carpenter, "are apt to become merely official—not to say arbitrary—in their ideas, and are apter and apter with each passing day to forget that they only hold power in a representative capacity." Is it possible to recall anyone else in modern history who could exercise so much power and yet feel so slightly the private corruption that goes with it? Here, perhaps, is the best measure of Lincoln's personal eminence in the human calendar—that he was chastened and not intoxicated by power.

## “Letter from Birmingham City Jail” by Martin Luther King, Jr. (1963)

My Dear Fellow Clergymen:

While confined here in the Birmingham city jail, I came across your recent statement calling my present activities "unwise and untimely." Seldom do I pause to answer criticism of my work and ideas. If I sought to answer all the criticisms that cross my desk, my secretaries would have little time for anything other than such correspondence in the course of the day, and I would have no time for constructive work. But since I feel that you are men of genuine good will and that your criticisms are sincerely set forth, I want to try to answer your statements in what I hope will be patient and reasonable terms.

I think I should indicate why I am here in Birmingham, since you have been influenced by the view which argues against "outsiders coming in." I have the honor of serving as president of the Southern Christian Leadership Conference, an organization operating in every southern state, with headquarters in Atlanta, Georgia. We have some eighty-five affiliated organizations across the South, and one of them is the Alabama Christian Movement for Human Rights. Frequently we share staff, educational and financial resources with our affiliates. Several months ago the affiliate here in Birmingham asked us to be on call to engage in a nonviolent direct-action program if such were deemed necessary. We readily consented, and when the hour came we lived up to our promise. So I, along with several members of my staff, am here because I was invited here I am here because I have organizational ties here.

But more basically, I am in Birmingham because injustice is here. Just as the prophets of the eighth century B.C. left their villages and carried their "thus saith the Lord" far beyond the boundaries of their home towns, and just as the Apostle Paul left his village of Tarsus and carried the gospel of Jesus Christ to the far corners of the Greco-Roman world, so am I compelled to carry the gospel of freedom beyond my own home town. Like Paul, I must constantly respond to the Macedonian call for aid.

Moreover, I am cognizant of the interrelatedness of all communities and states. I cannot sit idly by in Atlanta and not be concerned about what happens in Birmingham. Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. Never again can we afford to live with the narrow, provincial "outside agitator" idea. Anyone who lives inside the United States can never be considered an outsider anywhere within its bounds.

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As reprinted in *Why We Can't Wait* by King, Jr., M. L. (2000). New York City: Signet Classics.

## “Mother Tongue” by Amy Tan (1990)

Just last week, I was walking down the street with my mother, and I again found myself conscious of the English I was using, the English I do use with her. We were talking about the price of new and used furniture and I heard myself saying this: “Not waste money that way.” My husband was with us as well, and he didn’t notice any switch in my English. And then I realized why. It’s because over the twenty years we’ve been together I’ve often used that same kind of English with him, and sometimes he even uses it with me. It has become our language of intimacy, a different sort of English that relates to family talk, the language I grew up with.

So you’ll have some idea of what this family talk I heard sounds like, I’ll quote what my mother said during a recent conversation which I videotaped and then transcribed. During this conversation, my mother was talking about a political gangster in Shanghai who had the same last name as her family’s, Du, and how the gangster in his early years wanted to be adopted by her family, which was rich by comparison. Later, the gangster became more powerful, far richer than my mother’s family, and one day showed up at my mother’s wedding to pay his respects. Here’s what she said in part: “Du Yusong having business like fruit stand. Like off the street kind. He is Du like Du Zong — but not Tsung-ming Island people. The local people call putong, the river east side, he belong to that side local people. That man want to ask Du Zong father take him in like become own family. Du Zong father wasn’t look down on him, but didn’t take seriously, until that man big like become a mafia. Now important person, very hard to inviting him. Chinese way, came only to show respect, don’t stay for dinner. Respect for making big celebration, he shows up. Mean gives lots of respect. Chinese custom. Chinese social life that way. If too important won’t have to stay too long. He come to my wedding. I didn’t see, I heard it. I gone to boy’s side, they have YMCA dinner. Chinese age I was nineteen.”

You should know that my mother’s expressive command of English belies how much she actually understands. She reads the Forbes report, listens to Wall Street Week, converses daily with her stockbroker, reads all of Shirley MacLaine’s books with ease—all kinds of things I can’t begin to understand. Yet some of my friends tell me they understand 50 percent of what my mother says. Some say they understand 80 to 90 percent. Some say they understand none of it, as if she were speaking pure Chinese. But to me, my mother’s English is perfectly clear, perfectly natural. It’s my mother tongue. Her language, as I hear it, is vivid, direct, full of observation and imagery. That was the language that helped shape the way I saw things, expressed things, made sense of the world.

Lately, I’ve been giving more thought to the kind of English my mother speaks. Like others, I have described it to people as “broken” or “fractured” English. But I wince when I say that. It has always bothered me that I can think of no way to describe it other than “broken,” as if it were damaged and needed to be fixed, as if it lacked a certain wholeness and soundness. I’ve heard other terms used, “limited English,” for example. But they seem just as bad, as if everything is limited, including people’s perceptions of the limited English speaker.

I know this for a fact, because when I was growing up, my mother’s “limited” English limited my perception of her. I was ashamed of her English. I believed that her English reflected the quality of what she had to say. That is, because she expressed them imperfectly her thoughts were imperfect. And I had plenty of empirical evidence to support me: the fact that people in department stores, at banks, and at restaurants did not take her seriously, did not give her good service, pretended not to understand her, or even acted as if they did not hear her.

My mother has long realized the limitations of her English as well. When I was fifteen, she used to have me call people on the phone to pretend I was she. In this guise, I was forced to ask for information or even to complain and yell at people who had been rude to her. One time it was a call to her stockbroker in New York. She had cashed out her small portfolio and it just so happened we were going to go to New York the next week, our very first trip outside California. I had to get on the phone and say in an adolescent voice that was not very convincing, “This is Mrs. Tan.”

And my mother was standing in the back whispering loudly, “Why he don’t send me check, already two weeks late. So mad he lie to me, losing me money.”

And then I said in perfect English, "Yes, I'm getting rather concerned. You had agreed to send the check two weeks ago, but it hasn't arrived."

Then she began to talk more loudly. "What he want, I come to New York tell him front of his boss, you cheating me?" And I was trying to calm her down, make her be quiet, while telling the stockbroker, "I can't tolerate any more excuses. If I don't receive the check immediately, I am going to have to speak to your manager when I'm in New York next week." And sure enough, the following week there we were in front of this astonished stockbroker, and I was sitting there red-faced and quiet, and my mother, the real Mrs. Tan, was shouting at his boss in her impeccable broken English.

## “Take the Tortillas Out of Your Poetry” by Rudolfo Anaya (1995)

In a recent lecture, “Is Nothing Sacred?”, Salman Rushdie, one of the most censored authors of our time, talked about the importance of books. He grew up in a household in India where books were as sacred as bread. If anyone in the household dropped a piece of bread or a book, the person not only picked it up, but also kissed the object by way of apologizing for clumsy disrespect.

He goes on to say that he had kissed many books before he had kissed a girl. Bread and books were for his household, and for many like his, food for the body and the soul. This image of the kissing of the book one had accidentally dropped made an impression on me. It speaks to the love and respect many people have for them.

I grew up in a small town in New Mexico, and we had very few books in our household. The first one I remember reading was my catechism book. Before I went to school to learn English, my mother taught me catechism in Spanish. I remember the questions and answers I had to learn, and I remember the well-thumbed, frayed volume which was sacred to me.

Growing up with few books in the house created in me a desire and a need for them. When I started school, I remember visiting the one room library of our town and standing in front of the dusty shelves. In reality there were only a few shelves and not over a thousand books, but I wanted to read them all. There was food for my soul in the books, that much I realized.

As a child I listened to the stories of the people, the cuentos the old ones told. Those stories were my first contact with the magic of storytelling. Those stories fed my imagination, and later, when I wrote books, I found the same sense of magic and mystery in writing. In *Bless Me, Ultima*, my first novel, Antonio, my main character who had just started to school, sees in them the power of the written word. He calls books the “magic of words.”

For me, reading has always been a path toward liberation and fulfillment. To learn to read is to start down the road of liberation, a road which should be accessible to everyone. . . .

## Appendix C: Samples of Student Writing

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The following writing samples are annotated to illustrate the level of quality required to meet the writing standards for particular types of writing in a given grade band. Each of the samples exhibits the qualities of exemplary performance at a specific grade in relation to a specific set of criteria for a particular type of writing (narrative, informative/explanatory, or argument).

As a set, the samples come from students in kindergarten through grade 8 and from high school students in grades 9, 10, and 12. The students attended school in a number of different states and districts across the country.\* Some of the samples were written in class or for homework; others were written for on demand assessments. Still others are the result of extended projects that involved research. Taken as a whole, the samples reflect the wide range of conditions under which students are expected to write. Where possible, each sample includes information about the situation in which it was produced.

At the lower grades, the samples include “opinion” writing, a type of explanatory writing in which students give reasons for their opinions and preferences. Because reasons are required, such writing helps to prepare students for writing the arguments they will be expected to write beginning in grade 6.

\* The workgroup would like to express its appreciation to colleagues in Massachusetts, California, Texas, and Washington who helped us find and obtain permission for several of the samples included in the set. The group would also like to express its appreciation to the New Standards Project and to the International Reading Association, which allowed the use of several samples from their publications.

## Appendix C: Samples of Student Writing

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### Table of Contents

|   |    |
|---|----|
| Student Sample: K, Narrative<br>“I Went to Disnand”                                 | 3  |
| Student Sample: K, Informational/Explanatory<br>“Frag (Frogs)”                      | 4  |
| Student Sample: K, Opinion<br>“My fabit Book is do you Want to be my friend”        | 5  |
| Student Sample: Grade 1, Informational/Explanatory<br>“My Big Book About Spain”     | 6  |
| Student Sample: Grade 1, Narrative<br>“I bot a little coton ball”                   | 7  |
| Student Sample: Grade 2, Opinion<br>“Owl Moon”                                      | 9  |
| Student Sample: Grade 2, Narrative<br>“My first tooth is gone”                      | 10 |
| Student Sample: Grade 3, Informational/Explanatory<br>“Horses”                      | 12 |
| Student Sample: Grade 3, Narrative:<br>“When my Puppys Ranaway”                     | 15 |
| Student Sample: Grade 4, Narrative<br>“Glowing Shoes”                               | 18 |
| Student Sample: Grade 4, Argument<br>“Zoo Field Trip”                               | 21 |
| Student Sample: Grade 5, Informational/Explanatory<br>“Author Response: Roald Dahl” | 23 |
| Student Sample: Grade 5, Narrative<br>“Getting Shot and Living Through It”          | 25 |
| Student Sample: Grade 6, Argument<br>“Dear Mr. Sandler”                             | 28 |
| Student Sample: Grade 6, Argument<br>“A Pet Story About My Cat . . . Gus”           | 30 |
| Student Sample: Grade 7, Informational/Explanatory<br>“A Geographical Conflict”     | 33 |

|   |    |
|---|----|
| Student Sample: Grade 7, Argument<br>“Video Cameras in Classrooms”  | 40 |
| Student Sample: Grade 8, Narrative<br>“Miss Sadie”  | 42 |
| Student Sample: Grade 8, Informational/Explanatory<br>“Football”  | 45 |
| Student Sample: Grade 8, Informational/Explanatory<br>“The Old Man and the Sea”                             | 48 |
| Student Sample: Grade 10, Argument<br>“_____ School Bond Levy”  | 51 |
| Student Sample: Grade 10, Informational/Explanatory<br>“Animal Farm”  | 54 |
| Student Sample: Grade 12, Informational/Explanatory<br>“In the Wake of the Spanish Lady”                    | 57 |
| Student Sample: Grade 12, Informational/Explanatory<br>“Fact vs. Fiction and All the Grey Space in Between” | 67 |
| Student Sample: Grade 12, Informational/Explanatory<br>“The Making of a Human Voice and How to Use It”      | 73 |
| Student Sample: Grade 12, Argument<br>“Dress Codes”   | 78 |
| Student Sample: Grade 12, Argument<br>“City Council”  | 80 |

## Student Sample: K, Narrative

The narrative that follows is a process piece that was produced in class.

### I Went to Disnand

I went to disnand (Disneyland) we wen (went) frorw (from) the deser (desert). I had a fun on vacshne (vacation). at Disnand (Disneyland). I see lot of rids (rides). I went on the mader hon (Matterhorn). I went on fer wel (Ferris wheel). I went on a meere go rowrg (merry-go-round). I went on a pol (?). I went my house.

## Annotation

The writer of this piece

- establishes a situation by naming a place.
  - *disnand* (Disneyland)
- recounts several loosely linked actions, controlling for chronological order.
  - *I had a fun on vacshne* (vacation). . . . *I see lot* (lots) *of rids* (rides). *I went on the mader hon* (Matterhorn). . . . *I went my house*.
- provides a reaction to what happened.
  - *I had a fun on vacshne* (vacation).
- provides a sense of closure.
  - *I went my house*.
- demonstrates command of some of the conventions of standard written English.
  - This piece illustrates consistent control of beginning and end sentence punctuation. The writer also uses capital letters appropriately in the title of the piece.

## Student Sample: K, Informational/Explanatory

This informational report was produced in class.

### Frag (frogs)

To day befor (before) We had riyda (writing) groos (groups) Mrs. \_\_\_\_\_ red (read) us a storry (story) a baowt (about) frogs. We had to riet (write) a baowt (about) frags (frogs). We haf (have) a tadpol (tadpole) in the sciens (science) sentr (center). It has 2 bac (back) ligs (legs) and wen (when) it has 2 frunt (front) ligs (legs) its tal (tail) disupirs (disappears) and it can not eyt (eat) wen (when) its maot (mouth) is chajn (changing). Then the scknn (skin) gets to (too) little and the frags pol (pull) off thrr (their) scknm (skin) an thaa (they) eyt (eat) it. Saum (Some) of the frogs bloo (blow) baubools (bubbles). Frogs lad (laid) eggs that look like jele (jelly) and the fish eyt (eat) some but some hach (hatch) to tadpoos (tadpoles). It gros (grows) bigr (bigger) and bigr (bigger) and bigr (bigger).

### Annotation

The writer of this piece

- establishes the topic in a title and goes beyond the title to set a context for the piece.
  - *To day befor (before) We had riyda (writing) groos (groups) Mrs. \_\_\_\_\_ red (read) us a storry (story) a baowt (about) frags.*
- supplies facts and information relevant to the topic.
  - *It has 2 bac (back) ligs (legs) and wen (when) it has 2 frunt (front) ligs (legs) its tal (tail) disupirs (disappears) . . . Then the scknm (skin) gets to (too) little and the frags pol (pull) off thrr (their) scknm (skin) . . .*
- uses additive (adversative and temporal) linking words.
  - *. . . and wen (when) . . . Then . . . but*
- provides examples relevant to the topic.
  - *Frogs lad (laid) eggs that look like jele (jelly) . . .*
- demonstrates remarkable control of the conventions of standard written English for a kindergartener.
  - The piece is a process piece, however, so it is reasonable to assume the writer received feedback to correct possible errors with capital letters and periods.
- provides a sense of closure.
  - *It gros (grows) bigr (bigger) and bigr and bigr.*

## Student Sample: K, Opinion

The opinion about literature that follows was produced in class.

### **My fabit Book is do you Want to be my friend**

the mas (mouse) as (asked) the hos (horse) if you will be my friend the hos (horse) sayd (said) No. the mas (mouse) Fid (found) a FRIEND the mos (mouse) as (asked) the lutl (little) mas (mouse) if you will be my friend the latr (other) mas (mouse) Sayd (said) Yes they dig a hol (hole) in the gan (ground) my fait (favorite) pot (part) is the hos (horse)

## Annotation

The writer of this piece

- introduces the topic by naming the title of the book.
  - *My fabit (favorite) Book is do you Want to be my friend*
- expresses preferences relevant to the topic.
  - Although the writer does not specify the reasons for his preferences (a favorite book and a favorite part of the book), this sample is still a good representation of opinion writing at kindergarten.
  - . . . *my fait (favorite) pot (part) is the hos (horse)*
- Although this piece illustrates the writer's ability to express an opinion, it has not been edited to demonstrate any awareness of conventions.

## Student Sample: Grade 1, Informational/Explanatory

This informational report was produced in class.

### My Big Book About Spain

Spain is in Europe. Spain is located in the south western tip of Europe. Europe is a far away place from here. Spain has alot of fiestas. In some of the fiestas they make masks and make special food too. Spian has bull fights and I would want to see one. I think Spian looks like a upside down hat. In some of the fiestas the people are loud. Some of the fiestas are even beautiful and colorful. Spain has alot of different people. In the bull fights they make the bulls tired and make them fall out. Spain is very colorful even if you go there you will see I'm right. Spain has 5 neighbors. Spain's neighbors are France, Andorra, Algeria, Portugal and Morocco. One day when I am a researcher I am going to go to Spain and write about it!

### Annotation

The writer of this piece

- provides a beginning (on a separate piece of paper) to establish the topic.
  - *My Big Book About Spain*
- supplies facts and information about the topic.
  - *Spain is located in the south western tip of Europe.*
  - *Spain has alot of fiestas.*
  - *Spian . . . has bull fights . . .*
  - *Spain's neighbors are France, Andorra, Algeria, Portugal and Morocco.*
- provides a conclusion.
  - *One day when I am a researcher I am going to go to Spain and write about it!*
- demonstrates command of some of the conventions of standard written English.
  - This piece illustrates the writer's awareness of beginning and end sentence punctuation as well as the use of capital letters in proper nouns.
- Although this piece does not illustrate the successful grouping of like facts (and so there are no linking words), it otherwise is a fair representation of first-grade report writing. With the removal of two sentences (*I think Spain looks like a upside down hat* and *Spain has alot of different people*), the paper's organization would not be so problematic, at least once the writer used linking words to create connections.

## Student Sample: Grade 1, Narrative

The narrative that follows is a process piece that was produced in class.

### I bot a little coton ball

I went to biye (buy) a hamster I was so excited I woted (wanted) to own (run) all the waye (way) these (there) but I didn't want to get run over.

I got a nerves (nervous) hamster but I didn't know she was going to be so nerves (nervous) So we bot (bought) her that afternoon she skwet (squeaked) so much she suwed (sounded) like a skewing (squeaking) bed. And at nite (night) when my Dad came home he sedi (said) wus (what's) that noese (noise) I sed it is nibllet (Nibblet) I named (named) my hamster nibllet becaus (because) she nibls (nibbles) to (too) much becaus she liks (likes) that She is a difent (different) hamster becaus (because) Flufey (Fluffy) was there befor (before) that hamster but he did (died) becaus my bother (brother) sed (said) thot (that) hamster onley (only) live for tow (two) yers (years) but I did tek (take) her out of the box.

After I took her out she was so soft and cuddley (cuddly) she felt like a littl (little) coten (cotton) ball.

## Annotation

The writer of this piece

- establishes the situation with the opening sentence.
  - *I went to biye (buy) a hamster . . .*
- recounts appropriately sequenced events. Though she does not always signal the chronology of events with transition words, the piece holds together logically.
  - *I got a nerves (nervous) hamster . . . And at nite (night) when my Dad came home . . . After I took her out . . .*
- uses detail to describe actions and incidents.
  - *I was so excited I woted (wanted) to own (run) all the waye (way) these (there) . . .*
  - *. . . she skwet (squeaked) so much she suwed (sounded) like a skewing (squeaking) bed.*
- includes dialogue and linking words.
  - *And at nite (night) when my Dad came home he sedi (said) wus (what's) that noese (noise) . . .*
  - *. . . so . . . and . . . After . . .*
- provides a concluding sentence that signals closure and echoes the title.
  - *After I took her out she was so soft and cuddley (cuddly) she felt like a littl (little) coten (cotton) ball.*
- demonstrates growing command of the conventions of standard written English.

- There is some evidence in this piece that the writer understands various uses of capital letters. Frequently sentences begin with a capital letter, and the pronoun *I* is consistently capitalized. With the exception of *I* in the title, however, there are no capital letters. Periods end some sentences, but not all.

## Student Sample: Grade 2, Opinion

This opinion about literature was produced in class.

### Owl Moon

When you go owling you don't need words, or worm (warm) or any thing but hope. This is (from) the book Owl Moon. This book is written by Jane Yolen. I like that phrase Because The boy was happy becaus (because) he got to go owling and hes (he's) been wonted (wanting) to go owling for a long time and he finally got to go.

When other kids are happy that makes me happy. I like it Because it makes me feel good Because you don't haf t (have) to have words to go owling but you haf t to have hope to see an owl.

### Annotation

The writer of this piece

- introduces the central message of the book she is writing about with a quotation from the book.
  - *When you go owling you don't need words, or worm (warm) or any thing but hope. This is (from) the book Owl Moon.*
- states an opinion relative to the book and provides reasons to support it.
  - *I like that phrase Because The boy was happy becaus (because) he got to go owling and hes (he's) been wonted (wanting) to go owling for a long time and he finally got to go. When other kids are happy that makes me happy.*
- uses words to link ideas.
  - *I like it Because you don't haf t (have) to have words to go owling but you haf t to have hope to see an owl.*
- closes with the concluding remark about having to have hope to see an owl.
- demonstrates some command of the conventions of standard written English.
  - This piece illustrates the writer's understanding that capital letters are used in a title, that the pronoun *I* is to be capitalized, and that sentences begin with a capital letter. The title of the book is underlined, and most words are spelled correctly. *Don't* has an apostrophe in the correct place, although this is the only correct use of an apostrophe in the paper. The use of the comma is not consistent. For some reason, *because* is always capitalized. All sentences end with periods.

## Student Sample: Grade 2, Narrative

This narrative sample is a process piece that was produced in class.

### My first tooth is gone

I recall one winter night. I was four. My sister and I were running down the hall and something happend. It was my sister and I had run right into each other. Boy! did we cry. But not only did I cry, my tooth was bleeding. Then it felt funny. Then plop! There it was lying in my hand. So that night I put it under my pillow and in the morning I found something. It was not my tooth it was two dollars. So I ran down the hall, like I wasn't supposed to, and showed my mom and dad. They were suprised because when they lost teeth the only thing they got is 50¢.

### Annotation

The writer of this piece

- establishes a situation in time and place appropriate for what is to come.
  - *I recall one winter night. I was four. My sister and I were running down the hall and something happend.*
- develops sequenced actions using linking words to signal chronological ordering.
  - *My sister and I were running down the hall and something happend. . . . But not only did I cry . . . Then it felt funny. Then plop! There it was lying in my hand.*
- provides a reaction to what happened.
  - *Boy! did we cry.*
  - *Then it felt funny.*
- includes some detail.
  - *So I ran down the hall, like I wasn't supposed to, and showed my mom and dad.*
- provides a sense of closure.
  - *They were suprised because when they lost teeth the only thing they got is 50¢.*
- demonstrates good command of the conventions of standard written English.
  - This piece illustrates the writer's consistent use of beginning-of-sentence capitalization and end-of-sentence punctuation (both periods and exclamation points at the end of sentences). The pronoun *I* is also capitalized consistently, and almost all the words are spelled correctly. The writer also sets off a parenthetical phrase with commas and uses the apostrophe correctly with *wasn't* (though that word is misspelled by the writer).

### Student Sample: Grade 3, Informational/Explanatory

This informational sample is a process piece that was produced in class.

#### Horses

By \_\_\_\_\_

#### Why I Chose This Animal

I chose horses because I like to ride them. I also like to pet them. At the camp I go to everybody gets to have horses back riding lessons. Horses are so beautiful and fun to ride.

#### Horse Families

A mother or female horse is called a mare. A father or male horse is called a stallion. A foal is a baby horse.

#### Markings

A star is a little white diamond on the forelock. The forelock is a horse's forehead. A race is a white line down the middle of the horse's face. A blaze is kind of like a race but wider. If the white line on its face spreads out to its eyes it is called a white face. A small amount of white on its muzzle is called a snip. A muzzle is a horse's mouth.

#### Breeds and Color Coats

Icelandic and Shetland ponies are very small when they are full grown. Chestnuts are red-brown and Roans have white hairs on their brown coat. Cream is a rare color. Rare means you don't see the color cream very much. Brown horses are brown all over. Blacks are black all over. Piebalds have black and white spots. Skewbalds are brown and white. Duns are a sandy brown with black manes and tails. Palominos have a yellowish coat and a shiny mane and tail. Grays have black and white hairs that make the color gray. Bays are brown with black manes, tails, and legs. White are white all over.

#### Breeds I Like

I like thoroughbreds because they are such a pretty brown. I like Arabians because their different coats are very beautiful and they're one of the oldest horses. I like Morgans because they have a beautiful reddish-brown coat. I like Lipizzaners because their white coats are so very pretty. I like Icelandic and Shetland ponies because they are so very cute, pretty and small.

#### Horses from Different Countries

Hokaidos are from Japan, Sumbas are from Indonesia, and Pintos are from America.

#### Horse Movement

A horse can walk, trot, canter, and gallop. A trot is kind of like a skip. A canter is like a fast skip. And a gallop is like running.

#### Friendly Horses

Horses can be great friends. Some horses can be dangerous. Most horses are very lovable.

#### Foals

Baby horses are called foals. When a foal is ready to be born, the mare (the mother horse) lies down. As soon as the foal is born it struggles to break out of the membrane sack. When the foal breaks out of the sack it breathes on its own. In about less than a minute the foal tries to get up and walk on its own. Foals are born with their hooves first and head last. They drink their mother's milk until they're nine to ten months old.

#### How Long a Horse Lives

They live about 12 to 14 years.

### Horse Habitat

You usually find horses in a barn. Some horses are wild. You can find horses on ranches too.

### What Horses Eat

Horses eat hay, grass, barley and oats. The best food for a tired horse is oatmeal. Don't give a young horse too much oatmeal, it makes them too hyper. Horses love carrots, apples, molasses and sugar cubes. A block of salt gives the horse important minerals and makes them thirsty so they will drink enough water.

### The Most Dangerous Horse

The most dangerous horse is the Percheron. Some people cannot pronounce that so they call them war horses. It is only dangerous if it is a wild horse. If it is wild it can kill you in 7 to 8 minutes. If it is trained it is nice like any other horse.

### The Fastest Horse

The fastest horse is the wild stallion. If you thought, like I did that the Wild stallion was really dangerous you were wrong. A wild stallion can kill you but it could take up to one hour.

### The First Horses

The first horses were no bigger than a fox and looked like a donkey. They had short tails and small ears. These horses lived millions of years ago, but now they are extinct. The only way we knew there were horses like that was because the first humans (our ancestors) painted these horses on ancient cave walls. These horses lived in North America and over the years they changed into the horses we know now.

### Horse Survival

Most horses live on farms or ranches, but some horses are wild. Wild horses can survive hard weather and they graze on hills, marshes and grasslands. These days wild horses are very rare. People work to keep these wild horses free.

### My Description of a Horse

A horse is a mammal because it has fur, drinks milk and their babies are born alive. They have four legs and hooves. They have beautiful long manes and tails.

I like horses and I know a lot about them. I like to ride them and they're so beautiful! Their coats are beautiful, I wish I had a horse of my own!

## **Annotation**

The writer of this piece

- produces an introduction that explains why she chose horses as her topic and provides a general statement about horses.
  - *I chose horses because I like to ride them. . . . Horses are so beautiful and fun to ride.*
- uses headers as an organizing structure that clusters similar information together logically.
  - *Horse Families; Markings; Breeds and Color Coats; Horses from Different Countries*
- provides adequate relevant and specific facts.

- *Hocaidos are from Japan, Sumbas are from Indonesia, and Pintos are from America.*
- *A horse can walk, trot, canter, and gallop.*
- *They [horses] live about 12 to 14 years.*
- *The most dangerous horse is the Percheron.*
- uses linking words appropriately to connect ideas.
  - *I like Morgans because they have a beautiful reddish-brown coat.*
  - *When a foal is ready to be born, the mare (the mother horse) lies down.*
  - *The first horses were no bigger than a fox and looked like a donkey.*
  - *Most horses live on farms or ranches, but some horses are wild.*
- includes a concluding section.
  - *I like horses and I know a lot about them. I like to ride them and they're so beautiful! Their coats are beautiful, I wish I had a horse of my own!*
- demonstrates good command of the conventions of standard written English, although there are some minor errors.
  - *When the foal breaks out of the sack it breathes on it's own. In about less than a minute to foal tries to get up and walk on it's own.*
  - *Don't give a young horse too much oatmeal, it makes them too hyper.*

### Student Sample: Grade 3, Narrative

The narrative that follows is a process piece that was produced in class.

#### When my Puppys Ranaway

ONE night when the air was warm, my puppys were sleeping on the back porch. Me and my sisters were getting ready for bed.

When I was in bed, I read a chapter from my Nancy Drew book. When I finished the chapter I turned out my lamp. I wuldn't go to sleep.

I went into the living room. I saw my mom geting ready to walk out the door. I asked "where are you going?" "Just for a drive" she replied. She had a worried exspression on her face.

I knew somthing was wrong.

I thought maybe if I went outside and played with my puppys. I would forget about moms worried exspression and go to sleep.

When I opened The back door I expected my puppys Maggie and Tucker to jump up on me. They didn't come at all. I called, they still didn't come.

Now I knew somthing was wrong.

I went and woke up my dad, he said moms got it under control I thought mom had taken them to the vet because somthing was really wrong. Dad wouldn't tell me anything else. I went to my room and cried. Thats all I rembered about that night because I fell asleep.

The next day I still worried.

I worried all through school.

When I got home from me and my mom made a snack for sisters.

I asked my mom, "so were are the puppys"? Her eyes started to fill with tears as she answered my question with 3 words, "I don't know," she burst into tears. So did I. She hugged me. "If we never find them I am sure they will have a good home.

I went outside and sat in moms rocking chair. I cried some more.

Mom came out I got up. She sat down and motioned me by waving her hand to come and sit on her lap. I went over and cried on her shoulder.

After dinner that night we went looking for them, we couldn't find them at all.

My dad after work each day went to the pound to see if they had picked them up. They didn't at all.

I've got over them leaving because mom says we can get 2 new puppys very soon.

## Annotation

The writer of this piece

- establishes the story's time and location and hints at the focus of the events to follow.
  - *ONE night when the air was warm, my puppies were sleeping on the back porch. . . . I turned out my lamp. I wouldn't go to sleep. . . . I saw my mom getting ready to walk out the door. . . . She had a worried expression on her face. I knew something was wrong.*
- recounts a sequence of events that unfolds naturally using temporal words, phrases, and clauses and provides pacing.
  - *When I opened The back door I expected my puppies Maggie and Tucker to jump up on me. They didn't come at all. I called, they still didn't come.*
- tells what the narrator thought or felt.
  - *I knew something was wrong.*
  - *The next day I still worried.*
  - *I worried all through school.*
  - *I've got over them leaving because mom says we can get 2 new puppies very soon.*
- develops the character (narrator) through description of external behavior.
  - *I went to my room and cried.*
  - *I went outside and sat in moms rocking chair. I cried some more.*
- provides descriptive details.
  - *Her eyes started to fill with tears as she answered my question with 3 words, "I don't know," she burst into tears. So did I. She hugged me.*
- employs dialogue effectively.
  - *I asked "where are you going?" "Just for a drive" she replied. She had a worried expression on her face.*
- provide a satisfying conclusion.
  - *I've got over them leaving because mom says we can get 2 new puppies very soon.*
- demonstrates some command of the conventions of standard written English, although there are many minor errors.
  - *When my Puppies Ranaway*

- *I went and woke up my dad, he said moms got it under control I thought mom had taken them to the vet because something was really wrong.*

## Student Sample: Grade 4, Narrative

The narrative that follows was produced in an on-demand assessment situation. Students were asked to respond to the following prompt: “One morning you wake up and find a strange pair of shoes next to your bed. The shoes are glowing. In several paragraphs, write a story telling what happens.”

### Glowing Shoes

One quiet, Tuesday morning, I woke up to a pair of bright, dazzling shoes, lying right in front of my bedroom door. The shoes were a nice shade of violet and smelled like catnip. I found that out because my cats, Tigger and Max, were rubbing on my legs, which tickled.

When I started out the door, I noticed that Tigger and Max were following me to school. Other cats joined in as well. They didn't even stop when we reached Main Street!

“Don't you guys have somewhere to be?” I quizzed the cats.

“Meeeeooooow!” the crowd of cats replied.

As I walked on, I observed many more cats joining the stalking crowd. I moved more swiftly. The crowd of cats' walk turned into a prance. I sped up. I felt like a rollercoaster zooming past the crowded line that was waiting for their turn as I darted down the sidewalk with dashing cats on my tail.

When I reached the school building . . . SLAM! WHACK! “Meeyow!” The door closed and every single cat flew and hit the door.

Whew! Glad that's over! I thought.

I walked upstairs and took my seat in the classroom.

“Mrs. Miller! Something smells like catnip! Could you open the windows so the smell will go away? Pleeeeease?” Zane whined.

“Oh, sure! We could all use some fresh air right now during class!” Mrs. Miller thoughtfully responded.

“Noooooooo!” I screamed.

When the teacher opened the windows, the cats pounced into the building.

“It's a cat attack!” Meisha screamed

Everyone scrambled on top of their desks. Well, everyone except Cade, who was absolutely obsessed with cats.

“Awww! Look at all the fuzzy kitties! They're sooo cute! Mrs. Miller, can I pet them?” Cade asked, adorably.

“Why not! Pet whichever one you want!” she answered.

“Thanks! Okay, kitties, which one of you wants to be petted by Cade Dahlin?” he asked the cats. None of them answered. They were all staring at me.

“Uh, hi?” I stammered.

Rrrriiiiiing! The recess bell rang. Everyone, including Mrs. Miller, darted out the door.

Out at recess, Lissa and I played on the swings.

“Hey! Look over there!” Lissa shouted. Formed as an ocean wave, the cats ran toward me.

Luckily, Zane's cat, Buddy, was prancing along with the aroma of catnip surrounding his fur. He ran up to me and rubbed on my legs. The shoes fell off. Why didn't I think of this before? I notioned.

“Hey Cade! Catch!”

Cade grabbed the shoes and slipped them on.

The cats changed directions and headed for Cade.

“I'm in heaven!” he shrieked.

### Annotation

The writer of this piece

- produces an introduction that orients readers and draws them in by establishing a situation upon which the story line is developed.
  - *One quiet, Tuesday morning, I woke up to a pair of bright, dazzling shoes, lying right in front of my bedroom door. The shoes were a nice shade of violet and smelled like catnip. I found that out because my cats, Tigger and Max, were rubbing on my legs, which tickled.*
- creates an organizing structure in which events are logically and causally sequenced.
  - The teacher opens the window; cats come into the classroom; at recess the cats surge toward the narrator; her shoes fall off; another student (one who loves cats) picks up the narrator's shoes; the cats move toward him, and he is delighted.
  - *. . . Tigger and Max were following me to school. Other cats joined in as well. . . . When I reached the school building . . . SLAM! WHACK! "Meeyow!" The door closed and every single cat flew and hit the door.*
- produces a story with an initiating event (the narrator finding the shoes), complicating action (the cats following the narrator), climax (the narrator's shoes coming off), and resolution (the cats transferring their affections to a delighted Cade, who now has the shoes).
- uses a variety of temporal words, phrases, and clauses to signal sequence.
  - *When I started out the door . . . As I walked on . . . When I reached the school building . . .*
- tells what the narrator thought or felt (internal responses of a character).
  - *I felt like a rollercoaster zooming past the crowded line that was waiting for their turn . . .*
  - *Whew! Glad that's over! I thought.*
- uses specific details to develop plot.
  - The sequence of events unfolds naturally from the point when the narrator finds the dazzling shoes smelling of catnip through to the point when the narrator gives Cade the shoes in order to be free from all the cats.
- provides closure through a logical outcome of the event sequence.
  - The narrator describes Cade earlier in the piece as a student obsessed with cats. The story concludes logically because such a character would likely be pleased with the effects of wearing catnip-scented shoes.
- demonstrates exemplary command of the conventions of standard written English.
  - This piece illustrates an almost perfect control of conventions (although the work was subsequently edited). There is even a sentence fragment used appropriately (*Well, everyone except Cade, who was absolutely obsessed with cats*).

## Student Sample: Grade 4, Argument

This argument sample is a process piece that was produced in class.

### Zoo Field Trip

Dear Mr. \_\_\_\_\_ and Mrs. \_\_\_\_\_,

We have a problem. The wildlife here in \_\_\_\_\_ is very limited. There is not a lot of opportunity to learn about conservation and wildlife preservation. If we took a field trip to \_\_\_\_\_ our problem would be solved. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and I would like to take our class for a great learning experience. In addition, we will provide a study guide to \_\_\_\_\_ to identify the animals and provide information about conservation of endangered wildlife.

If we went on a field trip, we will learn about the wildlife from around the world and how \_\_\_\_\_ provides a natural habitat for them to live and breed. This information would help us to understand the importance of science in our day to day life. We would use math to make a budget and figure out a way to earn money. These skills will be very useful again and again. We will learn how to make a schedule with target dates. This will provide us with a plan that covers the entire project from start to finish. The preparation of the study guide will require lots of research and organization of information.

The first thing to do is research, research, research! Next, we will choose a fund raiser (with your approval, of course). This will earn money for the field trip. The parents will hopefully chip in their time and money, if we don't get enough. We will prepare a plan schedule. This will provide the dates that team members will need to accomplish the steps toward our goal. My competent adult model is the Unofficial Guide to Walt Disney World. It shows us step by step how to plan a trip and what to see.

Now, you are asking why should I approve a trip to \_\_\_\_\_? How does this help \_\_\_\_\_ and the students? Besides the fact that the project planning, fund raising, budgeting and reporting will provide an excellent learning opportunity, it will provide education. It will also provide awareness of wildlife and the importance of conservation. This project will be evaluated by its successful planning and its ability to involve our class in wildlife conservation. The trip will be evaluated by the student participation on the trip and a plan of conservation that identifies what we can all do to protect and respect wildlife so they will still be around when we have children.

Sincerely,

\_\_\_\_\_

### Annotation

The writer of this piece

- introduces an opinion about a concrete issue.
  - *We have a problem. The wildlife here in \_\_\_\_\_ is very limited. There is not a lot of opportunity to learn about conservation and wildlife preservation. If we took a field trip to \_\_\_\_\_ our problem would be solved. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and I would like to take our class for a great learning experience.*
- supports the opinion with relevant reasons.

- . . . we will provide a study guide to \_\_\_\_\_ to identify the animals and provide information about conservation of endangered wildlife. . . . we will learn about the wildlife from around the world and how \_\_\_\_\_ provides a natural habitat for them to live and breed. This information would help us to understand the importance of science in our day to day life. We would use math to make a budget and figure out a way to earn money. . . . We will learn how to make a schedule with target dates. . . . The preparation of the study guide will require lots of research and organization of information.
- links the ideas with words, phrases, and clauses.
  - *The first thing to do . . . Next . . . Now, you are asking . . . Besides the fact . . .*
- adopts a relatively formal style.
  - The entire style of this document is formal as appropriate for students writing to secure permission from an adult audience.
- provides a concluding section.
  - The final paragraph details possible objections to the field trip and argues against each one:

*Now, you are asking why should I approve a trip to \_\_\_\_\_?. . .  
Besides the fact that the project planning, fund raising, budgeting and reporting will provide an excellent learning opportunity, it will provide education. It will also provide awareness of wildlife and the importance of conservation.*
- This piece is nearly flawless in terms of observing the conventions of standard written English. It has been edited by student response groups and by adults.

## Student Sample: Grade 5, Informational/Explanatory

The informational writing that follows was produced in class.

### Author Response: Roald Dahl

Roald Dahl is a very interesting author to me. That's because he knows what a kid wants to hear. He has a "kid's mind". He is the only author that I know that makes up interesting words like Inkland, fizz wizard, and gobblefunking. All his stories are the same type. I don't mean the same story written again and again. What I mean is that they all have imagination, made up words, and disgusting thoughts. Some of his stories that have those things are Charlie and the Chocolate Factory, Matilda, The Witches and Danny the Champion of the World. The Witches is the book that I am reading right now, and it is like The BFG, another book that is by Roald Dahl. They are alike because in The BFG, Sophie and the BFG (the big friendly giant), are trying to stop other giants from eating human beings. The Witches has the same problem. The Boy, (he has no name), is trying to stop the witches from turning children into small mice, and then killing the mice by stepping on them. Both stories have to stop evil people from doing something horrible. Roald Dahl uses a lot of similes. Some similes that he used that I like are: Up he shot again like a bullet in the barrel of a gun. And my favorite is: They were like a chorus of dentists' drills all grinding away together. In all of Roald Dahl's books, I have noticed that the plot or the main problem of the story is either someone killing someone else, or a kid having a bad life. But it is always about something terrible. All the characters that Roald Dahl ever made were probably fake characters. A few things that the main characters have in common are that they all are poor. None of them are rich. Another thing that they all have in common is that they either have to save the world, someone else, or themselves.

### Annotation

The writer of this piece

- introduces the topic and provides a general observation about it to set a context for readers.
  - *Roald Dahl is a very interesting author to me. That's because he knows what a kid wants to hear.*
- uses adequate facts, concrete details, and language from the books to convey ideas and insights.
  - *He is the only author that I know that makes up interesting words like Inkland, fizz wizard, and gobblefunking.*
  - *Roald Dahl uses a lot of similes. Some similes that he used that I like are: Up he shot again like a bullet in the barrel of a gun. And my favorite is: They were like a chorus of dentists' drills all grinding away together.*
  - *In all of Roald Dahl's books, I have noticed that the plot or the main problem of the story is either someone killing someone else, or a kid having a bad life.*
- employs a formal, objective style.
  - *. . . I have noticed . . .*
  - *A few things that the main characters have in common . . .*
- includes only appropriately information.

- The writer stays focused on the characteristics shared by the Roald Dahl books.
- uses appropriate links to join ideas.
  - *The Witches is the book that I am reading right now, and it is like The BFG, another book that is by Roald Dahl. They are alike because . . .*
- demonstrates good command of the conventions of standard written English, although there are some awkward wordings.
  - *Both stories have to stop evil people from doing something horrible.*

## Student Sample: Grade 5, Narrative

The narrative that follows is a process piece produced in class.

### Getting Shot and Living Through It

We were in the darkness filled, mountain-top cold, waiting room. We were preparing for the shots of our lives. Getting shots for malaria and more.

There were many benches all covered in the night. It was hard to see the color the marky dark but it seemed to be some sort of faded brown. The room was big, no, huge which gave it all the more reason to be terror bringing. Who knew what would be lurking in the corner! Rat, monster, anything! There were also doors. Three doors, which were also brown and also faded. One was the way in. Not the way out unfortunately. Another was the way to the other evil places. With the evil hallway and the evil office. The last door was the most evil, The Shot Room.

The rest of the room was filled with families. Including my family of five. My five year old self, my three year old bother, and my one year old sister. Then there was my mom and dad. Some of the other children were screeching or crying or not knowing what would happen to them. So they would just be playing. I was in the middle of both. I was playing with fear, playing, knowing what would happen, knowing that the worst moment of my life was coming over closer. It was like knowing you would be put to sleep, sent to the dementors, waiting to take a ride in the Electric Chair.

I had had shots before. They were not your best friend. After a long while a nurse said, "Alyssa, Trevor, and Taryn, your turn." It was our turn. I got half dragged and I half walked. The door creaked open. It was the room of no return. The door slammed shut. There was not way out. Grown-ups guarding every escape. Seeing there was no way out we gave up and went for it.

Trevor went first. Before the shot was even touching him he was already howling. When it did hit him he was yelling loud enough to deafen you. He was done. It was my turn. (He was still crying so a nurse tried to calm him down).

I was paralyzed with fear, I was death-defyed, I was scared. My mom and dad told me to "just be brave." "Just be brave?!" How could I "just be brave?!" But I had not time to think. It was coming. Just waiting to pounce, just waiting to penetrate my skin! I say why Trevor had screamed so loud. I couldn't hear anything, I could just see it coming, closer, closer!

It touched, entered my flesh, and fulfilled it's job. I started with a whimper the, BOOM! full blast cry.

When Taryn had her turn she didn't even notice! Ugh! She was supposed to cry the most! Worse than Trevor!

But then I remembered it was over. We opened the door and the sparking sun blinded our eyes. It was over. All over. Finally.

## Annotation

The writer of this piece

- orients the reader and creates interest by establishing the situation and setting the scene.
  - *We were in the darkness filled, mountain-top cold, waiting room. We were preparing for the shots of our lives.*

- creates an organizing structure in which events are logically sequenced.
  - *Trevor went first. . . . It was my turn. . . . When Taryn had her turn . . .*
- uses detail to develop setting, plot, and character.
  - *We were in the darkness filled, mountain-top cold, waiting room. We were preparing for the shots of our lives.*
  - *There were also doors. Three doors, which were also brown and also faded. One was the way in. Not the way out unfortunately.*
  - *The rest of the room was filled with families. Including my family of five. My five year old self, my three year old bother, and my one year old sister.*
- uses a range of appropriate techniques, such as humor, pacing, and reporting characters' thoughts. The most consistent technique this writer uses is exaggeration to produce humor.
  - **Humor through exaggeration:** *Before the shot was even touching him he was already howling. When it did hit him he was yelling loud enough to deafen you.*
  - **Pacing:** *It touched, entered my flesh, and fulfilled it's job. I started with a whimper the, BOOM! full blast cry.*
  - **Reporting a character's thoughts:** *I was paralyzed with fear, I was death-defyed, I was scared.*
- provides closure and a realistic outcome, which is emphasized by the use of sentence fragments.
  - *We opened the door and the sparking sun blinded our eyes. It was over. All over. Finally.*
- demonstrates good command of the conventions of standard written English, although there are some minor errors.
  - The writer is clearly stretching to convey suspense and tension. There are some awkward and incorrect wordings but also some interesting structures, such as a rhetorically defensible sentence fragment and comma splice.
  - *We were in the darkness filled, mountain-top cold, waiting room.*
  - *We were preparing for the shots of our lives. Getting shots for malaria and more.*
  - *I was paralyzed with fear, I was death-defyed, I was scared.*

## Student Sample: Grade 6, Argument

The argument that follows was written as homework after a class in which sixth grade students viewed a movie titled *Smoke Screeners* and discussed how movie writers and producers promote smoking through characters. The letter is addressed to the producer of a film in which smoking appears.

Dear Mr. Sandler,

Did you know that every cigarette a person smokes takes seven minutes off their life? I mentioned this because I just watched the movie, *Benchwarmers*, and I noticed that Carlos smoked. Why did you feel the need to have one of the characters smoke? Did you think that would make him look cool? Did you think that would make him look older? It did neither of those things. As a matter of fact, I think it made him look stupid and not very cool. Especially when he put out a cigarette on his tongue.

If I were producing a movie, I would want my characters to be strong, healthy and smart. I would not have any smokers in my movies for many reasons. The first reason is it sets a bad example for children. An estimated 450,000 Americans die each year from tobacco related disease. In fact, tobacco use causes many different types of cancers such as lung, throat, mouth, and tongue. Another reason not to promote smoking is it ages and wrinkles your skin. Who wants to look 75 if you are only 60? It turns your teeth yellow and may lead to gum disease and tooth decay. Lastly, smoking is a very expensive habit. A heavy smoker spends thousands of dollars a year on cigarettes. I can think of better things to spend money on.

So Mr. Sandler, I urge you to take smoking out of all future movies you produce. Instead of having your characters smoke have them do healthy things. That will set a positive influence for children instead of poisoning their minds. Thanks for reading my letter. I hope you agree with my opinion.

Sincerely, \_\_\_\_\_

P.S. I love your Chanukah song.

## Annotation

The writer of this argument

- introduces a claim about a topic or concept.
  - *I would not have any smokers in my movies for many reasons.*
- supports claims with logical reasons.
  - *The first reason is it sets a bad example for children.*
  - *Another reason not to promote smoking is it ages and wrinkles your skin.*
  - *It turns your teeth yellow and may lead to gum disease and tooth decay.*
- supports reasons with detailed and relevant evidence.
  - *Lastly, smoking is a very expensive habit. A heavy smoker spends thousands of dollars a year on cigarettes.*
- signals the relationship between reasons using logical connecting words.

- *The first reason . . . Another reason . . . Lastly . . .*
- sustains an objective style and tone.
  - *Dear Mr. Sadler . . . Thanks for reading my letter. I hope you agree with my opinion. . . . Sincerely . . .*
  - Except perhaps for the postscript, the level of formality is appropriate for an argument addressed to someone the student does not know (in this case, a movie producer).
- includes only relevant information and evidence in support of claims.
- provides a concluding statement or section that offers a recommendation that follows from the argument.
  - *Instead of having your characters smoke have them do healthy things. That will set a positive influence for children instead of poisoning their minds.*
- demonstrates good command of the conventions of standard written English although there are a few errors that do not interfere materially with the underlying message.
  - *. . . I just watched the movie, Benchwarmers, and I noticed that Carlos smoked.*
  - *Instead of having your characters smoke have them do healthy things . . .*

## Student Sample: Grade 6, Argument.

This argument (inappropriately named a story) is a process piece produced in class.

### A Pet Story About My Cat . . . Gus

People get pets so that they will never be lonely, and they will always have a friend to be there for them. Ask your heart, what makes the best pet??? Some people think a best pet is picky, energetic, and sneaky, but I think my pet is the best pet because he is a cuddle bug, he's playful, and he loves me! Gus was about eight weeks old when we got him, now he is 4 ½ months old, and he is about as big as a size eight sneaker. He is a little gray and white kitten. If you look closely he has a gray tail, but there are darker gray rings around it. He has a little white on his face, and some on his tummy and paws. He has a little stripe on his leg but it is his back left leg only. He's very cute, and he purrs a lot! He also has a cute little gray nose.

One of the reasons why my cat Gus is the best pet is because he is a cuddle bug. When Gus was a baby, he had to be kept in a cage because he wasn't allowed to interact with the other pets until he was older. He couldn't interact with the other pets because when Twister was a baby, the ferrets bit her ear and dragged her under the bed, and bit her in the back of the neck and we didn't want the same thing to happen to Gus. Also because Twister had to be kept in a cage when she was little, too. His cage was in my room so when he meowed, as if to say, "Get me out!" I would have to take him out and sleep with him. All he would do is thank me for doing that by snuggling against my chin! Another example to prove that Gus is a cuddle bug, is that when I'm feeding Gus, I put his and Twister's bowl up on the counter when I do so, and Twister sits there patiently while Gus is snuggling against my legs to show affection toward me. He snuggles my leg even when I'm walking around! Well, at least he tries to, because he follows me, and when I stop walking, he starts to cuddle. Eventually I pick him up and cuddle him back!!! Finally, when I have nothing to do and I'm just sitting on my bed reading, Gus jumps up with me and then he pushes away the covers to get under them, and he sleeps on my chest to keep my company when I'm board. After he slept on my tummy many times, he finally got the nickname \_\_\_\_\_ Cuddle Buddy. Now I always snuggle with my favorite cuddle buddy . . . Gus!!!

A second reason why Gus is the best pet is because he's playful. Most of the time when Gus is lying on the couch minding his own business, I'll reach out to pet him then he'll start biting my hand and attacking it!!! He does this to be playful, not to hurt anyone but he just wants to have fun. It kind of tickles when he does it, actually. Gus also has a little toy mouse that is attached to a string that I drag around the house so that Gus will follow it. The mouse has a leopard skin pattern on it with balls of fur as hands and feet. The mouse is about the size of the pencil sharpeners in Mrs. \_\_\_\_\_ classroom. He goes after that mouse so fast that it's hard to see him running by to catch it. When Gus was a baby, I would put him in my bed to sleep with, but before we went to sleep, I would move my feet around underneath the covers, while Gus was on top chasing them around. Eventually, he got tired and lied down near my feet, but before he was completely asleep, I would pick him up and put him near my pillow and we slept together. Gus loves doing that all the time. I love how Gus is so playful!!!

The last reason why Gus is the best pet is because he loves me! He always misses me whenever I'm not there. When I come home from school and I open the door, Gus comes flying around the corner, and starts to climb my pants! When he gets high enough. I grab him in my arms and we start cuddling each other while Gus is happily purring. He does this a lot. Most of the time I'm in my room watching TV, while Gus and Twister are fighting and killing each other, they come dashing around the corner and into my room. I, of course, have to break up the fight. After that, I put them on my bed and hold them down, but they keep squirming. Soon, they get tired and sleep with me, silently, watching TV. Gus is with me as much as possible. Sometimes he's busy playing with Twister, sleeping, or eating. Otherwise, he's playing or sleeping with me. We do so many things together and I'm glad I got him, but technically, he chose me. It was a homeless cat shelter. They were able to catch the kittens, but not there mommy. His brothers and sisters were all playing, but he was sleeping under the table. Soon, he walked out from under the table and slept with me while we cuddled on the couch. That's how I met Gus.

People have feelings for their pets that show that they love them very much. When I had to decide what makes the best pet, I would say that Gus is the best pet because he is a cuddle bug, he's playful, and he loves me.

When you think about the examples that I gave you, like when I told you about how Gus snuggles against my chin, you saw that Gus IS the best pet and if you don't believe me, you have a problem with deciding who the best pet is.

## Annotation

The writer of this piece

- introduces a claim about a topic or concept.
  - . . . *I think my pet is the best pet because he is a cuddle bug, he's playful, and he loves me!*
- supports the claim with logical and detailed evidence.
  - *One of the reasons why my cat Gus is the best pet is because he is a cuddle bug.* The writer elaborates on this point by providing three examples of his cat's affectionate nature: freed from his cage, the cat snuggles against the narrator's chin; the cat rubs against the narrator's legs; and the cat sleeps on the narrator.
  - *A second reason why Gus is the best pet is because he's playful.* The writer elaborates this point with three examples of the cat's playful nature: Gus attacks the narrator's hand; Gus plays with a toy mouse; and Gus attacks the narrator's feet when they are under the covers.
  - *The last reason why Gus is the best pet is because he loves me!* The writer elaborates this point with three examples: Gus runs to greet the narrator when he returns home from school; Gus (and the other cat, Twister) scuffle with one another until the narrator separates them, and then they sleep with the narrator as he watches television; and Gus spends as much time as possible in the narrator's company.
- signals the relationship between the reasons.
  - *One of my reasons . . . A second reason . . . The last reason . . .*
- sustains an objective style and tone appropriate for making a case.
  - The style throughout this document is appropriate for convincing a reader about the writer's claim and about the reasons that support the claim. Only the last sentence in the three-page-long paper (. . . *if you don't believe me, you have a problem with deciding who the best pet is*) seems inappropriate because it lapses into *ad hominem*.
- includes only relevant information and evidence in support of claims (although the reference to the cat having come from a homeless shelter might better have been placed in the introduction).
- provides a concluding statement.
  - *When I had to decide what makes the best pet, I would say that Gus is the best pet . . . When you think about the examples that I gave you, like when I told you about how Gus snuggles against my chin, you saw that Gus IS the best pet . . .*



## Student Sample: Grade 7, Informational/Explanatory

The extended project that led to the exemplary scientific report that follows required students to review existing research, conduct original research, and produce a report. Although the student who wrote the report was in seventh grade, the conceptual understanding it displays is clearly at a level expected for high school students.

### A Geographical Conflict

My report is on a very rare and unique wetland that many people do not even know exists. They occur only in a few places around the world.

My topic is created by a specific geographical condition. Vernal pools in San Diego occur only on the local mesas and terraces, where soil conditions allow, but these are the ideal place for much of the city's urban and agricultural development. Is it possible to find a balance between the two conflicting purposes of expansion and preservation?

This raises an interesting question; how can you establish vernal pools being thought of as a geographical asset?

#### METHODS

To answer my question I had to get information on vernal pools: what they are, where they are, and how they are a sensitive natural habitat. Then I needed to examine how city expansion is affecting vernal pools, and if it is apt to continue. I needed to know what the City thinks about the problem and what they are planning to do.

First I looked for any information available on vernal pools at public libraries, but I couldn't find what I was looking for. The topic is apparently too obscure. Next I went to a university library that had an environmental department to get as much information as possible (University of San Diego).

I also interviewed several authorities in the field: the district representative for the U.S. Army Corps of Engineers, the federal agency responsible for the protection of wetlands; a senior environment planner with the City of San Diego, who wrote the City's Resource Protection Ordinance (RPO); the Station botanist at Miramar Naval Air Station, who is in charge of their vernal pool management plan on the land that has the largest number of pools remaining in the City of San Diego; a biologist working for RECON (Regional Environmental Consultants), a firm which is mapping the vernal pools for the City of Hemet, (another city in San Diego County facing the same issues); and finally a geographer working for SANDAG (San Diego Association of Governments), a regional organization that gathers, records, and analyzes data associated with regional planning and environmental issues. They answered many questions and offered their own ideas and information, including additional articles on my subject. I looked at several maps and photos of vernal pools locations, and charts of changing land use.

To decide how much education may be needed about vernal pools, I made a questionnaire, and surveyed two classrooms of elementary students, and a group of forty-two adults, trying to cover most age groups.

#### WHAT VERNAL POOLS ARE

Vernal pools are a unique and rare form of wetland. Wetlands are areas that are covered or soaked by water enough to support plants that grow only in moist ground. Some examples of wetlands are bogs, swamps, marshes, and edges of lakes and streams. These are what people think of when they hear "wetland". But vernal pools are different than these other types of wetlands. They are located on dry and flat places. No one would expect to find a wetland in such a dry area!

San Diego vernal pools are surrounded by small mounds called "mima mounds". The name mima mounds come from the Mima Prairie near Olympia, Washington. People don't know for sure how mima mounds are formed. Some think that they were formed by gophers piling up the earth. Others think that ice wedges from glaciers caused the upheaval, or maybe the wind pushed loose dirt, catching in clumps of shrubs. Mounds can be found on prairies or terraces with a hardpan or clay layer underneath.

Vernal pools are depressions between the mima mounds. In winter the pools are filled by rain storms. In spring the pools look their best, when plants are in full splendor. By summer the pools are dry and look only like a dry pothole, (See illustration of pool cycles and typical cross section.) A vernal pool does not dry by soaking into the ground; the layer of clay or rock underneath the pool prevents the water from soaking through. Instead they dry out from evaporation, or use by the plants. The mima mounds are not impervious so one pool tends to drain into another. Therefore, the pools have to be on flat land; the pools cannot be on a slope or the water would run off, and the pools would not be filled.

[Illustration here]

Typical Cross Section of Vernal Pool

[Illustration here]

Vernal Pool Cycle

#### WHY VERNAL POOLS ARE SO IMPORTANT

Vernal pools are a very rare, specific habitat. Hardly any are left, so we don't have many to lose. There used to be vernal pools on many of the mesas and terraces of San Diego County, and the Central Valley of California. Now there are almost no vernal pools in the Central Valley, and an estimated 97% have been lost in San Diego County. An estimated 80% of the remaining pools in San Diego are located on Miramar Naval Air Station. (See map, next page.)

[Illustration here]

Vernal Pool Distribution, San Diego County

It does not take much to disturb a vernal pool. Even grazing or off road vehicle use in the summer, when pool species are dormant and people could think they are just a dry hole, can damage them. Most are disturbed by grading and flattening of their habitat, or by breakup of the impervious layer. With just flat land there would be no depressions for vernal pools to form; what would form would be "vernal mud". With no impervious layer the water would just sink into the ground, and would be there only for a short period of time, not enough for wetland plants.

The mima mounds have to be protected too. If the watershed for the pools is changed, the condition of the pools changes. If there isn't enough water from runoff, then all plant or animal life in them disappears, because they need enough moisture at the right time, to live. If there is too much water, then the pool may turn into another kind of wetland, such as a bog.

Although people have begun to study them, there is still a lot to learn. One thing scientists know is that they are a part of a larger environment. Many animals travel from other areas to feed on plants or animals, or drink from the vernal pools. For example, water fowl from many other places will stop at the pools to eat the fairy shrimp and snack on the plants.

Vernal pools have a large assortment of rare and exotic flora and fauna (plants and animals). Five of them are on the federal list of endangered species, and one more is a candidate for listing. The plants and animals in vernal pools are unusual because they have only developed recently compared to other changes in evolution. As scientists study the pools more intently they are finding more and more unknown species. There are temporary pools in other places around the world, but California's vernal pools are different because of their long drought phase, which causes the plants and animals to adapt to the climate. They go into a dormant phase. For example, fairy shrimp lay eggs before the drought which hatch when it gets moist enough to be active. Some plants, in a short period of time, develop seeds; others appear to die out, but quickly spout again from the rain. Many of these species cannot survive outside vernal pools, and some are "endemic" (species found only in a very restricted geographical area).

## PROTECTION TECHNIQUES

The first step is to try to keep development away from vernal pools. But to do this you first need to know where the pools are. Thanks to regional mapping efforts, existing vernal pools have been fairly well identified in San Diego County.

There are already laws against disturbances of vernal pools. You could go to jail or get fined a large sum of money for disturbing a wetland. The U.S. Fish and Wildlife Service protects the listed endangered species present, and the U. S. Army Corps of Engineers makes sure you don't fill any kind of wetland habitat, including vernal pools. The local office of the U.S. Army Corps of Engineers has submitted a proposal to Washington for a stricter permit process for vernal pools.

When possible the vernal pools should be part of a large preserve of open space. That way the pools would not be isolated islands, but part of their natural communities, and would be protected by a buffer of distance. Fences should not be put directly around the vernal pools unless it cannot be avoided, because it would keep some animals out, such as rabbits which spread plant seeds around when they eat them.

It is important to educate people about vernal pools so they know how important they are and what they look like, and so they know how to preserve them. To see how much education may be needed in San Diego, I surveyed ninety-two people (forty-two adults and fifty elementary students to try to cover all age groups). I asked them if they had heard of vernal pools, and if they knew what they were. About 21% thought they had heard of them, but only 7% really knew what they were. (See pie chart.) I found that much education is needed.

[Illustration here]

Survey Results

At N.A.S. Miramar the Station botanist has been putting articles dealing with vernal pools in almost every issue of the base newspaper. Now most people on the base know about vernal pools, and know how valuable they are.

## RECOGNIZING AN ASSET

Education is a key to preserving vernal pools. Vernal pools are very unique and we do not have many to lose. Making new ones does not work. Studies done at the University of California, Santa Barbara, have shown that after five years their complexity goes down.

First, vernal pools must be protected. There could be different ranges of accessibility, from remote (available to research only), somewhat accessible (good for guided seasonal visits), to readily accessible (which may have to be protected by fencing or supervision). The most accessible ones would be a great educational opportunity for the general public. The pools closer to development could be developed into nature centers, with raised boardwalks to protect the habitat, as is done over the hot springs in Yellowstone. (See illustration.)

[Illustration here]

Cross Section of Possible Nature Center

Interpretive signs and docents could provide information. Being very unique, vernal pools would make interesting learning centers. People would learn how the plants and animals adapt to the seasonal changes. This would teach people the importance of vernal pools, how complex they are, how to identify them, and how to preserve them when wet or dry. A park in the Sacramento area has an adjacent vernal pool with hiking trails around it; and it seems to work there because the people there know how important and delicate it is.

Ecotourism, a popular concept now, would be another idea. San Diego is a place where tourists already come. The very climate and geography that brings people here is what created vernal pools. Ecotourism would be easy to add to the other attractions, and would indirectly benefit the city. A tour company might be authorized to place advertisements to bring people to learn the importance of vernal pools and their ecosystem. With many people outside San Diego knowing about vernal pools and concerned about their well-being, there would be widespread support for vernal pool protection.

#### CONCLUSION

The problem of endangering vernal pools will not go away, because the City will need more land to develop. However, vernal pools remain a rare and unique wetland, and need protection. Even though there are laws made to protect them, pools are still being lost. Education is needed. Widespread education showing how important vernal pools are, and how easy they are to disturb, will create widespread support for protection.

A balance between expansion and preservation will not come easily, but if the public views vernal pools as a geographical asset, the balance will shift toward long-term vernal pool preservation.

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## Annotation

The writer of this scientific research report

- provides a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance.
  - *My report is on a very rare and unique wetland that many people do not even know exists. . . . Vernal pools in San Diego occur only on the local mesas and terraces, where soil conditions allow, but these are the ideal place for much of the city's urban and agricultural development.*
- develops the subject through relevant and specific facts and details.
  - *San Diego vernal pools are surrounded by small mounds called "mima mounds".*
  - *. . . the layer of clay or rock underneath the pool prevents the water from soaking through. . . . an estimated 97% [of vernal pools] have been lost in San Diego County.*
- organizes specific information under broader concepts and categories, and provides headings, figures, tables, and diagrams when useful.
  - *The writer uses a number of headings to help section off the text: *Methods, What Vernal Pools Are, Why Vernal Pools Are So Important, Protection Techniques, Recognizing an Asset, and Conclusion.**
  - *The writer offers a cross-section of a vernal pool, an illustration of the vernal pool cycle, a map of the distribution of vernal pools in San Diego County, a pie chart of responses to the survey, and a cross-section of a possible nature center.*
- employs discipline-specific and technical vocabulary.
  - *Vernal pool . . . wetland . . . bogs . . . mima mounds . . . pool cycles . . . habitat . . .*
- maintains a formal, objective style.
- adapts strategies to present explanations and to manage the complexity of the topic.
  - *If/then and cause/effect: *If the watershed for the pools is changed, the condition of the pools changes. If there isn't enough water from runoff, then all plant or animal life in them disappears, because they need enough moisture at the right time, to live.**
  - *Definition: *Vernal pools are a unique and rare form of wetland. . . . They are located on dry and flat places. . . . Vernal pools are depressions between the mima mounds. . . . Vernal pools are a very rare, specific habitat.**
  - *Comparison/contrast: *Some examples of wetlands are bogs, swamps, marshes, and edges of lakes and streams. . . . But vernal pools are different than these other types of wetlands. They are located on dry and flat places.**
- links ideas by varying sentence structures to express relationships between ideas and to create cohesion.

- *Vernal pools are a very rare, specific habitat. Hardly any are left, so we don't have many to lose.*
- *First, vernal pools must be protected. There could be different ranges of accessibility, from remote (available to research only), somewhat accessible (good for guided seasonal visits), to readily accessible (which may have to be protected by fencing or supervision). The most accessible ones would be a great educational opportunity for the general public.*
- emphasizes the most significant information.
- provides a conclusion that follows logically from the information presented.
  - *A balance between expansion and preservation will not come easily, but if the public views vernal pools as a geographical asset, the balance will shift toward long-term vernal pool preservation.*
- demonstrates exemplary command of the conventions of standard written English. Though there are a few minor errors, the writer uses complicated sentence structures and punctuation to convey complex concepts and information.

## Student Sample: Grade 7, Argument

The argument that follows was produced in an on-demand assessment situation. The seventh-grade students in the assessment were asked to write a letter to their principal about a plan to install video cameras in the classroom for safety reasons. The abbreviated time frame of the assessment (and the consequent lack of opportunity to do research and to revise) explains the absence of information from sources and possibly also the occasional errors.

### Video Cameras in Classrooms

You are seated in class as your teacher explains and points things out on the whiteboard. You twitch your hand, accidentally nudging your pencil, which rolls off your desk and clatters to the floor. As you lean over to pick up your pencil, your cell phone falls out of your coat pocket! Luckily you catch it without your teacher seeing, but it is in plain view of the video camera's shiny lens that points straight at you. The classroom phone rings, and after a brief conversation, your teacher walks over to your desk and kneels down beside you. "About that cell phone of yours . . ." How did that get you in trouble? How could it possibly be a good idea to put cameras in classrooms?

When students are in their classrooms, teachers are in the classroom too, usually. But when a teacher goes out of the classroom, what usually happens is either everything goes on as usual, or the students get a little more talkative. Cameras aren't there because people talk a lot. It is the teacher's job to keep people quiet. If something horrible happened, somebody in class would usually report it, or it would just be obvious to the teacher when he came back that something had happened.

If we already have cameras in the halls, why spend the money to get thirty more cameras for all the different classrooms? Our school district already has a low budget, so we would be spending money on something completely unnecessary. There hasn't been camera-worthy trouble in classrooms. Camera-worthy trouble would be bad behavior every time a teacher left the room. There is no reason to install cameras that might just cause trouble, both for the students and for the budget.

Different students react differently when there is a camera in the room. Some students get nervous and flustered, trying hard to stay focused on their work with a camera focused on them. 90% of students claim that they do better work when they are calmer, and cameras are not going to help. Other students look at cameras as a source of entertainment. These students will do things such as wave at the camera, make faces, or say hi to the people watching through the camera. This could be a big distraction for others who are trying to learn and participate in class. Still other students will try to trick the camera. They will find a way to block the lens or do something that the camera will not be likely to catch. All of these different students will be distracted by the cameras in their classrooms.

Instead of solving problems, cameras would cause the problems. That is why I disagree with the idea to put cameras in classrooms. This plan should not be put to action.

## Annotation

The writer of this argument

- introduces a claim about a topic or concept.
  - The student does not state the claim directly until the end of the piece.
- supports his claim with logical reasons.
  - The opening anecdote indicates that students may be unfairly punished for minor and undisruptive actions.
  - [Cameras are not necessary because] *[i]f something horrible happened, somebody in class would usually report it, or it would just be obvious to the teacher when he came back that something had happened.*

- . . . *we already have cameras in the halls . . .*
- *Our school district already has a low budget . . .*
- supports reasons with relevant evidence.
  - *Some students get nervous and flustered, trying hard to stay focused on their work with a camera focused on them.*
  - *Other students . . . will do things such as wave at the camera, make faces, or say hi to the people watching through the camera.*
  - *Still other students will try to trick the camera.*
- signals the relationship between reasons and evidence using logical connecting words.
  - *If . . . already . . . why . . . so . . . Some students . . . Other students . . . These students . . . All of these different students . . .*
- sustains an objective style and tone.
  - *When students are in their classrooms, teachers are in the classroom too, usually. But when a teacher goes out of the classroom, what usually happens is either everything goes on as usual, or the students get a little more talkative.*
  - *Different students react differently when there is a camera in the room.*
- includes only relevant information and evidence in support of claims.
- provides a concluding statement or section that offers a restatement and a recommendation that follows from the argument.
  - *Instead of solving problems, cameras would cause the problems. That is why I disagree with the idea to put cameras in classrooms. This plan should not be put to action.*
- demonstrates very good command of the conventions of standard written English.

## Student Sample: Grade 8, Narrative

The narrative that follows was written to fulfill an assignment for an eighth grade class. Students in the class were asked to present a special person to readers who did not know the person. The students were also advised to reveal the personal quality of their relationship with the person presented. The eighth grade student who wrote this piece borrowed ideas from a fictional piece she read in class.

### Miss Sadie

Miss Sadie no longer sits in her rocking chair on her porch on summer days. But I still can see her. The old chair squeaking with every sway of her big, brown body. Her summer dresses stained from cooking. I smell her sweet smelling kitchen. I see her gray hair pulled back in that awful, yellow banana clip. Most of all, I hear that voice. So full of character and wisdom.

I used to bring Miss Johnson cookies every summer day of 1988. I miss the days where I would sit on that shabby old porch and listen to her stories. “Melissa!” she would holler. “What ‘chu doin’ here? Come see me and my poor self, have ya?”

She once told me of her grandmother who escaped slavery, back when white men could only do anything, she would say. Her grandma ran for miles without food or water. It wasn’t too long before her master came looking for her and took her home to whip her. I thought of how Blacks are treated today. I sighed. She would sing in her soulful, blaring voice, old negro hymns passed down from her mother and grand mother. I would sit there in amazement.

Once, Jimmy Taylor came walking by us yelling, “Melissa! Whattaya want with that old, fat, Black lady, any ways?”

Before I could retaliate, Miss Johnson said to me, “Now, you musn’t, we must feel sorry for that terrible child. His mother must have done gone and not thought him no manners!” She actually wanted me to bow my head and pray for him. (Even though I went to his house and punched him out the next day.)

My friends would tease me for spending the whole summer with Sadie Johnson, “The cookoo of Connecticut,” they called her. But I’m so very glad I did. She taught me then, to not care what other people thought. I learned that I could be friends with someone generations apart from my own.

My visits became less frequent when school started. I had other things to think about. Boys, clothes, grades. You know, real important stuff.

One day I was thinking, I haven’t seen Miss Sadie in a while. So after school I trotted up to her house amidst the twirling, autumn leaves.

I rang her bell. The door cracked open and the woman adjusted her glasses. “May I help you?”

“Miss Sadie, it’s me, Melissa.”

“I—I,” she’d stuttered. “I don’t remember,” she said and shut the door. I heard crying. I rang the door again and she screamed, “Please leave?” in a scared, confused voice.

I went home bewildered and my mother told me to stop bothering Miss Sadie. I said I wasn’t bothering her. Mama said, “Miss Johnson has a disease. Alzheimer’s disease. It makes her forget things . . . people, family even. And so, I don’t want you over there anymore, you hear?” Then, I didn’t realize or comprehend, how someone so special to you could forget your own existence when you’d shared a summer so special and vivid in your mind.

That Christmas I went to bring Miss Johnson cookies. She wasn't there. I learned from a family member that she was in the hospital and that she'd die very soon. As the woman, a daughter maybe, spoke, my heart broke.

"Well, you make sure she gets these cookies." I said, my voice cracking and tears welling in my eyes.

Today, I've learned to love old people. For their innocence, for their knowledge. I've learned to always treat people with kindness, no matter how cruel they may seem. But mainly I've learned, that you must cherish the time spend with a person. And memories are very valuable. Because Miss Sadie no longer sits in her rocking chair on her porch on summer days. I'm glad that I can still see her.

## Annotation

The writer of this personal experience narrative

- orients the reader by backfilling information after entering immediately into the storyline.
  - The writer begins in the present, when *Miss Sadie no longer sits in her rocking chair*, and then immediately creates an image with specific details of Miss Sadie as she was in the past (*every sway of her big brown body . . . her gray hair pulled back in that awful, yellow banana clip*).
  - The writer skillfully backfills information about the setting (*the old chair squeaking; that shabby old porch*) and the narrator's experiences with Miss Sadie (bringing Miss Sadie cookies, listening to her stories, listening to her sing *old negro hymns*).
- creates an organizing structure in which events are sequenced both chronologically and logically.
  - The embedded incident involving Jimmy Taylor illustrates Miss Sadie's ability to forgive rude behavior.
  - The incident in which the narrator learns that Miss Sadie has Alzheimer's disease advances the action.
- uses a variety of temporal words, phrases, and clauses to convey sequence, to shift from one time frame to another, and to show the relationships among events.
  - *no longer . . . still . . . used to . . . I miss the days . . . once . . . then . . . Today . . .*
- uses relevant, specific details and literary devices purposefully to develop setting, plot, and character.
  - *The old chair squeaking with every sway of her big, brown body.*
  - *Her summer dresses stained from cooking. I smell her sweet smelling kitchen.*
  - *. . . her soulful, blaring voice . . .*
  - *. . . the twirling, autumn leaves.*
  - *The door cracked open . . .*

- “I—I,” she’d stuttered.
- uses techniques to create particular effects.
  - Dialogue: “Now you musn’t, we must feel sorry for that terrible child. His mother must have done gone and not taught him no manners!”
  - Tension: *I heard crying. I rang the door again and she screamed, “Please leave?” in a scared, confused voice.*
  - Sarcasm and irony: *I had other things to think about. Boys, clothes, grades. You know, real important stuff.*
  - Reflection on events: *Then, I didn’t realize or comprehend, how someone so special to you could forget your own existence when you’d shared a summer so special and vivid in your mind.*
- shows internal mental processes to develop complex characters and convey their motives and emotional responses.
  - “Whattaya want with that old, fat, Black lady, any ways?”
  - *As the woman, a daughter maybe, spoke, my heart broke.*
- provides an engaging conclusion that returns to the beginning.
  - In the closing, the writer returns to the image in the beginning of the narrative (*Miss Sadie no longer sits in her rocking chair on her porch on summer days. But I still can see her*) to reflect on the importance of memories (*I’m glad that I can still see her*).
- demonstrates good command of the conventions of standard written English.
  - Occasional sentence fragments were likely included for stylistic purposes (e.g., *The old chair squeaking with every sway of her big, brown body; Her summer dresses stained from cooking; Because Miss Sadie no longer sits in her rocking chair on her porch on summer days*).

## Student Sample: Grade 8, Informational/Explanatory

This essay was written by an eighth-grade student. The task assigned was to write about a favorite activity. The writer wrote for one entire class period the first day and revised his essay the second day after discussing ideas for revision with a partner.

### Football

What I like doing best is playing football, mainly because it is one of my best sports. One of the greatest things about it, in my opinion, is the anticipation, wondering what the other players are thinking about what you might do. Football is a physical game, of course, but it's the mental aspect that I appreciate the most.

At times football can get grueling, which makes the game even more exciting. The first time you make contact with another player (even with all that equipment) you get very sore. That is true for everyone, but in time you get used to the aches and pains. After awhile, you develop mental discipline, which allows you to ignore some of the pain. The mental discipline then allows you to go all out, to unload everything you have, every play. That's how you win games, everyone going all out, giving 110%.

The game takes concentration, just as much as any other sport, if not more. You develop this aspect in practice. That is why it is so important to have hours and hours of it. Mentally, you have to get over the fear, the fear of eleven madmen waiting for chance to make you eat dirt. And that comes through practice. Once you overcome the fear, you can concentrate on the more important things, like anticipating the other guy's next move. Studying the playbook and talking with other players also helps.

During the game, your mind clears of all thoughts. These thoughts become instinct. You have to react, and react quickly, and you develop reactions and instinct in practice. For example, when you're carrying the ball or about to make a tackle, you want to make sure you have more momentum than the other guy. If you don't you'll be leveled. But, you should react instinctively to that situation by increasing your momentum.

Playing defense, all you want to do is hit the man with the ball, hit him hard. Right when you unload for a stick, all your body tightens. Then you feel the impact. After you regain your thoughts, you wonder if you're all right. You wait for your brain to get the pain signal from the nerves. Even so, if you do get that signal, which is always the case, you keep right on playing. You can't let that experience shake your concentration.

On offense, while playing receiver, you can actually "hear" the footsteps of the defensive back as you're concentrating on catching the ball. What separates the men from the boys is the one who "hears" the footsteps but doesn't miss the ball. That's mental discipline, concentration.

Football is very physical or else it wouldn't be fun. But it is also a mental game and that is why it's challenging. You can get hurt in football if you screw up and ignore the right way to do things. However, mental discipline and concentration, which you develop during hours of practice, helps you avoid such mistakes.

### Annotation

The writer of this explanation

- establishes the topic in an introduction that provides a sense of what's to follow.
  - *What I like doing best is playing football . . . Football is a physical game, of course, but it's the mental aspect that I appreciate the most.*
- develops the subject through relevant and specific facts, details, and examples.
  - *At times football can get grueling, which makes the game even more exciting. The first time you make contact with another player (even with all that equipment) you get very sore.*

- *For example, when you're carrying the ball or about to make a tackle, you want to make sure you have more momentum than the other guy. If you don't you'll be leveled.*
- organizes specific information under broader concepts or categories.
  - Information is organized into three components of the mental aspect of football: discipline, concentration, and instinct.
- uses factual, precise language and maintains a relatively formal style with occasional lapses into cliché and undefined terms.
  - *Mentally, you have to get over the fear, the fear of eleven madmen waiting for chance to make you eat dirt.*
  - *That's how you win games, everyone going all out, giving 110%. . . . you'll be leveled . . . Right when you unload for a stick . . .*
- uses strategies appropriate to informational and explanatory texts, such as definition, comparison/contrast, and cause/effect.
  - **Definition:** *What separates the men from the boys is the one who "hears" the footsteps but doesn't miss the ball. That's mental discipline, concentration.*
  - **Comparison/contrast:** *The game takes concentration, just as much as any other sport, if not more.*
  - **Cause/effect:** *If you don't [have more momentum] you'll be leveled.*
- uses appropriate links to join ideas and create cohesion.
  - *At times . . . The first time . . . After a while . . . During the game . . . For example . . . But . . . Playing defense . . . After . . . On offense . . . However . . .*
- provides only accurate and relevant information.
- provides a conclusion that follows logically from the explanation presented.
  - The conclusion emphasizes the importance of the controlling idea (the mental aspect of football) but in a new light: *You can get hurt in football if you screw up and ignore the right way to do things. However, mental discipline and concentration, which you develop during hours of practice, helps you avoid such mistakes.*
- demonstrates good command of the conventions of standard written English.
  - While there are some minor errors (e.g., *But, you should react instinctively . . .*), there are also some stylistically interesting constructions (e.g., *Playing defense, all you want to do is hit the man with the ball, hit him hard*).

## Student Sample: Grade 8, Informational/Explanatory

The eighth-grade student who wrote this piece was asked to analyze a novel. The paper was completed as a homework assignment for an English class.

### The Old Man and the Sea

In the book The Old Man and the Sea, Ernest Hemingway tells the story of an old Cuban fisherman named Santiago who, considered by the villagers to be the worst type of unlucky, is still determined to win a battle against a giant Marlin off the coast of Cuba. Santiago succeeds, but his successes do not come without great hardship and struggle. He spends three days being dragged in his skiff by the enormous marlin with minimal food and water, all the while enduring acute physical pain, tiredness, and an unending loneliness due to the absence of his young friend, Manolin. It is only after Santiago's prize fish is completely devoured by sharks that he returns home to the village scorners and the safety of Manolin's trust. As his suffering and loss compound, we can see that Hemingway's quote "a man can be destroyed but not defeated" offers a key insight into Santiago's life.

As the story begins, we learn that Santiago has gone eighty-four days straight without catching a fish. Young Manolin's parents will no longer allow the two to fish together, for they do not want their son being exposed any more to this type of failure. Santiago and Manolin are deeply saddened by this news, but Santiago does not let the loss of his friend or the defeat that others see him suffering keep him off the sea. Rather, with bright and shining eyes he thinks "maybe today. Every day is a new day" (pg. 32), and prepares to catch the biggest fish of his life. This shows that even though almost all of Santiago's acquaintances feel that his fishing career is over, he sees it about to reach its all time high. Though he knows he is physically older and weaker than most of his fellow fisherman, he refuses to let their opinions and stereotypes destroy his confidence and determination.

As the story progresses, Hemingway presents an even more vivid picture of Santiago refusing to be destroyed by the forces that threaten to defeat him. Even after he accomplishes the difficult task of hooking the giant Marlin, he finds his skiff being dragged by the fish for over two days. Living in the small boat is no easy task for Santiago, and soon injury and suffering seem to take over his entire body. His back is sore from sitting so long against the stiff wood, his face is cut from fishing hooks, his shoulders ache, and his eyes have trouble focusing. Most difficult to endure though is the terrible condition in which he finds his hands. The left one is weakened from a period of being tightly cramped, and both are extremely mutilated from the burn of the moving fishing line. It would have been so much easier for Santiago to simply give up and release the fish, yet he knows that if he endures a little longer, victory will be his. Even when it seems he has no effort left, Santiago promises himself "I'll try it again." (pg. 93) This is Santiago's real inner determination coming through. He has encountered so many obstacles during the past few days, yet he will not let them defeat his dream of killing the fish. There is no outside force promising a splendid reward if he succeeds, only those that threaten to ridicule him if he is destroyed. Santiago is working solely on his own desire to fulfill his dream and prove to himself that, although his struggles may cost him his life, he can accomplish even the seemingly impossible.

After three long days and nights, Santiago's determination pays off, and at last he manages to catch and kill the Marlin. It is only a very short time that he has to relish in his triumph though, for a few hours later vicious sharks begin to destroy the carcass of the great fish. For hours, Santiago manages to ward them off, but this time it is not he who wins the final battle. Spirits low and pain at an all time high, Santiago returns to the village, towing behind him only the bare skeleton of a treasure that once was. It seems as though Santiago is ready to just curl up and die, and indeed he has reason to feel this way. Yet as he rests alone and talk with Manolin, we see a hint of Santiago's determination, that has characterized his personality throughout the entire story, begin to shine through. Upon reaching home, he begins to make plans with Manolin about future adventures they will have together. Hemingway tells us that Santiago, in his youth, had loved to watch the majestic lions along his home on a white sand beach in Africa, and he still returns to those dreams when searching for contentment. That night, as Santiago drifts off to sleep, Hemingway tells that he was indeed "dreaming about the lions." (pg. 127) This is perhaps the truest test of how

much courage and determination a person has. If even when they have suffered the biggest defeat of their life, they are able to look to the future and realize the wonderful things they still possess. Though the forces of nature and time destroyed Santiago's prize fish, he refuses to let that fact ruin the rest of his life. No one can take away his love for Manolin or memories of what once was, and because of this, no one can ever truly defeat Santiago.

In conclusion, throughout the entire story The Old man and the Sea, Santiago refuses to surrender to the forces working against him. He ignores the comments of those who think he is unlucky, endures great physical pain, and rises up from the depths of sorrow over the lost Marlin to find happiness in what he does possess. Hemingway's quote "a man can be destroyed but not defeated" truly does display the amount of determination that Santiago shows throughout his life.

## Annotation

The writer of this explanation

- establishes the topic in an introduction that provides a sense of what is to follow.
  - The writer provides a brief summary of the plot in the introduction, then uses a quotation to advance the thesis of the essay: *As his suffering and loss compound, we can see that Hemingway's quote "a man can be destroyed but not defeated" offers a key insight into Santiago's life.*
- develops the subject through relevant and specific facts, details, quotations, information, and relevant examples.
  - The second, third, and fourth paragraphs each tell part of the story and support the writer's thesis by providing examples of Santiago's struggle and determination.
  - The writer uses concrete details to illustrate Santiago's suffering (e.g., *eighty-four days straight without catching a fish; [hands] extremely mutilated from the burn of the moving fishing line; towing behind him only the bare skeleton of a treasure that once was*).
  - The writer uses quotations and concrete details to illustrate Santiago's determination (e.g., *Rather, with bright and shining eyes he thinks "maybe today. Every day is a new day"; as Santiago drifts off to sleep, Hemingway tells that he was indeed "dreaming about the lions"*).
- uses precise language and maintains a formal, objective style.
  - *In the book The Old Man and the Sea, Ernest Hemingway tells the story of an old Cuban fisherman named Santiago who, considered by the villagers to be the worst type of unlucky, is still determined to win a battle against a giant Marlin off the coast of Cuba.*
  - *As the story begins, we learn . . . In conclusion . . .*
- uses strategies appropriate to explanatory texts.
  - Two key elements of the quotation in the introduction (*destroyed but not defeated*) are used as devices to help establish the structure.
- uses appropriate links to join ideas and create cohesion.

- *As the story progresses . . . Even after . . . After three long days and nights . . . In conclusion, throughout the entire story The Old Man and the Sea . . .*
- provides a conclusion that follows logically from the explanation presented.
  - *In the last paragraph, the writer summarizes the elements of the narrative that support his thesis and returns to the quotation in the thesis statement (Hemingway's quote "a man can be destroyed but not defeated" truly does display the amount of determination that Santiago shows throughout his life).*
- demonstrates very good command of the conventions of standard written English.

## Student Sample: Grade 10, Argument

The argument that follows was produced in a 10th grade class. Students were advised to write a persuasive essay that required research. The student generated the topic and had an opportunity to revise.

### \_\_\_\_\_ School Bond Levy

The \_\_\_\_\_ School Board has recently proposed a bond levy to add new facilities as well as conduct some major repairs to the school. The bond includes building a new gymnasium, a new science room and lab, a new Media Center/Library, new Chapter 1 and Special Education classrooms, and other facilities such as more parking space, an increase in storage area, and new locker rooms. Along with new construction, the board is proposing to remodel facilities such as the drama/music areas, the entire roof, the heating system, the school kitchen, and present gym as well. This bond allowing \_\_\_\_\_ School to add more facilities should be passed in order for young students to be provided with a better education.

Several arguments have been brought up concerning the levy since it failed in the March election. Some say that the school doesn't need to have brand new facilities and better classrooms, but it does. Just this year the school had to shut down for days at a time as a result of a malfunction of the heating system. The roof of the library also had a leaking problem all winter long. The leaking has actually caused the ceiling tiles to rot to the point where they are having to be removed. It isn't safe to sit underneath them because, in fact, they have fallen to tables where students had been working only minutes before.

Another issue that people may be concerned with is the money that taxpayers have to put up for the building. The cost of the project in its entirety will be 2.9 million dollars, meaning that for the next 25 years, taxpayers would pay 40 cents more per thousand dollars in property tax than they do this year. The project does cost a significant amount of money, but the school needs it. If something isn't done now, then the facilities such as the library, the science room and others will continue to grow steadily worse. The construction and remodeling needs to be done eventually, so why not now, when interest rates are low and expenses are also low. Superintendent \_\_\_\_\_ commented that it would cost the taxpayers much less money now than ten years from now. Another reason that this is a good time to pass this bond is that the results of Ballot Measure 5 are going into effect at the same time as the levy. As it stands now, property tax rates will go down another \$2.50 by next year; however, if taxpayers don't mind paying what they do now and can handle a 40 cent increase, then the school can be that much better.

Many other good reasons we exist for funding this construction now. For one, better facilities will be made available to everyone: staff members, students, and community members. The new gym will allow student athletes to have earlier practices and more time for homework. With only one gym in a K-12 school system, the junior high has to practice in the morning before school, starting at 6:30 A.M., meaning that both the girls and boys teams had to practice at the same time, with half of the court for the girls half for the boys. After school, the high school girls would practice from 3:30 to 5:30 P.M. The varsity boys would then start at 5:30 or 6:00 and go until 7:30. After that, the junior varsity boys would come in for an hour and a half. It's absurd to think that student athletes can make good use of their time with a schedule like that. If the bond were to pass, both the new gym and the present gym would be used for practices and athletes wouldn't have to wait so long to practice every day.

Another reason that the gym should be built is that it is no longer adequate. The bleachers are too close to the court and so there is no room to walk by without getting in the way during a game. The gym also poses a problem for the cheerleaders. As it is now, there is no room for them to cheer. They have to stand on one of the ends which, of course, is right in the way of people walking by. If a new gym were built, enough room would be provided surrounding the court that there wouldn't be any of the problems there are now.

Another advantage to the bond proposed is that it would provide more space in the school. The school has always been small, which is in some ways nice, but it needs to expand. The lack of space is a problem because everyone is crammed into one little hallway trying to make it around from class to class. As it is, there isn't enough room for the library to just be a library or the kitchen to just be a kitchen. Students can't even go to the library when they need to because Health, Media, and other classes are held there. The Satellite Learning classroom, which shares a space with the kitchen, usually has a difficult learning atmosphere each day people prepare food for the hot lunch program. Another problem area is the current science room and lab. Lab facilities are outdated and cannot be

replaced for a variety of reasons related to the plumbing and electrical systems. Both science teachers have said publicly that the chemical storage room is inadequate and unsafe. The science curriculum is a core part of students' education and they deserve good facilities.

It is clear then, that \_\_\_\_\_ School needs significant improvements in which case the bond must be passed. As a community, education is an essential part of the future. In the past, \_\_\_\_\_ has relied in the timber industry for employment, but times are changing and the younger generations need to be better prepared to meet the challenges that arise. For example, they need to be able to take part in a variety of activities and be able to achieve in many different areas. If the school is inadequate, how can the younger generations be provided with the education and training they need to be successful in the future?

### Annotation

The writer of this argument

- establishes a substantive claim and distinguishes it from alternate or opposing claims.
  - *This bond allowing \_\_\_\_\_ School to add more facilities should be passed in order for young students to be provided with a better education.*
  - *Some say that the school doesn't need to have brand new facilities and better classrooms, but it does.*
- supports claims with logical reasons.
  - *. . . brand new facilities and better classrooms [are needed] . . .*
  - *. . . it would cost the taxpayers much less money now than ten years from now.*
  - *. . . better facilities will be made available to everyone: staff members, students, and community members.*
  - *. . . [the gym] is no longer adequate.*
  - *The school has always been small . . . [and] it needs to expand.*
- provides relevant and sufficient evidence in support of his reasons.
  - *Details about the malfunction of the heating system and the falling ceiling tiles in the library support the reason (claim) that brand new facilities and better classrooms are needed.*
  - *Details about the scheduling of classes in the library support the reason (claim) that the school needs to expand.*
- explains how the evidence links to his reasons.
  - *The writer relates that just this year the school had to shut down for days at a time as a result of a malfunction of the heating system and that it isn't safe to sit underneath the rotted ceiling tiles in the library.*
  - *The writer relates that students can't even go to the library when they need to because Health, Media, and other classes are held there.*

- develops the argument in part based on knowledge of the audience.
  - The content of the essay is shaped in part for an audience of adults concerned with accelerative tax levels. For example, the third paragraph deals with costs by detailing the actual dollar amount needed. The writer also argues that acting now will prevent greater, more expensive deterioration later and that current low interest rates and expenses make additions and repairs more cost effective today than they would be in the future.
- conveys relationships between reasons and signals shifts in claims using transition words, phrases, and clauses.
  - *Another issue that people may be concerned with . . . Many other good reasons . . . Another reason . . .*
  - *The project does cost a significant amount of money, but the school needs it.*
- maintains a formal style that is appropriate for the topic and audience.
- enhances the reliability of his argument by paraphrasing from a credible, authoritative source.
  - *Superintendent \_\_\_\_\_ commented that it would cost the taxpayers much less money now than ten years from now.*
  - *Both science teachers have said publicly that the chemical storage room is inadequate and unsafe.*
- provides a concluding section that enhances the argument by articulating consequences if the school bond levy should fail.
  - *If the school is inadequate, how can the younger generations be provided with the education and training they need to be successful in the future?*
- demonstrates very good command of the conventions of standard written English.

**Student Sample: Grade 10, Informational/Explanatory**

The essay that follows was produced in an on-demand 10<sup>th</sup> grade assessment situation. Students were told to write about a character in a work of literature whose pride or selfishness creates problems. The abbreviated time frame of the assessment situation (and the consequent lack of opportunity to revise) explains the absence of information and quotations from researched sources and perhaps the occasional spelling errors as well.

**Animal Farm**

In the novel, Animal Farm, by George Orwell, there is one very particular character whose pride and selfishness creates problems. This character had just merely good ideas in the beginning. However, as time went on, his true self-interest began to shine through. This character started a free republic of animals and turned it into a plantation that used animals as slaves. He never did have enough and always wanted more, regardless of the price that others had to pay. This character whose pride and selfishness creates problems, is none other than the great leader of Animal Farm himself, comrade Napoleon [Napoleon], the pig.

Comrade Napoleon is a powerful authority on Animal Farm. In fact he is the leader of Animal Farm and a high strung leader at that. After Old Major died, Napoleon lived upon Old Major's ideas. Napoleon lead all the animals to rebellion so that Manor Farm ceized to exist, and Animal Farm was born. In the first year, he even worked the fields

and helped bring in their biggest harvest ever. Little did the animals know, but he would soon change. Eventually the animals started receiving less food because Napoleon needed more food to power his “large” brain. Later, he goes and runs off his successor, Snowball, so he can have the whole farm to himself. Then he stopped working the fields. He started taking young animals and selling them or using them for his own use. He stopped sleeping in the hay and slept in the farm house instead. Finally, he took away half the grain fields so he could plant barely to make himself beer. This Napoleon was a power hungry, selfish individual for sure.

Being power hungry, always causes problems, and boy did Napoleon cause problems. The animals had received so little food that many were starving, you could see their bones, and some even died of starvation. Napoleons’s lack of work meant the animals had to work harder, and it wasn’t easy on an empty stomach. Many animals would break their legs or hoofs but would continue to work. The lack of new workers due to Napoleon’s selling them off, meant that nobody could retire, and one old animal even died in the fields. Snowball was a great teacher for the animals, and now that he was gone, they lacked education. Then with finally only half of the fields being productive for food, the animals starved even more and worked harder to make beer that they never saw. Not to mention that they had to sleep on a dirt floor while the lazy Napoleon slept in his nice comfortable bed. His selfishness had deffinately created problems.

Napolean’s experience had changed the farm drastically. He thought things were getting better while the animals knew they were only getting worse. After the rebellion, many humans disliked Animal Farm and the animals disliked humans. Nopoleans’s selfish ways were much like those of a farmer. So eventually as Napoleon became more “human,” the town’s people began to like him. Napoleon could care less about his animals, just so long as he was on good terms with the humans. By the novel’s end, Napoleon is great friends with every human in town. However, his animal slaves are no longer happy as they once were. They still hate humans which means now, they hate Napoleon. So due to Napoleon’s pride, the story has changed its ways from start to finish. He has turned friends into foe and foe into friends, but at great cost.

In the novel, Animal Farm, by George Orwell, Comrade Napoleon is a character whose pride and selfishness creates problems. The starving animals have suffered greatly because of their leader’s pride. On the other hand, Napoleon has gained great success through his selfishness. Unfortunately, that’s just the way it is. You can’t have pride without problems. Even if they are little problems, it’s still due to pride. Now, if Napoleon had pride in his farm rather than in himself, well then maybe the humans would’ve hated him, but he’d still has his true friends of four legs. However, he chose to follow a different path and he burned those bridges along the way. So for now, Comrade Napoleon’s pride and selfishness has created problems for the animals, but someday, it will create problems for himself.

## Annotation

The writer of this explanation

- provides a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance.
  - The writer introduces a character (Comrade Napoleon, the pig) and conveys a knowledgeable stance when providing background about the role Napoleon plays in the novel.
- develops a complex subject through relevant and specific details as well as other information and relevant examples.
  - Details: *In the first year, [Napoleon] even worked the fields and helped bring in their biggest harvest ever. . . . Not to mention that they had to sleep on a dirt floor while the lazy Napoleon slept in his nice comfortable bed.*

- Examples: . . . *nobody could retire, and one old animal even died in the fields.*
- organizes complex information.
  - The organization of the explanation is mostly chronological because the writer focuses on how Napoleon changes over time, how he becomes *power hungry, selfish, and more “human.”* The writer also describes the problems that Napoleon’s changed nature creates.
- maintains a formal, objective style, with one notable exception.
  - The writer maintains a formal style but employs only a few words that could be considered specific to the discipline of English (e.g., *character, novel*). The writer also noticeably lapses in tone on one occasion (*Being power hungry, always causes problems, and boy did Napoleon cause problems*).
- uses strategies appropriate to informational and explanatory texts.
  - Cause/effect: *The animals had received so little food that many were starving . . . The lack of new workers due to Napoleon’s selling them off, meant that nobody could retire . . .*
  - Comparison/contrast: *He thought things were getting better while the animals knew they were only getting worse.*
- uses appropriate links and varies sentence structures to express relationships between ideas and to create cohesion.
  - *In the novel . . . In fact . . . In the first year . . . Eventually . . . Being power hungry . . . Not to mention . . . On the other hand . . .*
  - *In the novel, Animal Farm, by George Orwell, there is one very particular character whose pride and selfishness creates problems. This character had just merely good ideas in the beginning.*
- provides only accurate and relevant information.
- provides a conclusion that follows logically from the explanation presented.
  - The writer’s conclusion sums up the main points of the explanation and reflects on the link between pride and the problems it creates (*You can’t have pride without problems*).
- demonstrates marginal command of the conventions of standard written English, having made several distracting errors in spelling and other mechanics.
  - *The character whose pride and selfishness creates problems, is none other than the great leader of Animal Farm himself, comrade Napoleon, the pig.*
  - ceized [seized].
  - barely [barley].
  - deffinately [definitely].

## Student Sample: Grade 12, Informational/Explanatory

The essay that follows was written for an AP U. S. History class. The student had unlimited time to write and likely received feedback and instructional support while creating the essay, which was published in the *Concord Review* (vol. 20, no.1, Fall 2009, pp. 203–216).

### In the Wake of the Spanish Lady: American Economic Resilience in the Aftermath of the Influenza Epidemic of 1918

Whatever does not kill me makes me stronger.<sup>1</sup>

—Friedrich Nietzsche

America in the years leading up to 1918 was as confident in its medical ability as it had ever been. In only one century, it had seen the successful vaccination, containment, or cure for the notorious menaces of smallpox, anthrax, rabies, meningitis, typhoid, malaria, yellow fever, diphtheria, cholera, and tetanus.<sup>2</sup> Due to the new strides in bacteriology, germ theory, and sanitation, as well as new methods devised to control food-, water-, and insect-borne diseases, Americans were experiencing an era of unprecedented health. Whereas in all previous wars, more American soldiers were lost to disease than in action, American troops in World War I saw an all-time low in the number of deaths due to disease. Army camp inspections, carried out by William Henry Welch, the respected doctor and assistant to the Army Surgeon General, revealed that, though camps were overcrowded, “the health of the army proved to be as good as any reasonable doctor could expect.”<sup>3</sup> Unfortunately, the new light that had been shed on disease control did not apply to air-borne viruses. Because neither antibiotics nor a way to control the spread of air-borne diseases had been invented yet, America was as vulnerable to the deadly grip of influenza that would befall it in 1918 as Medieval Europe had been to the Bubonic Plague of the 14th century.

More people died of the Spanish Flu in the 10 months that it devastated the world than had died of any other disease or war in history. A commonly cited estimate of deaths is 21 million worldwide, yet prominent demographer Kingsley Davis estimates that the disease killed approximately 20 million in the Indian subcontinent alone.<sup>4</sup> The actual number of deaths will never be known, but the modern estimate is somewhere between 50 and 100 million.<sup>5</sup> If an equal percentage of the world population died today, that would be close to 2 billion victims.<sup>6</sup> A bare minimum of 550,000 Americans, or .5 percent of the American population, died in the apocalyptic pandemic.<sup>7</sup> Yet, due to some historical and demographic particulars of the 1918 flu, the American economy—which nearly collapsed in some areas during the outbreak—was not crippled in any lasting way.

The flu is not generally thought of as a killer. Instead, it is perceived as a pesky annual virus, slightly more troublesome than the common cold, but nothing serious. In reality, the average yearly flu is an extremely virulent disease, infecting anywhere from 30 to 60 million Americans annually, of whom about 36,000 die (usually the very old or the very young).<sup>8</sup> It mutates so frequently that humans are never fully immune to it, so a yearly vaccine must be produced to counteract it, whereas most viruses require only one vaccination in a lifetime.<sup>9</sup> The killer flu of 1918, dubbed the Spanish Flu or the Spanish Lady, was a particularly deadly mutation of this influenza virus.<sup>10</sup> In comparison to the .1 percent of infected who die of the annual flu, it killed 2.5 percent of those who contracted it.<sup>11</sup> This mutation had a propensity to cause pneumonia, untreatable at the time, and clogged its victims’ lungs with bloody sputum until their faces turned dark purple and they died of suffocation.<sup>12</sup>

The origins of the Spanish Flu are uncertain, but most experts believe that the first wave in the U.S. emerged in Fort Riley, Kansas, on March 11, 1918, when one of the men came down with a milder form of the mysterious illness.<sup>13</sup> As of the next day, 414 soldiers had contracted the virus, and by the end of the week at least 500 were sick.<sup>14</sup> In total, 48 men died from the first influenza-pneumonia strain by the time it had run its course in the camp—too low a number to merit any concern in the medical community in 1918.<sup>15</sup> Even though the virus struck at least 13 other military camps, there was sparse evidence that civilians were similarly affected, and, besides, disease was a fact of life in any military camp.<sup>16</sup> So, little attention was directed to the budding pandemic. America instead

focused on the new draft calls, the war in Europe, the suffragette movement, and the Bolshevik tumult in Russia, while ignoring the mild outbreak of a hard-to-identify flu.<sup>17</sup>

As expected, the flu subsided quickly with a forgettable number of casualties. Unforeseen, however, was the deadlier second wave that would emerge that August to explode in September with unprecedented virulence. Influenza viruses thrive in cold, dry weather, which is why flu season tends to be during the winter.<sup>18</sup> The fact that it exploded like it did in August, which is neither cold nor dry, makes this flu remarkable. The epidemic first struck Camp Devens, an overcrowded military camp thirty miles from Boston, on September 8 after brewing in Europe for about a month.<sup>19</sup> From there, it spread to the rest of the United States in an unsettlingly erratic manner, hitting most of the East coast, then some of the Midwest and the Gulf Coast region, then the West coast, and ultimately striking the interior.<sup>20</sup> Although at times slow in reaching certain regions, the Spanish Flu was horrifyingly thorough in its damages.

Nearly every city in the United States was affected economically by the flu in the short-term. In many places, the workforce was paralyzed because 21-to-29-year-olds suffered the greatest casualties.<sup>21</sup> So many people died at uncommonly young ages that the average life expectancy dropped 12 years, from 51 in 1917 to 39 in 1918.<sup>22</sup> Whether or not the infected had been young, healthy, and robust prior to contracting the flu was of little consequence. The military, which consisted of a particularly young, healthy, and robust demographic, was hit the hardest of any social group in America: 40 percent of the Navy and 36 percent of the Army developed the flu in 1918.<sup>23</sup> With victims' average age being 33, the volume of death claims by flu victims blind-sided the life insurance companies.<sup>24</sup> One life insurance company handled \$24 million worth of unanticipated death claims for 68,000 deaths.<sup>25</sup> The fact that the majority of victims were in the prime of their lives defied actuarial projections, confusing insurance companies, destroying families, and disrupting the economy at large.

In the most severe stages of the flu, the “essential services” of cities verged on collapse as policemen, firemen, garbage collectors, telephone operators, and even the doctors, nurses, and social workers who were struggling to fight the flu, were absent from work.<sup>26</sup> The Bureau of Child Hygiene strove to handle an overwhelming population of orphans as the fathers and mothers of America, those in the most vulnerable age-range, were decimated by influenza.<sup>27</sup> Employment standards plummeted, the only requirement in some places being “two hands and willingness to work.”<sup>28</sup> Worst off of any “essential service” were the processors of the dead. As morgues filled up, in some places with bodies stacked three and four high, corpses accumulated in the streets, spreading bacteria and the residual influenza virus.<sup>29</sup> In some situations, the dead were left untended, festering in their homes for days.<sup>30</sup> The primary emergency during the flu was in these “essential services,” which could not have held out much longer than they did. While those services continued functioning, even at a minimal level, the rest of the economy was able to rebound to normal capacity within three years, the “Roaring Twenties” as evidence of this resilience. Despite the chaos, the nation persisted.

In *The Review of Economic Statistics* of December 1919, the year 1919 was deemed a “year of readjustment,” one in which the United States was healing from the tensions of 1918.<sup>31</sup> According to the article, in 1918, “industries were straining their energies to meet the unusual demands occasioned by the war,” yet it should be noted that the strain was also partially due to the Spanish Flu.<sup>32</sup> In one county in West Virginia, during the fall of 1918, the three months of flu had left 6,000 ill, of whom 500 died.<sup>33</sup> This sapped the county economy to near-collapse as 80 percent of the labor force fell ill.<sup>34</sup> Coupled with the large population overseas for the war, situations like this compromised cities across the nation, especially with Surgeon General of the Army William Crawford Gorgas shipping thousands of America’s fittest young doctors and nurses to Europe, where he believed they were most necessary.<sup>35</sup> The doctors and nurses who continued to serve at home, like many of the civilians who remained, were generally too old, or too young, or too disabled to adequately respond to the Spanish Flu.<sup>36</sup>

When the epidemic reached cities with a deficient work force and incompetent, sparse medical care, the critical damage to the economy was compounded by restrictive public health ordinances. In an effort to restrict exposure to the virus, the Surgeon General had issued public health ordinances that prohibited most public gatherings

and required gauze masks to be worn at all times.<sup>37</sup> In Philadelphia alone, it is estimated that theaters, cinemas, and hotels lost \$2 million to the flu from the ordinances, while saloons lost \$350,000.<sup>38</sup> These ordinances turned out to be fairly pointless: even in places that strictly adhered to the recommendations of the Surgeon General the case and death rates were no lower than those in lenient cities.<sup>39</sup> On a smaller scale, tobacco sales dropped off about 50 percent in places that strictly required cotton face masks because men could not smoke while wearing masks.<sup>40</sup> These masks turned out to be completely ineffective, because the weave of the gauze proved too porous to stop a virus, usually a tiny sphere with a diameter of about 1/10,000 of a millimeter.<sup>41</sup> The futile public health ordinances and gauze masks temporarily damaged business during the flu crisis, yet the economy rebounded.

When contagious diseases attack a society, it tends to hit the poorest sector of economy the hardest. One of the reasons for this is that they are more prone to infect people who have cramped living quarters, poor hygiene, inadequate water and food supplies, and exposure to parasites—some of the consequences of poverty.<sup>42</sup> Because the working class would be disproportionately affected by disease, the work force would be disproportionately affected by disease, the work force would be disproportionately diminished in the lowest-paying, most essential jobs during an epidemic. By contrast, the Spanish Flu, being an air-borne disease (and thus not preventable through good hygiene and health), affected all sectors of the economy equally. It killed vast numbers of people, but, as noted by historian Alfred W. Crosby, it “ignored the differences between rural and urban, patrician and peasant, capitalist and proletarian, and struck them all down in similar proportions.”<sup>43</sup> Because it was so unbiased in its selection, no social hierarchies were overturned, nor were any particular divisions of employment gutted of laborers. Influenza’s only prejudice was that it ravaged the young, healthy age-range—something fairly irrelevant to economic status—and thus the only long-term economic imbalance was proportional: there were fewer people to work and fewer people sharing in the wealth.

Although the Spanish Flu killed a lower percentage of the population than it affected and lasted for a shorter period of time, the economic benefits of the epidemic can be compared to those of the Black Death. One of the peculiar positive effects of the Black Death, according to historian Norman Davies, was that it marked “the decisive point in the decline of the feudal system in Western Europe.”<sup>44</sup> Although social upheaval may have already been gaining momentum, the deadly epidemic that killed approximately one-third of Europe allowed formerly impoverished and powerless serfs to assert their independence.<sup>45</sup> With an absence of competition in the work force and a high demand for menial labor, serfs were able to gain comparative economic freedom with rising pay.<sup>46</sup> This escalation of the price of labor and goods during the plague is echoed in the aftermath of the Spanish Flu epidemic. *The Review of Economic Statistics* of December 1919 observes the post-influenza wage inflation, noting that the “efficiency of labor, unfortunately, has not materially improved and is still generally below the pre-war level,” yet “rates of wages have remained high during 1919 and have continued to rise rather than decline.”<sup>47</sup> *The Review* also remarks on the oddity that “unemployment has not developed, in spite of the demobilization of the army; and in many sections labor is still reported to be scarce.”<sup>48</sup> The unusually high wages and low labor supply despite the re-absorption of troops into the work force could be attributed to the fact that so many people had succumbed to the pandemic on the home front that the re-entry of troops had normalized, rather than overwhelmed, the labor market.

In the years following 1918, the influenza pandemic, though surely seared in the memories of those it personally affected, quickly subsided from national consciousness.<sup>49</sup> Even during the epidemic, the flu was rarely mentioned in the papers or truly noticed on a national level. As noted by Crosby, “*The Reader’s Guide to Periodical Literature*, 1919-1921 has 13 inches of column space devoted to citations of articles about baseball, 20 inches to Bolshevism, 47 to Prohibition, and 8 inches to the flu.”<sup>50</sup> As the United States emerged victorious from the devastations of World War I, the brief but deadly nightmare of the Spanish Flu was lost to the national memory. The war had put pressure on Americans to sacrifice as much as possible: the government urging people to grow what food they could, eat less meat and fewer luxury foods, buy war bonds, and serve in the army as required by the draft. Wartime America was dealing with death on a regular basis as the war casualties continued to grow, ultimately reaching approximately 117,000 deaths—about 53,000 in battle, the remainder due to disease.<sup>51</sup> With such a high proportion of war losses due to disease and the influenza deaths accompanying the hardships on the home front, the flu must have seemed so intricately enmeshed in the reality of war that it became unremarkable.

After the war had ended and the flu had essentially run its course in most places, the thrifty attitudes about consumption enforced by the war effort and the strict public health ordinances were immediately discarded. Americans had a brief attention span for such restrictions—they were only heeded during the war for patriotic reasons or in the midst of a deadly, dramatic pandemic. *The Review of Economic Statistics* of December 1919 remarked that “extravagant expenditure, both public and private, is found on every hand.”<sup>52</sup> San Franciscans—who endured the worst hit of the Spanish Flu on the West Coast—had complied with the October-November 1918 masking ordinance that had required gauze masks be worn at all times.<sup>53</sup> Yet, a mid-December masking recommendation of that same year met the fierce opposition of 90 percent of the city and was struck down by the San Francisco Board of Supervisors.<sup>54</sup> The intolerance for what were thought at the time to be potentially life-saving health measures reflects the prevalent mood at the time of impatience with inconvenience that trumped even fear of death.

Perhaps the Spanish Flu would have drawn more attention if only it had left the scar of a long depression in its wake. Yet, after the crippling 10 months of the flu, the American economy was not only undamaged, but booming. Following the “year of readjustment” of 1919, the United States experienced a sunny era of unprecedented prosperity.<sup>55</sup> The national income, which had remained stagnant from 1890 to 1918, rose more than \$200 per capita and laborers enjoyed a workday diminished from 12 to eight hours, as well as a paid annual vacation.<sup>56</sup> With the advent of mass-production due to the innovations of the assembly line and expanded industrial exploitation of electricity, productivity soared to unheard-of levels.<sup>57</sup> In the mere 30 years between 1899 and 1929, industrial production expanded by 264 percent.<sup>58</sup> All of this was accomplished by a manufacturing labor pool that, according to historian William E. Leuchtenburg in his book *The Perils of Prosperity*, contained “precisely the same number of men in 1929 as it had in 1919.”<sup>59</sup> The workforce to attain these new heights was the same workforce that been described in 1919 as generally sufficient, yet which was in many sectors “still reported to be scarce.”<sup>60</sup> In the same way that the Renaissance thrived in the wake of the Black Plague by benefiting from capital redistribution to a greater demographic, the destruction of the Spanish Flu had opened up a decade of culture and materialism to a population that benefited from the resulting availability of jobs and higher wages.

With thousands of the fittest soldiers, doctors, and nurses overseas and the stress of coping with wartime and its strict economic regulations, a flu epidemic was the last thing that Americans of 1918 needed, or expected. It was especially traumatic when even the enormous strides that had been made in recent years in the medical community were insufficient to control this epidemic of a traditionally unobtrusive disease. Disturbingly, young, healthy adults were the most likely to succumb to the virus and die of a violent, delirious pneumonia. With the backbone of the economy debilitated and inept medical care, U.S. society could have collapsed. However, the flu lasted for a short enough time that it did not permanently disable the workforce. Also, because the primary target was an age-group rather than a class, the virus infected different socioeconomic sectors evenly. As a consequence, though in many places the workforce was reduced to the point of near-collapse, the population retained its socioeconomic balance. Finally, because the flu took place for 10 months during and after World War I, the most devastated demographic was replaced by the return of soldiers who could then be reabsorbed easily into society, thereby alleviating the labor-pool crisis. From the perspective of its victims and their loved ones, the 1918 influenza was a tragedy; however, viewed within an economic paradigm, the Spanish Lady smoothed the transition from the turbulence of the 19th and early 20th centuries into the prosperity of the 1920s.

#### Endnotes

<sup>1</sup> Friedrich Nietzsche *Twilight of the Idols, or, How to Philosophize with a Hammer* (Oxford: Oxford University Press, 1988) p. 5, [http://books.google.com/books?id-oH4q25gwkOgC&pg=PR3&dq=twilight+of+the+idols&sig=6sr5pPhV2ST4tHWj\\_CbRqJ-5Ty4#PPA5,M1](http://books.google.com/books?id-oH4q25gwkOgC&pg=PR3&dq=twilight+of+the+idols&sig=6sr5pPhV2ST4tHWj_CbRqJ-5Ty4#PPA5,M1)

<sup>2</sup> Alfred W. Crosby. *America's Forgotten Pandemic: The Influenza of 1918* 2nd ed. (Cambridge: Cambridge University Press, 2003) p. 10; *The American Experience: Influenza 1918*, Program Transcript, PBS, <http://www.pbs.org/wgbh/amex/influenza/filmmore/transcript/transcript1.html>

<sup>3</sup> Crosby, p. 3

<sup>4</sup> Ibid., pp. 206, 207

<sup>5</sup> Svenn-Erik Mamelund, "Can the Spanish Influenza Pandemic of 1918 Explain the Baby Boom of 1920 in Neutral Norway?" Population English Edition, 2002 Vol 59, No. 2 (March-April, 2004) p. 232, <http://links.jstor.org/sici?sici=1634-2941%28200403%2F04%2959%3A2%3C229%3ACTSIPO%3E2.0.CO%3B2-Z>

<sup>6</sup> John M. Barry, Great Influenza: The Epic Story of the Deadliest Plague in History (New York: Penguin Group, 2004) p. 238

<sup>7</sup> Ibid., p. 238

<sup>8</sup> Tim Appenzeller, "Tracking the Next Killer Flu," National Geographic (October 2005) p. 12

<sup>9</sup> Ibid., p. 12

<sup>10</sup> It is generally thought that the Spanish flu got its name because Spain, being a neutral country in the World War I, did not censor its newspapers, so the mortality rates were exposed to the world. It is certain that the flu did not originate in Spain, though it is not certain where it did originate. Most experts agree that it probably began in America. Ibid., p. 12

<sup>11</sup> Gina Kolata, Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus That Caused It (New York: Farrar, Straus and Giroux, 1999) p. 7

<sup>12</sup> Barry, p. 243

<sup>13</sup> Mary Ellen Snodgrass, World Epidemics: A Cultural Chronology of Disease from Prehistory to the Era of SARS (Jefferson, North Carolina: McFarland & Company, Incorporated, 2003) p. 272

<sup>14</sup> Ibid., p. 272

<sup>15</sup> Crosby, p. 19

<sup>16</sup> The flu was not made a reportable disease in many cities until the second wave of the epidemic was already in full swing because the medical community was reluctant to accept that influenza had reached such proportions. This partially accounts for the incomplete civilian records concerning the flu, in contrast to the records of controlled populations, like the military and prisons, which kept strict medical records of any and all diseases in the community. Kolata, Flu, p. 10

<sup>17</sup> Crosby, pp. 17, 18

<sup>18</sup> Gina Kolata, "Why winter for the flu? A virus has its reasons; [4 edition]," International Herald Tribune (December 6, 2007) p. 5 <http://proquest.umi.com/pqdweb?index=1&did=1393874091&SrchMod e=1&sid=2&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1197252984&clientId=14764>

<sup>19</sup> Ibid., p. 4

<sup>20</sup> The American Experience: Influenza 1918, Maps, PBS, <http://www.pbs.org/wgbh/amex/influenza/maps/index.htm>

<sup>21</sup> Crosby, p. 21

<sup>22</sup> Laura B. Shrestha, "CRS Report for Congress: Life Expectancy in the United States," (Domestic Social Policy Division, 2006) p. 31, <http://www.ncseonline.org/NLE/CRSreports/06Sep/RL32792.pdf>

<sup>23</sup> Kolata, Flu, pp. 6, 7

<sup>24</sup> Crosby, p. 312

<sup>25</sup> Ibid., p. 312

<sup>26</sup> Ibid., p. 75

<sup>27</sup> Ibid., p. 75

<sup>28</sup> Ibid., p. 75

<sup>29</sup> Ibid., p. 76

<sup>30</sup> Ibid., p. 76

<sup>31</sup> Joseph S. Davis, "Economic Conditions Since the Armistice," The Review of Economic Statistics Vol 1, Monthly Supplement (December 1919) p. 9, <http://links.jstor.org/sici?sici=00346535%28191912%291%3C9%3AIAOTY%3E2.0.CO%3B2-0>

<sup>32</sup> Ibid., p. 9

<sup>33</sup> Snodgrass, p. 276

<sup>34</sup> Ibid., p. 276

- <sup>35</sup> Barry, pp. 142, 143  
<sup>36</sup> Ibid., p. 143  
<sup>37</sup> Crosby, p. 74  
<sup>38</sup> Ibid., p. 87  
<sup>39</sup> Ibid., p. 74  
<sup>40</sup> Ibid., p. 104  
<sup>41</sup> Barry, pp. 359, 103  
<sup>42</sup> Kolata, Flu, p. 47  
<sup>43</sup> Crosby, p. 323  
<sup>44</sup> Norman Davies, Europe: A History (New York: Oxford University Press, 1996) p. 412  
<sup>45</sup> Ibid., p. 412  
<sup>46</sup> Ibid., p. 412  
<sup>47</sup> Ibid., p. 412; Davis, p. 10  
<sup>48</sup> Davis, p. 10  
<sup>49</sup> Crosby, p. 314  
<sup>50</sup> Ibid., p. 314  
<sup>51</sup> The Great War: Resources, WWI Casualty and Death Tables, PBS,  
[http://www.pbs.org/greatwar/resources/casdeath\\_pop.html](http://www.pbs.org/greatwar/resources/casdeath_pop.html)  
<sup>52</sup> Davis, p. 9  
<sup>53</sup> Crosby, pp. 70, 108-110  
<sup>54</sup> Ibid., pp. 70, 108-110  
<sup>55</sup> Davis, p. 10; William E. Leuchtenburg, The Perils of Prosperity: 1914-32 (Chicago: The University of Chicago Press, 1958) p. 178  
<sup>56</sup> Leuchtenburg, pp. 178-179  
<sup>57</sup> Ibid., p. 179  
<sup>58</sup> Ibid., p. 180  
<sup>59</sup> Ibid., p. 179  
<sup>60</sup> Davis, p. 10

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## Annotation

The writer of this explanation

- provides a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance.
  - *More people died of the Spanish Flu in the 10 months that it devastated the world than had died of any other disease or war in history. . . . Yet, due to some historical and demographic particulars of the 1918 flu, the American economy—which nearly collapsed in some areas during the outbreak—was not crippled in any lasting way.*
- develops a complex subject through judicious use of relevant and specific facts, details, quotations, and examples.
  - *Details: In only one century, it had seen the successful vaccination, containment, or cure for the notorious menaces of smallpox, anthrax, rabies, meningitis, typhoid, malaria, yellow fever, diphtheria, cholera, and tetanus.<sup>2</sup> . . . On a smaller scale, tobacco sales dropped off about 50 percent in places that strictly required cotton face masks because men could not smoke while wearing masks. . . .*
  - *Facts: Following the “year of readjustment” of 1919, the United States experienced a sunny era of unprecedented prosperity.<sup>55</sup> The national income, which had remained stagnant from 1890 to 1918, rose more than \$200 per capita and laborers enjoyed a workday diminished from 12 to eight hours, as well as a paid annual vacation.<sup>56</sup>*

- **Examples:** *It mutates so frequently that humans are never fully immune to it . . . The killer flu of 1918, dubbed the Spanish Flu or the Spanish Lady, was a particularly deadly mutation of this influenza virus.*<sup>10</sup>
- **Quotations:** *As noted by Crosby, “The Reader’s Guide to Periodical Literature, 1919-1921 has 13 inches of column space devoted to citations of articles about baseball, 20 inches to Bolshevism, 47 to Prohibition, and 8 inches to the flu.”<sup>50</sup> . . . All of this was accomplished by a manufacturing labor pool that, according to historian William E. Leuchtenburg in his book *The Perils of Prosperity*, contained “precisely the same number of men in 1929 as it had in 1919.”<sup>59</sup>*
- makes discriminating use of researched information, incorporating it effectively into the text.
  - The writer incorporates information effectively to show how devastating the flu was as well as the historical and demographic particulars that allowed the economy to escape lasting damage.
- organizes and presents information so that each new piece of information builds upon what precedes it to create a unified whole.
  - The information is organized logically (and, in places, chronologically). The introduction previews the content. The piece then moves through several carefully sequenced categories of information: background details; information about the number of deaths the flu caused; the progress of the pandemic; the immediate effect on young workers, the military, and service workers; the impact of restrictive public health ordinances; the way the “egalitarian” infection attacked all strata of society; the ironic economic benefit of the flu; the resurgence of materialism; and the rapid growth of prosperity. The conclusion summarizes the main points of the explanation.
- demonstrates command of discipline-specific and technical vocabulary and maintains a formal, objective style.
  - . . . bacteriology . . . diphtheria . . . sanitation . . . suffragette movement . . . pandemic . . . virulent disease . . . influenza viruses . . .
  - *In an effort to restrict exposure to the virus, the Surgeon General had issued public health ordinances that prohibited most public gatherings and required gauze masks to be worn at all times.*<sup>37</sup>
- demonstrates control of a range of strategies to present complex information or explanations and employs them effectively to manage the complexity of the topic.
  - **Cause/effect:** . . . there was sparse evidence that civilians were similarly affected, and, besides, disease was a fact of life in any military camp.<sup>16</sup> So, little attention was directed to the budding pandemic . . . With an absence of competition in the work force and a high demand for menial labor, serfs were able to gain comparative economic freedom with rising pay.<sup>45</sup>
  - **Comparison/contrast:** *More people died of the Spanish Flu in the 10 months that it devastated the world than had died of any other disease or war in history. . . . The flu is not generally thought of as a killer. Instead, it is perceived as a pesky annual virus, slightly more troublesome than the common cold, but nothing serious . . . When contagious diseases attack a society, it tends to hit the poorest sector of the economy the hardest. . . . By contrast, the Spanish Flu, being an air-borne disease (and thus not preventable through good hygiene and health) affected all sectors of the economy equally.*

- links ideas with transitions and by varying sentence structures to express relationships between ideas and to create cohesion.
  - *Due to the new strides . . . Whereas in all previous wards . . . Yet, due to some historical and demographic particulars . . . Instead, it is perceived . . . As expected, the flu subsided quickly . . . Nearly every city . . . In many places . . . In the most severe stages . . . When the epidemic reached cities . . .*
- emphasizes the most significant information and confirms the accuracy of key points.
  - The writer quotes appropriately, paraphrases and cites works, and documents facts and sources.
  - *The epidemic first struck Camp Devens, an overcrowded military camp thirty miles from Boston, on September 8 after brewing in Europe for about a month.<sup>19</sup>*
- demonstrates very good command of the conventions of standard written English, although the work may have been edited for publication.

## Student Sample: Grade 12, Informational/Explanatory

The essay that follows was one of a portfolio of four essays submitted by a high school student for placement in a college composition course sequence. The student had unlimited time to write and likely received feedback and instructional support while creating the portfolio.

### Fact vs. Fiction and All the Grey Space in Between

The modern world is full of problems and issues—disagreements between peoples that stem from today’s wide array of perceptions, ideas, and values. Issues that could never have been foreseen are often identified and made known today because of technology. Once, there were scatterings of people who had the same idea, yet never took any action because none knew of the others; now, given our complex forms of modern communication, there are millions who have been connected. Today, when a new and arguable idea surfaces, the debate spreads across the global community like wildfire. Topics that the general public might never have become aware of are instantly made into news that can be discussed at the evening dinner table. One such matter, which has sparked the curiosity of millions, is the recent interest in the classification of literature as fiction or nonfiction.

A number of questions have arisen: What sparked the booming interest? Where exactly is the line that separates fiction from nonfiction, and how far can the line be stretched until one becomes the other? Are there intermediaries between the two, or must we classify each piece of literature as one or the other? Do authors do this purposefully, or with no intent? The answers to these questions are often circular and simply lead to further dispute. In modern times, the line between the classification of literature as either fiction or nonfiction has become blurred and unclear; the outdated definitions and qualifications have sparked the development of new genres and challenged the world’s idea on the differences between the two.

#### *The Spark Which Lit the Fire*

Though it had been a fairly relevant and known topic to members of the literary world, the idea that a book is not always completely fiction or nonfiction seemed to be an obscure and unnecessary subject for the public to ponder. However, the average Monday morning watercooler conversation was forever changed when what has become known as the “Million Little Lies Scandal” broke out in early 2006. It started on October 26, 2005 when author James Frey appeared on *The Oprah Winfrey Show*. He was the only guest of the day, there to promote and discuss his book entitled *A Million Little Pieces*. The book, a nonfiction memoir, recounts Frey’s experience as an alcoholic, drug addict, and criminal, and the heroic story of his overcoming of every obstacle in his path to getting clean. After his appearance on the show and addition into Oprah’s highly esteemed and publicized book club, the novel skyrocketed to the top of the charts, eventually becoming a number one best seller. But his success was short lived; in the months that followed, *The Smoking Gun*, a Web site that posts legal documents, arrest records, and investigates celebrity police dealings, unearthed some discrepancies between Frey’s story and the police documents that should have supported his claims.

Though the Web site had originally only been searching for Frey’s mugshot, one small inconsistency soon led to another, and after a six-week investigation, the site released its findings. Investigators had taken any parts of Frey’s story that could be verified by a police record, matched it with his actual records, and were shocked by what they found; nearly all of Frey’s memoir was either highly embellished or flat out fabricated. Huge discrepancies between the truth and what was stated in Frey’s book became headline news; instances like Frey claiming to be in jail for eighty-seven days when in reality he was incarcerated for a mere four hours, or the serious drug charges that he claimed were filed against him that were never found on any record.

Frey was caught, and on January 8, 2006, *The Smoking Gun* published an article called “A Million Little Lies,” which took an in-depth look at every provable inconsistency in the novel. By comparing direct quotes from the book to police records—or rather, the lack of police records—Frey’s entire novel was pieced apart until there was nothing remaining. Completely discredited, yet still somehow maintaining the entire situation was a misunderstanding, Frey

attempted to salvage his namesake by reappearing on *Oprah*; in the end, this proved to be more damaging than helpful. He had his reasons for what he'd done, he tried to explain.

Reasons that were valid and legitimate according to him, as he stated that he would not have been able to get the book signed unless he was willing to sell it as nonfiction. Details had been slightly exaggerated, he conceded, but this was only to allow the novel to fluctuate and flow in a way that would not have been possible had he stuck to the bare facts.

Regardless, in the end, it was proved beyond anyone's reasonable doubt that James Frey's novel landed dead center in the proverbial grey area between black and white—his novel was partially fiction and partially nonfiction. And so started the media frenzy; the scandal covered newsstands for weeks, people took sides with either Frey or his critics, and similarly themed novels were called into question. Suddenly the world *cared* about a novel's validity; they no longer assumed that the words fiction and nonfiction could themselves define the amount of fact that stood behind a piece of literature. People also realized, simultaneously, that they might not exactly know what defined and separated fiction and nonfiction, or if, in more modern times, the two might mesh together a bit more than in the literature of old.

#### *With Difficulty, the Line is Drawn*

Fiction and nonfiction: they're two words that are surprisingly hard to define. It's difficult to ascertain what the words have meant in the past, what they each encompass today, and how past and present definitions have been molded and shaped by the literature of the time. Traditionally, fiction is 'a tale drawn from the imagination' and nonfiction is 'a statement of fact'; however, the two are so much more complex than that. For many, the word 'fiction' is associable with the word 'story,' as if the two are equal or interchangeable. Subgenres of fiction often contribute to this perception; novels, short stories, fairy tales, comics, films, animation, and even video games help the mind classify fiction as a substance completely fabricated in the mind. Fiction is largely assumed to be a form of art or entertainment, and in many cases this is true—science fiction and romance novels are two examples of how we are entertained by a good book. But frequently, stories are told to educate—to raise awareness regarding a certain topic about which the author is concerned.

Stories like Cormac McCarthy's *The Road*, George Orwell's *1984*, and Ayn Rand's *Anthem* all warn us about terrible futures that may arise as the result of the choices of humanity. Uzodinma Iweala's *Beasts of No Nation* is a short work of fiction based entirely around fact; while it tells the tale of a fictional little African boy thrown into a bloody civil uprising, his story of being a recruited child soldier is happening to hundreds of similar boys to this very day. Fables and parables are other, more subliminal examples of educational, moral-based fiction.

In the same way, nonfiction is surrounded by many presumptions; people assume that anything read in a nonfiction book is true, otherwise the literature would be labeled as fiction. Nonfiction literature *is* factual literature, but there is one important note to make. Nonfiction is literature that is *presented* as fact. This presentation may be accurate or inaccurate; in other words, the author is presumed to be writing what he or she believes to be the truth, or what he or she has been led to believe is the truth. Examples of nonfiction include essays, documentaries, scientific papers, textbooks, and journals. Nonfiction differs from fiction, however, in the areas regarding how the literature is presented and used. Directness, simplicity, and clarity are all aims of nonfiction literature.

Providing straight, accessible, understandable information to the reader is the purpose of nonfiction, and the ability to communicate well to the audience is what defines a skilled writer of the field. And despite the truth behind nonfiction writing, it is often necessary to persuade the reader to agree with the ideas being presented; therefore, a balanced, coherent and informed argument is also vital.

#### *More Than Simply Black or White*

The line between fiction and nonfiction starts to blur, however, when one considers genres that seem to mesh the two; historical fiction, new journalism, and biographies/autobiographies. These are only three of the defined new

genres encompassed by what has become the intermediary between fiction and nonfiction— literary nonfiction. When one explores these three genres, it becomes blaringly obvious how easily fiction and nonfiction can blur into one.

Historical fiction is the product when an author takes real people and real events and tells the story of what actually happened to them, but inserts characters of their own creation and a plot line that they invent in order to tie the entire novel together. This idea is perfectly exemplified in Ann Rinaldi’s *An Acquaintance with Darkness*. This novel takes real historical aspects (the assassination of President Lincoln; the trial of the only woman associated with his murder; the society of Washington, D.C., at the time of his death; the history behind the practice of grave robbing) and inserts the character of a young girl and her dying mother who, between the two of them, manage to tell the historical side of the story along with their own imagined one. All the pieces of history are told completely as they happened; so on some level, this novel *is* nonfiction. Yet it is also blatantly fiction—it has *characters*.

New journalism, biographies, and autobiographies, however, blur the lines in a slightly different way; they call into question people’s ability to relay information truthfully and with no bias. New journalism is the term coined in the 1960s to describe the then unconventional journalism techniques that brought the reader inside the life and mind of the story. It’s a practice very common today; just watch any network investigation series. The journalist attempts to get inside the mind of whomever is being investigated; he or she digs up information regarding that person’s past, present, and potential future. The author then takes all the factual background information they’ve collected and pairs it with the emotions, memories, and feelings described to them by the person, and writes the complete story. If the complete work is to be published as a book rather than a news article or made into a television script, it often ends up being sold as a fiction novel. Yet is this the correct classification, given that all the information is true?

One excellent example of new journalism is Truman Capote’s *In Cold Blood*. When asked about it, Capote himself even called it “unclassifiable.” Capote traveled to Kansas to investigate the murder of a family of four; he ended up staying there for years, befriending the people of the town, discovering what he could about the murders from them, and piecing together his book from interviews and information he gained during his stay. When it was published, the novel became a best seller and also one of the first highly noted pieces of literature to border the line between fiction and nonfiction; it was the first of its kind to bring the idea of the blurring line to households across the United States.

Biographies and autobiographies are often questioned in the same way. Though not always thought of as controversial and previously considered nonfiction, biographies and autobiographies don’t appear to fit into today’s definition of fiction or nonfiction. The authors of both are simply telling the story of their own life or of someone else’s life, but that begs an obvious question; is a highly detailed, written record of a person’s feelings and perceptions able to be considered nonfiction? How can we classify people’s emotions and memories as fact? An outstanding example of an autobiographical piece that cannot be defined is Tim O’Brien’s *The Things They Carried*. His self-proclaimed ‘nonfiction novel’ is a collection of stories stemming from both his imagination and his personal experience in Vietnam during the war. O’Brien feels that the idea of creating a story that is technically false yet truthfully portrays a situation—as opposed to just stating the facts and stirring no emotion within the reader—is the correct way to educate the public in a meaningful, everlasting way. He, like many others, believes that biographies and autobiographies should be left as their own separate being; a genre where the reader may classify for himself or herself what truth and what fiction might lie within the literature. All of the issues mentioned above are shrouded in debate; there are no straightforward answers.

Fiction and nonfiction are two polar opposites on a scale that today offers little to no gradient. In years past, these two words have been definition enough and have managed to encompass all types of written word. Times change, however, and in the modern day, authors have begun to push the boundaries and discover the furthest extent of where literature can take us. Since they feel as if their literature does not fit into the classifications of fiction or nonfiction, authors are creating *new* genres where their novels and books can be properly sorted and defined. An update is long overdue—both an update to the definitions currently used to classify books, and an update in which we create new areas into which books can be classified.

## Annotation

The writer of this explanation

- provides a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance.
  - *In modern times, the line between the classification of literature as either fiction or nonfiction has become blurred and unclear; the outdated definitions and qualifications have sparked the development of new genres and challenged the world's idea on the differences between the two.*
- develops a complex subject through judicious use of facts, details, examples, and other information.
  - *Frey was caught, and on January 8, 2006, The Smoking Gun published an article called "A Million Little Lies," which took an in-depth look at every provable inconsistency in the novel. By comparing direct quotes from the book to police records—or rather, the lack of police records—Frey's entire novel was pieced apart until there was nothing remaining.*
  - *Stories like Cormac McCarthy's The Road, George Orwell's 1984, and Ayn Rand's Anthem all warn us about terrible futures that may arise as the result of the choices of humanity.*
- organizes and presents information so that each new piece of information builds upon what precedes it to create a unified whole.
  - *The writer uses headers to help organize sections and uses cohesion devices to link sentences.*
  - *The Spark Which Lit the Fire; With Difficulty, the Line is Drawn; More Than Simply Black or White*
  - *However, the average Monday morning watercooler conversation was forever changed when what has become known as the "Million Little Lies Scandal" broke out in early 2006.*
  - *Regardless, in the end, it was proved beyond anyone's reasonable doubt that James Frey's novel landed dead center in the proverbial grey area between black and white—his novel was partially fiction and partially nonfiction.*
  - *Fiction and nonfiction: they're two words that are surprisingly hard to define. It's difficult to ascertain what the words have meant in the past, what they each encompass today, and how past and present definitions have been molded and shaped by the literature of the time.*
  - *Fiction and nonfiction are two polar opposites on a scale that today offers little to no gradient.*
- demonstrates control of strategies and uses discipline-specific vocabulary.
  - *Fiction and nonfiction: they're two words that are surprisingly hard to define.*
  - *The line between fiction and nonfiction starts to blur, however, when one considers genres that seem to mesh the two; historical fiction, new journalism, and biographies/autobiographies.*

- links ideas by varying sentence structures to express the precise relationship among ideas and to create cohesion.
  - *All the pieces of history are told completely as they happened; so on some level, this novel is nonfiction. Yet it is also blatantly fiction—it has characters.*
  - *Where exactly is the line that separates fiction from nonfiction, and how far can the line be stretched until one becomes the other? Are there intermediaries between the two, or must we classify each piece of literature as one or the other?*
- provides a conclusion that articulates the significance of the information.
  - *Since they feel as if their literature does not fit into the classifications of fiction or nonfiction, authors are creating new genres where their novels and books can be properly sorted and defined.*
- demonstrates good command of the conventions of standard written English, although there are some errors in the essay.
  - *. . . The Smoking Gun, a Web site that posts legal documents, arrest records, and investigates celebrity police dealings . . .*
  - *By comparing direct quotes from the book to police records—or rather, the lack of police records—Frey’s entire novel was pieced apart until there was nothing remaining.*

Note on Narrative Writing:

The writer has used narrative—the recounting of James Frey’s troubles—to add interest and lend concreteness to his essay. He presents vivid and relevant details in his narrative and crafts a structure that reveals the significance of the story within the more philosophical explanation that surrounds it.

## Student Sample: Grade 12, Informational/Explanatory

The essay that follows was one of a portfolio of four essays submitted by a high school student for placement in a college composition course sequence. The student had unlimited time to write and likely received feedback and instructional support while creating the portfolio.

### The Making of a Human Voice and How to Use It

The violin is arguably the most cherished and well-known orchestral instrument in the world. Many are moved by its unique quality of sound; it is known as the only instrument close to the sound of a human voice. Maybe the violin is so revered because “humans in all times and places are powerfully moved, or threatened, by the possibility that with our hands and minds we can create something that is perfect” (Ebert). But the sound of this instrument was not magically created overnight; the creation of the very first violin took many years and has been a product of much experimentation. This is the reason that every beginning violinist should learn to appreciate the art of making a violin and the process of holding and bowing his instrument so that he will have the knowledge to play it well.

The process of constructing a violin is an age-old tradition that has been developed and refined for centuries. Each step is crucial to the quality of the instrument’s sound. The violin’s body consists of a rib structure, which is made from six thin maple ribs that are bent to shape by applying dry heat. The ribs are reinforced at the joints by wood blocks that are located in each of the four outward curving corners, one at the top rib, and one at the lower rib. To reinforce the glue-joints between the ribs and the table and back of the violin, strips of willow or pine are glued along the inside edges of the ribs to create the lining. The back plate of the violin is made from either one or two matched pieces of maple. The wood chosen for these pieces is very important and affects the sound production of the violin. The outline of the plate is drawn onto the maple and sawn out, and the arching (the outward bulge) is then painstakingly carved to a thickness of about five millimeters. The front plate of the violin, or table, has two soundholes carved from it on either side of the bridge. These soundholes are [shaped like the letter f] and are made to project the sound. Purfling is done by inlaying thin strips of wood around the top and back of the violin a short distance from the rim. Purfling strengthens the delicate edgework and produces a beautiful frame around the instrument’s outline (Gusset).

The bridge is cut from a thin sliver of maple. Intricate shapes are carved from it, known as the “heart,” “ears,” and the two “feet” that allow it to stand on the violin table. The bridge is placed directly between the small nicks cut in the middle of each [soundhole]. The top of the bridge is curved to conform to the arch of the violin table, which allows the player to play each string individually (Skinner). The bridge is held onto the instrument by as much as seventeen pounds of pressure exerted from the four strings, which makes it a very delicate piece that must be checked periodically for leaning or warping. A bass-bar is fitted to the underside of the table underneath the left foot of the bridge. Underneath the right foot of the bridge, a soundpost is wedged between the front and back panel. The soundpost is made of spruce or pine and resists the downward pressure of the strings and improves the sound.

A neck is fitted to the top rib and is made to hold the fingerboard above the table. The fingerboard is a piece of ebony that extends beyond the neck and gradually widens towards the bridge. At the top of the neck is a pegbox that has holes drilled into each side in which the pegs are held. The pegs are used for a wide range of tuning. The pegbox slopes slightly backwards, which tensions the strings across the ebony nut at the top of the fingerboard and keeps them raised above the fingerboard. At the top of the pegbox is a scroll, added during the baroque period as an artistic flourish to provide an aesthetic touch to its already pleasing appearance (Vienna Online Magazine). The strings are wrapped around the pegs, stretched across the bridge, and held by an ebony or boxwood tailpiece. Anywhere from one to four fine tuners can be attached to the tailpiece; these are used to tighten or loosen the string to change its pitch for fine-tuning. The tailpiece is held into place by a loop of gut or nylon that is wrapped around an ebony end button located in the middle of the bottom rib.

After gluing is done, the violin must be exposed to air and sun for several days to a few weeks to darken the wood through the process of oxidation (Gusset). A protective varnish is brushed onto the surface of the violin, which has a slight dampening effect to the sound, but it is primarily used to protect the wood from perspiration, dust, dirt, and humidity (Kolneder 21). “The classical Italian makers appear to have used different formulations for the ground coat, which seals and protects the wood and does much to bring out its natural beauty, and the top coats, which were tinted with rich red, yellow and golden-brown colours . . . Recent research suggests that walnut or linseed oil may have been an important constituent of the finest old Italian varnish, later supplanted by recipes based on shellac and alcohol” (Stowell 5).

Both the construction of the violin and the way it is played are equally important to its sound production. This is very critical to learn early so that a bad habit does not need correcting later on. The modern violin is held between the chin and the left shoulder, with the scroll angling towards the left. Violin teachers will have varying ideas of the correct position to hold a violin, but many great violinists have held their instruments in different ways and have been successful. Some will hold a violin directly under the chin, and others believe that the highest position on the shoulder is best. A chinrest is usually attached to the left side of the tailpiece to make it more comfortable for the violinist to hold. Sometimes a shoulder rest can be attached to the back of the violin which can be taken off after playing. The shoulder rest can be made of various materials and provides height and padding to the violinist’s shoulder.

The left hand gently moves along the neck and fingerboard of the violin. The left fingers press down upon the string, shortening its length, which creates a higher pitch. The right hand holds the bow, which consists of a long stick of wood and a gathering of horsehair stretched from one end of the bow to the other. “In the bowing area, two C-shaped indentations (the waist) accommodate the bow’s motion across the strings” (Kolneder 13). The four strings can be bowed with the horsehair, plucked, or bounced with the stick of the bow to produce vastly different colors of sound. “Bowling across the string is the normal manner of tone production, but the process is actually extremely complicated and in its most minute details not yet entirely understood . . . The strings’ basic pitch depends on its length, thickness, material . . . and tension. These factors determine the frequency, that is, the number of vibrations . . . per second” (Kolneder 16). The bow must be rosined frequently to allow the strings to vibrate to create the fullest sound.

Even if a luthier, or stringed instrument maker, takes years to complete a violin, it can only produce its best sound if every step of its construction and every piece is made with is of the best quality. The same is true of the time needed for a musician to play the violin well. A player must learn that what counts is not how much time is spent practicing, but the quality of practice. A private teacher is also required, so proper instruction will be given. A musician must also fully understand and appreciate the skill required for constructing a violin. Not until then will a violinist be able to use his knowledge to bring forth their instrument’s fullest and most beautiful sound.

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#### Annotation

### The writer of this explanatory essay

- provides a clear and coherent introduction that establishes the subject, and conveys a knowledgeable stance.
  - *The violin is arguably the most cherished and well-known orchestral instrument in the world. Many are moved by its unique quality of sound; it is known as the only instrument close to the sound of a human voice. . . . the sound of this instrument was not magically created overnight; the creation of the very first violin took many years and has been a product of much experimentation. This is the reason that every beginning violinist should learn to appreciate the art of making a violin and the process of holding and bowing his instrument so that he will have the knowledge to play it well.*
- develops a complex subject (the making of a violin) through judicious use of relevant and specific facts, details, quotations, and examples.
  - **Facts:** . . . *the creation of the very first violin took many years and has been a product of much experimentation.*
  - **Details:** *The four strings can be bowed with the horsehair, plucked, or bounced with the stick of the bow to produce vastly different colors of sound.*
  - **Quotations:** *“Bowing across the string is the normal manner of tone production, but the process is actually extremely complicated and in its most minute details not yet entirely understood . . . The strings’ basic pitch depends on its length, thickness, material . . . and tension. These factors determine the frequency, that is, the number of vibrations . . . per second” (Kolneder 16).*
  - **Examples:** . . . *many great violinists have held their instruments in different ways and have been successful. Some will hold a violin directly under the chin, and others believe that the highest position on the shoulder is best.*
- represents and cites accurately the data, conclusions, and opinions of others, effectively incorporating them into one’s own work while avoiding plagiarism.
  - *At the top of the pegbox is a scroll, added during the baroque period as an artistic flourish to provide an aesthetic touch to its already pleasing appearance (Vienna Online Magazine).*
  - *“The classical Italian makers appear to have used different formulations for the ground coat, which seals and protects the wood and does much to bring out its natural beauty, and the top coats, which were tinted with rich red, yellow and golden-brown colours . . . Recent research suggests that walnut or linseed oil may have been an important constituent of the finest old Italian varnish, later supplanted by recipes based on shellac and alcohol” (Stowell 5).*
- organizes and presents information so that each new piece of information builds upon what precedes it to create a unified whole.
  - The information is sequenced logically. The writer provides a carefully sequenced explanation of how a violin is made. Her explanation conveys detailed descriptions of the various parts of a violin and their purposes, what a violin is made of, how it is played, and the steps in the process of building one.

- demonstrates command of discipline-specific and technical vocabulary and maintains a formal, objective style.
  - . . . a rib structure . . . glue-joints . . . back plate . . . soundholes . . . tuning . . .
  - *Purfling is done by inlaying thin strips of wood around the top and back of the violin a short distance from the rim. . . . a luthier, or stringed instrument maker . . .*
- demonstrates control of a range of strategies to present complex information and employs them effectively to manage the complexity of the topic.
  - **If/then (with an embedded definition):** *Even if a luthier, or stringed instrument maker, takes years to complete a violin, it can only produce its best sound if every step of its construction and every piece is made with is of the best quality.*
  - **Definition:** *The **f**ingerboard is a piece of ebony that extends beyond the neck and gradually widens towards the bridge.*
- links ideas with transitions and by varying sentence structures to express the precise relationships among ideas and to create cohesion.
  - *This is the reason . . . At the top of the neck . . . After gluing is done . . . Even if a luthier . . .*
  - *But the sound of this instrument was not magically created overnight; the creation of the very **f**irst violin took many years and has been a product of much experimentation. This is the reason that every beginning violinist should learn to appreciate the art of making a violin . . .*
- emphasizes the most significant information and confirms the accuracy of key points.
  - The writer quotes appropriately, paraphrases and cites works, and documents sources.
- provides a conclusion that articulates the implications and significance of the explanation.
  - *A musician must . . . fully understand and appreciate the skill required for constructing a violin. Not until then will a violinist be able to use his knowledge to bring forth their instrument's fullest and most beautiful sound.*
- demonstrates very good command of the conventions of standard written English, although there are a few errors and weak constructions in the essay.
  - . . . *the creation of the very first violin took many years and has been a product of much experimentation.*
  - *The soundpost is made of spruce or pine and resists the downward pressure of the strings and improves the sound.*

## Student Sample: Grade 12, Argument

The essay that follows was written for a university/college placement assessment. Two different perspectives on an issue (whether or not dress codes should be adopted in school) were provided in the prompt, and students were advised to either support one of the two points of view given or to present a different point of view on the issue. The students were allowed thirty minutes to write.

I believe that it would be beneficial for our schools to adopt dress codes. Although some may argue that this action would restrict the individual student's freedom of expression, I do not agree. Our right to express ourselves is important, but in our society none of us has unrestricted freedom to do as we like at all times. We must all learn discipline, respect the feelings of others, and learn how to operate in the real world in order to be successful. Dress codes would not only create a better learning environment, but would also help prepare students for their futures.

Perhaps the most important benefit of adopting dress codes would be creating a better learning environment. Inappropriate clothing can be distracting to fellow students who are trying to concentrate. Short skirts, skimpy tops, and low pants are fine for after school, but not for the classroom. T-shirts with risky images or profanity may be offensive to certain groups. Students should express themselves through art or creative writing, not clothing. With fewer distractions, students can concentrate on getting a good education which can help them later on.

Another benefit of having a dress code is that it will prepare students to dress properly for different places. When you go to a party you do not wear the same clothes you wear to church. Likewise, when you dress for work you do not wear the same clothes you wear at the beach. Many professions even require uniforms. Having a dress code in high school will help students adjust to the real world.

Lastly, with all the peer pressure in school, many students worry about fitting in. If a dress code (or even uniforms) were required, there would be less emphasis on how you look, and more emphasis on learning.

In conclusion, there are many important reasons our schools should adopt dress codes. Getting an education is hard enough without being distracted by inappropriate t-shirts or tight pants. Learning to dress for particular occasions prepares us for the real world. And teens have enough pressure already without having to worry about what they are wearing.

## Annotation

The writer of this argument

- establishes the importance of the issue, makes a substantive claim, and distinguishes it from alternate or opposing claims.
  - *I believe that it would be beneficial for our schools to adopt dress codes.*
  - *Although some may argue that this action would restrict the individual student's freedom of expression, I do not agree. Our right to express ourselves is important, but in our society none of us has unrestricted freedom to do as we like at all times. We must all learn discipline, respect the feelings of others, and learn how to operate in the real world in order to be successful.*
- supports claims with logical reasons but generally fails to provide specific evidence, which could have been gathered if this had not been an on-demand-writing situation.
  - *Perhaps the most important benefit of adopting dress codes would be creating a better learning environment. Inappropriate clothing can be distracting to fellow students who are trying to concentrate.*
  - *Another benefit of having a dress code is that it will prepare students to dress properly for different places. When you go to a party you do not wear the same clothes you wear to church.*

- *If a dress code (or even uniforms) were required, there would be less emphasis on how you look, and more emphasis on learning.*
- develops the argument in part based on an awareness of the audience's values.
  - The writer addresses an unknown adult audience likely to appreciate values such as *discipline* and *respect [for] the feelings of others* as well as the creation of *a better learning environment*.
- conveys relationships between reasons and signals alternative claims using words, phrases, and clauses.
  - *Although some may argue . . . Perhaps the most important benefit . . . With fewer distractions . . . Another benefit . . . When . . . Likewise . . . Lastly . . . In conclusion . . .*
- maintains a formal style.
  - The writer's formal style is appropriate for the topic and the assessment situation.
- demonstrates fairly good command of the conventions of standard written English although there are some errors in the essay.
  - *T-shirts with risky [risqué] images . . .*
  - *. . . express themselves . . .*

## Student Sample: Grade 12, Argument

The essay that follows was written for a university/college placement assessment. Two different proposals (reducing fares or upgrading and expanding the subway and bus routes) were provided in the prompt, and students were asked to explain which proposal was better. The students who participated in the assessment were allowed one hour to write.

Dear City Council:

The choice you are facing is a daunting one. The number of users of the public transportation system has been plummeting, and something must be done. Two options are on the table. The first one, reducing fares, is no doubt attractive. It will greatly benefit the lower and middle income customers who form the majority of your customer base. It will only produce marginal gains, however, in terms of overall ridership. The better option is the second one, increasing the frequency of trains and buses and expanding routes. This option will increase your customer base by making the public transportation system more convenient and reliable.

The principal hurdle for most people who choose not to use public transportation is convenience. Let's view the public transportation system from the perspective of the average working person. If time is money, then time spent waiting for trains and buses is money lost. Additionally, infrequent trains mean crowded trains, which can result in further delays as well as considerable inconvenience. The average working person wants to arrive at work well rested, ready to attack the work day. This just isn't possible if you've just spent the past hour standing in an overcrowded train jostled by the people around you, wondering if you're going to be late for work. Let's face it, given the hassles one faces on the public transportation system, it's much more convenient to drive or take a cab. Even if you get stuck in traffic, you still have a reasonable amount of space and privacy and might even be able to get a bit of work done during your trip to work.

The convenience factor doesn't apply just to working people. It applies to people who are going out for evenings. It applies to school children. It applies to parent running household errands. Society today runs at an exceptionally fast pace, and we are all trying to find ways to cut corners and buy a minute or two. This applies to people from all age groups and income levels. If the public transportation system can start helping us make our lives more efficient and convenient, then we will see a dramatic increase in rider ship because more frequency of buses and trains will mean a more reliable system even if one bus or train is late or missing. People will be able to plan ahead, and their expectation that a bus or train will come very soon after they arrive at the bus stop or the subway station will be fulfilled. For new Yorkers, the reduction in the daily stress of commuting will be a great benefit.

Decreasing fares will not have the same impact. People who are forced to use the train for economic reasons will continue to use it for economic reasons. Those who drive or take cabs do so in spite of the cost. Money doesn't matter to them; convenience does. This doesn't mean that I'm not sympathetic to the notion of lowering fares. I am. It's just not a priority. In fact, there may be a way for us to have our cake and eat it too. If you adopt my proposal to increase rider ship by providing more frequent trains and increasing the number of stops, we may be able to increase rider ship to the point where the public transportation system begins to operate more efficiently. At this point, reducing fares might become feasible.

### Annotation

The writer of this argument

- establishes the importance of the issue, makes a substantive claim, and distinguishes it from alternate or opposing claims.

- *Dear City Council: The choice you are facing is a daunting one. The number of users of the public transportation system has been plummeting, and something must be done. . . . reducing fares, is no doubt attractive. . . . The better option is . . . increasing the frequency of trains and buses and expanding routes.*
- supports claims with logical reasons.
  - *This option will increase your customer base by making the public transportation system more convenient and reliable.*
- provides relevant, sufficient, and convincing evidence in support of the reasons and makes logical connections between the evidence and the claim.
  - *The principal hurdle for most people who choose not to use public transportation is convenience. . . . infrequent trains mean crowded trains, which can result in further delays as well as considerable inconvenience. The average working person wants to arrive at work well rested, ready to attack the work day. This just isn't possible if you've just spent the past hour standing in an overcrowded train jostled by the people around you, wondering if you're going to be late for work.*
  - *If the public transportation system can start helping us make our lives more efficient and convenient, then we will see a dramatic increase in rider ship because more frequency of buses and trains will mean a more reliable system even if one bus or train is late or missing.*
- develops the argument in part based on an awareness of the audience's values and maintains a formal style.
  - *If you adopt my proposal to increase rider ship by providing more frequent trains and increasing the number of stops, we may be able to increase rider ship to the point where the public transportation system begins to operate more efficiently. At this point, reducing fares might become feasible.*
- conveys relationships between reasons and between reasons and evidence and signals alternative perspectives.
  - *If time is money, then time spent waiting for trains and buses is money lost.*
  - *This doesn't mean that I'm not sympathetic to the notion of lowering fares. I am. It's just not a priority.*
- provides a concluding paragraph that enhances the argument by offering a logical consequence.
  - *If you adopt my proposal . . . we may be able to increase rider ship to the point where the public transportation system begins to operate more efficiently. At this point, reducing fares might become feasible..*
- demonstrates good command of the conventions of standard written English, although there are minor errors.
  - *. . . rider ship . . .*
  - *It applies to parent running household errands.*

## Exemplars of Reading Text Complexity and Quality, History/Science 6–12

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### Selecting Text Samples

The following text samples primarily serve to exemplify the level of complexity and quality that the *Standards* require all students in a given grade band to engage with while additionally suggesting the breadth of text types that students should encounter. The choices should serve as useful guideposts in helping educators select texts of similar **complexity**, **quality**, and **breadth** for their own classrooms. The process of text selection was guided by these criteria in the following fashion:

- *Complexity*. Appendix A describes in detail a three-part model of measuring text complexity based on qualitative and quantitative indices of inherent text difficulty balanced with educators' professional judgment. In selecting texts to serve as exemplars, the work group began by soliciting contributions from teachers, educational leaders, and researchers who have experience working with students in the grades for which the texts have been selected. These contributors were asked to propose texts that they or their colleagues have used successfully with students in a given grade band. The work group made final selections based in part on whether qualitative and quantitative measures identified by the *Standards* indicated that the proposed texts were of sufficient complexity for the grade band. For those types of texts—particularly poetry and multimedia sources—for which these measures are not as well suited, professional judgment necessarily played a greater role in selection.
- *Quality*. While it is possible to have high-complexity texts of low inherent quality, the work group solicited only texts of recognized value. From the pool of submissions gathered from outside contributors, the work group selected classic or historically significant texts as well as contemporary works of comparable literary merit, cultural significance, and/or content richness.
- *Breadth*. After identifying texts of appropriate complexity and quality, the work group applied a range of secondary criteria to ensure that the samples presented in each band represented as broad a range of sufficiently complex, high-quality texts as possible. Among the factors considered were initial publication date, authorship, and subject matter.

### Copyright and Permissions

For those exemplar texts not in the public domain, the work group is seeking permission from the rights holders for limited use by the Common Core State Standards Initiative of the National Governors Association.

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Please note that these texts are included solely as exemplars in support of the *Standards*. Any additional use of those texts that are not in the public domain, such as for classroom use or curriculum development, requires independent permission from the rights holders. The texts may not be copied or distributed in any way other than as part of the overall Common Core Standards Initiative document.

### Organization and Excerpting

Texts are organized first by category, with narrative texts followed by drama and poetry and then the informational texts. Within each category, the texts are organized by date, usually of first publication, beginning with the oldest and ending with the most recent. In some cases, the date of any given work may be open to debate.

The excerpts given here are meant to stand in for the full work in most instances. Works that are not in the public domain may be represented by short excerpts or snippets while the work group awaits permission from the rights holders for full use.

### **Media Texts**

Selected excerpts are accompanied by annotated links to related media texts available online at the time of the publication of this document.

## Grades 6–8 Text Exemplars

### Informational Texts (History and Social Sciences)

|  |    |
|--|----|
| Preamble and First Amendment to the United States Constitution<br>by United States (1787, 1791)                    | 6  |
| <i>A Night to Remember</i><br>by Walter Lord (1955)  | 7  |
| <i>A Short Walk through the Pyramids and through the World of Art</i><br>by Phillip Isaacson (1993)                | 8  |
| <i>The Great Fire</i><br>by Jim Murphy (1995)  | 9  |
| <i>Vincent Van Gogh: Portrait of an Artist</i><br>by Jan Greenberg and Sandra Jordan (2001)                        | 10 |
| <i>This Land Was Made for You and Me:<br/>The Life and Songs of Woody Guthrie</i><br>by Elizabeth Partridge (2002) | 12 |
| <i>Words We Live By: Your Annotated Guide to the Constitution</i><br>by Linda R. Monk (2003)                       | 14 |
| <i>Freedom Walkers: The Story of the Montgomery Bus Boycott</i><br>by Russell Freedman (2006)                      | 15 |

### Informational Texts (Science, Mathematics, and Technology)

|  |    |
|--|----|
| <i>Cathedral: The Story of Its Construction</i><br>by David Macaulay (1973)  | 16 |
| <i>The Building of Manhattan</i><br>by Donald A. Mackay (1987)   | 17 |
| <i>The Number Devil: A Mathematical Adventure</i><br>by Hans Magnus Enzensberger & Rotraut Susanne Berner (1998)           | 18 |
| <i>Math Trek: Adventures in the Math Zone</i><br>by Ivars Peterson and Nancy Henderson (2000)                              | 19 |
| "The Evolution of the Grocery Bag"<br>by Henry Petroski (2003)   | 20 |
| "Geology" from <i>U*X*L Encyclopedia of Science</i><br>edited by Rob Nagel (2007)  | 21 |
| "Space Probe" from <i>Astronomy &amp; Space: From the Big Bang to the Big Crunch</i><br>edited by Phillis Engelbert (2009) | 22 |
| "Elementary Particles"<br>from <i>New Book of Popular Science</i> (2010)   | 23 |

## Grades 9–10 Exemplar Texts

### Informational Texts (History and Social Sciences)

|   |    |
|---|----|
| <i>Bury My Heart at Wounded Knee:<br/>An Indian History of the American West</i><br>by Dee Brown (1970) | 25 |
| <i>Son of the Morning Star: Custer and the Little Bighorn</i><br>by Evan S. Connell (1984)              | 26 |
| <i>The History of Art</i><br>by E. H. Gombrich (1995)   | 27 |
| <i>Cod: A Biography of the Fish That Changed the World</i><br>by Mark Kurlansky (1997)                  | 28 |
| <i>Black, Blue, and Gray: African Americans in the Civil War</i><br>by Jim Haskins (1998)               | 29 |
| <i>The Longitude Prize</i><br>by Joan Dash (2000)   | 30 |
| <i>The Illustrated Book of Great Composers</i><br>by Wendy Thompson (2004)                              | 32 |
| <i>Before Columbus: The Americas of 1491</i><br>by Charles C. Mann (2009)                               | 33 |

### Informational Texts (Science, Mathematics, and Technology)

|  |    |
|--|----|
| <i>Elements</i><br>by Euclid (300 BCE) translated by Richard Fitzpatrick                                     | 34 |
| “Classifying the Stars”<br>by Annie J. Cannon (1929)   | 37 |
| “Biography of an Atom”<br>by Jacob Bronowski and Millicent Selsam (1965)                                     | 38 |
| “Amusement Park Physics”<br>by Jearl Walker (1979)   | 39 |
| “Life by the Numbers”<br>by Keith Devlin (1998)  | 40 |
| <i>The Race to Save Lord God Bird</i><br>by Phillip Hoose (2004)   | 41 |
| <i>The Story of Science: Newton at the Center</i><br>by Joy Hakim (2005)                                     | 42 |
| <i>Circumference: Eratosthenes and the Ancient Quest to Measure the Globe</i><br>by Nicholas Nicastro (2008) | 43 |

## Grades 11–12 Exemplar Texts

### Informational Texts (History and Social Sciences)

|  |    |
|--|----|
| <i>Democracy in America</i><br>by Alexis de Tocqueville (1835) translated by Henry Reeve   | 44 |
| <i>Declaration of Sentiments</i><br>by the Seneca Falls Conference (1848)  | 45 |
| “Independence Day Speech”<br>by Frederick Douglass (1852)  | 47 |
| “Education”<br>by Ellen Condliffe Lagemann<br>in <i>The Reader’s Companion to American History</i><br>(Eric Foner and John A. Garraty, editors) (1991) | 50 |
| <i>What They Fought For, 1861–1865</i><br>by James M. McPherson (1994)   | 51 |
| <i>America’s Constitution: A Biography</i><br>by Akhil Reed Amar (2005)  | 52 |
| <i>1776</i><br>by David McCullough (2005)  | 53 |
| <i>Mirror of the World: A New History of Art</i><br>by Julian Bell (2007)  | 54 |
| <i>FedViews</i><br>by the Federal Reserve Bank of San Francisco (2009)   | 55 |

### Informational Texts (Science, Mathematics, and Technology)

|   |    |
|---|----|
| <i>Innumeracy: Mathematical Illiteracy and Its Consequences</i><br>by John Allen Paulos (1988)            | 57 |
| “Gravity in Reverse: The Tale of Albert Einstein’s ‘Greatest Blunder’”<br>by Neil deGrasse Tyson (2003)   | 59 |
| <i>Google Hacks: Tips &amp; Tools for Smarter Searching</i><br>by Tara Calishain and Rael Dornfest (2004) | 60 |
| “The Mysteries of Mass”<br>by Gordon Kane (2005)  | 61 |
| “Working Knowledge: Electronic Stability Control”<br>by Mark Fischetti (2007)                             | 63 |
| “The Coming Merger of Mind and Machine”<br>by Ray Kurzweil (2008)   | 64 |
| “Untangling the Roots of Cancer”<br>by W. Wayt Gibbs (2008)   | 65 |
| “The Cost Conundrum: Health Care Costs in McAllen, Texas”<br>by Atul Gawande (2009)                       | 66 |

## Grades 6–8

### Grades 6–8: Informational Texts (History and Social Sciences)

#### Preamble and First Amendment to the United States Constitution by United States (1787, 1791)

##### Preamble

We, the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution of the United States of America.

##### Amendment I

Congress shall make no law respecting the establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of people peaceably to assemble, and to petition the Government for a redress of grievances.

*A Night to Remember* by Walter Lord (1955)

High in the crow's nest of the New White Star Liner Titanic, Lookout Frederick Fleet peered into a dazzling night. It was calm, clear and bitterly cold. There was no moon, but the cloudless sky blazed with stars. The Atlantic was like polished plate glass; people later said they had never seen it so smooth.

This was the fifth night of the Titanic's maiden voyage to New York, and it was already clear that she was not only the largest but also the most glamorous ship in the world. Even the passengers' dogs were glamorous. John Jacob Astor had along his Airedale Kitty. Henry Sleeper Harper, of the publishing family, had his prize Pekingese Sun Yat-sen. Robert W. Daniel, the Philadelphia banker, was bringing back a champion French bulldog just purchased in Britain. Clarence Moore of Washington had also been dog shopping, but the 50 pairs of English foxhounds he bought for the Loudoun Hunt weren't making the trip.

This was all another world to Frederick Fleet. He was one of six lookouts carried by the Titanic, and the lookouts didn't worry about passenger problems. They were the "eyes of the ship," and on this particular night Fleet had been warned to watch especially for icebergs.

So far, so good. On duty at 10 o'clock ... a few words about the ice problem with Lookout Reginald Lee, who shared the same watch... a few more words about the cold... but mostly just silence, as the two men stared into the darkness.

Now the watch was almost over, and still there was nothing unusual. Just the night, the stars, the biting cold, the wind that whistled through the rigging as the Titanic raced across the calm, black sea at 22 ½ knots. It was almost 11:40 p.m. on Sunday, the 14<sup>th</sup> of April, 1912.

Suddenly Fleet saw something directly ahead, even darker than the darkness.

*A Short Walk through the Pyramids and through the World of Art* by Phillip Isaacson (1993)

At Giza, a few miles north of Saqqara, sit three great pyramids, each named for the king – or Pharaoh – during whose reign it was built. No other buildings are so well known, yet the first sight of them sitting in their field is breathtaking. When you walk among them, you walk in a place made for giants. They seem too large to have been made by human beings, too perfect to have been formed by nature, and when the sun is overhead, not solid enough to be attached to the sand. In the minutes before sunrise, they are the color of faded roses, and when the last rays of the desert sun touch them, they turn to amber. But whatever the light, their broad proportions, the beauty of the limestone, and the care with which it is fitted into place create three unforgettable works of art.

What do we learn about art when we look at the pyramids?

First, when all of the things that go into a work – its components – complement one another, they create an object that has a certain spirit, and we can call that spirit *harmony*. The pyramids are harmonious because limestone, a warm, quiet material, is a cordial companion for a simple, logical, pleasing shape. In fact, the stone and the shape are so comfortable with each other that the pyramids seem inevitable – as though they were bound to have the form, color, and texture that they do have.

The pyramids also show us that simple things must be made with care. The fine workmanship that went into the building of the pyramids is part of their beauty. Complicated shapes may conceal poor work – such shapes distract our eye – but in something as simple as a pyramid, there is no way to hide its flaws. Because any flaw would mar its beauty, the craftsmanship must be perfect. . . .

Finally, pyramids show us that light helps to shape our feelings about art. As the sun moves above the desert, the pyramids seem to change. As they do, our feelings about them also change. In the early morning they sit squarely on the horizon and we feel that they have become the kings for which they were named; by midday they have become restless and change into silver-white clouds; and at dusk they settle down and regain their power.

The pyramids will always work their magic on us. Their forms, so simple and reasonable, and their great size lift us high above the ordinary moments in our lives.

**Media Text:**

*National Geographic* mini-site on the pyramids, which includes diagrams, pictures, and a time line:  
<http://www.nationalgeographic.com/pyramids/pyramids.html>

### ***The Great Fire by Jim Murphy (1995)***

Chicago in 1871 was a city ready to burn. The city boasted having 59,500 buildings, many of them — such as the Courthouse and the Tribune Building — large and ornately decorated. The trouble was that about two-thirds of all these structures were made entirely of wood. Many of the remaining buildings (even the ones proclaimed to be "fireproof") looked solid, but were actually jerrybuilt affairs; the stone or brick exteriors hid wooden frames and floors, all topped with highly flammable tar or shingle roofs. It was also a common practice to disguise wood as another kind of building material. The fancy exterior decorations on just about every building were carved from wood, then painted to look like stone or marble. Most churches had steeples that appeared to be solid from the street, but a closer inspection would reveal a wooden framework covered with cleverly painted copper or tin.

The situation was worst in the middle-class and poorer districts. Lot sizes were small, and owners usually filled them up with cottages, barns, sheds, and outhouses — all made of fast-burning wood, naturally. Because both Patrick and Catherine O'Leary worked, they were able to put a large addition on their cottage despite a lot size of just 25 by 100 feet. Interspersed in these residential areas were a variety of businesses — paint factories, lumberyards, distilleries, gasworks, mills, furniture manufacturers, warehouses, and coal distributors.

Wealthier districts were by no means free of fire hazards. Stately stone and brick homes had wood interiors, and stood side by side with smaller wood-frame houses. Wooden stables and other storage buildings were common, and trees lined the streets and filled the yards.

The links between richer and poorer sections went beyond the materials used for construction or the way buildings were crammed together. Chicago had been built largely on soggy marshland that flooded every time it rained. As the years passed and the town developed, a quick solution to the water and mud problem was needed. The answer was to make the roads and sidewalks out of wood and elevate them above the waterline, in some places by several feet. On the day the fire started, over 55 miles of pine-block streets and 600 miles of wooden sidewalks bound the 23,000 acres of the city in a highly combustible knot.

#### **Media Text:**

*The Great Chicago Fire*, an exhibit created by the Chicago Historical Society that includes essays and images:  
<http://www.chicagohs.org/fire/intro/gcf-index.html>

## ***Vincent Van Gogh: Portrait of an Artist* by Jan Greenberg and Sandra Jordan (2001)**

From Chapter 1 “A Brabant Boy 1853-75”

*I have nature and art and poetry, if that is not enough what is?*  
--Letter to Theo, January 1874

On March 30, 1853, the handsome, soberly dressed Reverend Theodorus van Gogh entered the ancient town hall of Groot-Zundert, in the Brabant, a province of the Netherlands. He opened the birth register to number twenty-nine, where exactly one year earlier he had sadly written “Vincent Willem van Gogh, stillborn.” Beside the inscription he wrote again “Vincent Willem van Gogh,” the name of his new, healthy son, who was sleeping soundly next to his mother in the tiny parsonage across the square. The baby’s arrival was an answered prayer for the still-grieving family.

The first Vincent lay buried in a tiny grave by the door of the church where Pastor van Gogh preached. The Vincent who lived grew to be a study redheaded boy. Every Sunday on his way to church, young Vincent would pass the headstone carved with the name he shared. Did he feel as if his dead brother were the rightful Vincent, the one who would remain perfect in his parents’ hearts, and that he was merely an unsatisfactory replacement? That might have been one of the reasons he spent so much of his life feeling like a lonely outsider, as if he didn’t fit anywhere in the world.

Despite his dramatic beginning, Vincent had an ordinary childhood, giving no hint of the painter he would become. The small parsonage, with an upstairs just two windows wide under a slanting roof, quickly grew crowded. By the time he was six he had two sisters, Anna and Elizabeth, and one brother, Theo, whose gentle nature made him their mother’s favorite. [...]

Their mother, Anna Carbentus van Gogh, herself one of eight, came from an artistic background. Her father had been a bookbinder to the royal family. A gifted amateur artist who filled notebooks with drawings of plants and flowers, she thought Vincent had a pleasant talent that might be useful someday. She didn’t suspect he would develop into a great artist. In fact she recalled only that once he modeled an elephant out of clay but smashed it when she and his father praised it more than he thought they should. For the same reason he tore up a drawing of a cat climbing a tree. It wasn’t his artistic ability but his obstinate personality that left the biggest impression on his mother. That willful stubbornness turned up again and again as he grew older.

With a big family and a little house, the children spent a lot of time out of doors. The freckled, red-haired Vincent, solitary by nature, often wandered by himself in fields and heaths that surrounded the parsonage. He became familiar with the seasons of planting and harvest and with the hardworking local farm families whose labors connected them to the soil. The strong feeling he developed for the rural landscape of Brabant and the lives of its peasants would be one of the major influences in his life.

Mostly he did what boys like to do. He collected bugs and birds’ nests. He teased his sisters. He built sand castles in the garden with Theo. Sometimes he invented games for all of them to play. After one exciting day his brothers and sisters thanked Vincent by staging a ceremony, and, with mock formality, presented him with a rosebush from their father’s garden.

### **Media Text:**

The Van Gogh Gallery, a commercial Web resource with links to Van Gogh’s art and information about his life:  
<http://www.vangoghgallery.com/>



*This Land Was Made for You and Me: The Life and Songs of Woody Guthrie* by Elizabeth Partridge (2002)

Preface

Ramblin 'Round

"I hate a song that makes you think that you're not any good. I hate a song that makes you think you are just born to lose. I am out to fight those kind of songs to my very last breath of air and my last drop of blood."

Woody Guthrie could never cure himself of wandering off. One minute he'd be there, the next he'd be gone, vanishing without a word to anyone, abandoning those he loved best. He'd throw on a few extra shirts, one on top of the other, sling his guitar over his shoulder, and hit the road. He'd stick out his thumb and hitchhike, swing onto moving freight trains, and hunker down with other traveling men in flophouses, hobo jungles, and Hoovervilles across Depression America.

He moved restlessly from state to state, soaking up some songs: work songs, mountain and cowboy songs, sea chanteys, songs from the southern chain gangs. He added them to the dozens he already knew from his childhood until he was bursting with American folk songs. Playing the guitar and singing, he started making up new ones: hard-bitten, rough-edged songs that told it like it was, full of anger and hardship and hope and love. Woody said the best songs came to him when he was walking down a road. He always had fifteen or twenty songs running around in his mind, just waiting to be put together. Sometimes he knew the words, but not the melody. Usually he'd borrow a tune that was already well known—the simpler the better. As he walked along, he tried to catch a good, easy song that people could sing the first time they heard it, remember, and sing again later.

Woody sang his songs the old-fashioned way, his voice droning and nasal, the words sharp and clear. Promoters and club owners wanted him to follow their tightly written scripts and sing the melodious, popular songs that were on the radio. Whenever they came at him with their hands full of cash, Woody ran the other way. "I had rather sound like the cab drivers cursing at one another, like the longshoremen yelling, like the cowhands whooping and like the lone wolf barking, than to sound like a slick, smooth tongued, oily lipped, show person."

Just after New Years Day in 1940, Woody set off on one of his unannounced road trips. He left his wife and three kids in a shack in Texas and headed for New York City. It was a long, cold trip in the dead of winter, and every time he stopped in a diner he heard Irving Berlin's lush, sentimental song, "God Bless America," on the jukebox. It was exactly the kind of song Woody couldn't stand, romanticizing America, telling people not to worry, that God would take care of everything.

Woody thought there was plenty to worry about. The Great Depression, which had begun in 1929, was grinding on. For years, desperate, hungry people had been tramping the roads and riding the rails, looking for work or handouts. In Europe another world war was raging, threatening to pull America into the bloody conflict.

Bits of tunes and snatches of words swirled in Woody's mind, and a few weeks later in a cheap, fleabag hotel in New York City, his own song about America came together. Using an old Baptist tune for the melody, Woody wrote "This Land Is Your Land." His song caught the bittersweet contrasts of America: the beauty of our country, and the desperate strength of people making do in impossibly difficult times. Across the bottom of the sheet Woody wrote in his neat script, "All you can write is what you see," and put the song away.

Writing about what he saw—and felt, and heard about, and read about—gave Woody plenty of material. During his lifetime he wrote down more than three thousand songs, taking stories from everywhere: the front page of the newspaper; union meetings and busted-up strikes; and the sights and sounds of America as he walked "that ribbon of highway."

In April 1944 Woody recorded "This Land Is Your Land." When his good friend Pete Seeger heard the recording, he thought the song was one of Woody's weaker attempts. Too simple, thought Pete, and accomplished folk singer

himself. Later he would say, “That shows how wrong you can be.” Over the years he watched as “This Land Is Your Land” went from “one guitar picker to another,” gathering momentum as it made its way across America and out into the world. After Woody’s death in 1967, the song kept steadily spreading.

Today, “This Land Is Your Land” is sung all over the United States by just about everybody: schoolchildren, Scout troops, new immigrants, gospel choirs, and rest-home residents. More than half a century after Woody first recorded his song, Pete Seeger figures it has reached “hundreds of millions of people, maybe billions of people.” Many Americans consider it our unofficial national anthem.

Woody would be proud. Years before he had written, “I am out to sing songs that’ll prove to you that this is your world, no matter how hard it has run you down and rolled over you. I am out to sing the songs that will make you take pride in yourself.” Over and over again, he did just that.

*Words We Live By: Your Annotated Guide to the Constitution* by Linda R. Monk (2003)

**We the People...**

The first three words of the Constitution are the most important. They clearly state that the people – not the king, not the legislature, not the courts – are the true rulers in American government. This principle is known as **popular sovereignty**.

But who are “We the People”? This question troubled the nation for centuries. As Lucy Stone, one of America’s first advocates for women’s rights, asked in 1853, “‘We the People’? Which ‘We the People’? The women were not included.” Neither were white males who did not own property, American Indians, or African Americans – slave or free. Justice Thurgood Marshall, the first African American on the Supreme Court, described the limitation:

For a sense of the evolving nature of the Constitution, we need look no further than the first three words of the document’s preamble: ‘We the People.’ When the Founding Fathers used this phrase in 1787, they did not have in mind the majority of America’s citizens... The men who gathered in Philadelphia in 1787 could not...have imagined, nor would they have accepted, that the document they were drafting would one day be construed by a Supreme court to which had been appointed a woman and the descendant of an African slave.

Through the Amendment process, more and more Americans were eventually included in the Constitution’s definition of “We the People.” After the Civil War, the Thirteenth Amendment ended slavery, the Fourteenth Amendment gave African Americans citizenship, and the Fifteenth Amendment gave black men the vote. In 1920, the Nineteenth Amendment gave women the right to vote nationwide, and in 1971, the Twenty-sixth Amendment extended suffrage to eighteen-year-olds.

***Freedom Walkers: The Story of the Montgomery Bus Boycott* by Russell Freedman (2006)**

From the Introduction: Why They Walked

Not so long ago in Montgomery, Alabama, the color of your skin determined where you could sit on a public bus. If you happened to be an African American, you had to sit in the back of the bus, even if there were empty seats up front.

Back then, racial segregation was the rule throughout the American South. Strict laws—called “Jim Crow” laws—enforced a system of white supremacy that discriminated against blacks and kept them in their place as second-class citizens.

People were separated by race from the moment they were born in segregated hospitals until the day they were buried in segregated cemeteries. Blacks and whites did not attend the same schools, worship in the same churches, eat in the same restaurants, sleep in the same hotels, drink from the same water fountains, or sit together in the same movie theaters.

In Montgomery, it was against the law for a white person and a Negro to play checkers on public property or ride together in a taxi.

Most southern blacks were denied their right to vote. The biggest obstacle was the poll tax, a special tax that was required of all voters but was too costly for many blacks and for poor whites as well. Voters also had to pass a literacy test to prove that they could read, write, and understand the U.S. Constitution. These tests were often rigged to disqualify even highly educated blacks. Those who overcame the obstacles and insisted on registering as voters faced threats, harassment. And even physical violence. As a result, African Americans in the South could not express their grievances in the voting booth, which for the most part, was closed to them. But there were other ways to protest, and one day a half century ago, the black citizens in Montgomery rose up in protest and united to demand their rights—by walking peacefully.  
It all started on a bus.

## Grades 6–8: Informational Texts (Science, Mathematics, and Technology)

### *Cathedral: The Story of Its Construction* by David Macaulay (1973)

In order to construct the vaulted ceiling a wooden scaffold was erected connecting the two walls of the choir one hundred and thirty feet above ground. On the scaffolding wooden centerings like those used for the flying buttresses were installed. They would support the arched stone ribs until the mortar was dry, at which times the ribs could support themselves. The ribs carried the webbing, which was the ceiling itself. The vaults were constructed one bay at a time, a bay being the rectangular area between four piers.

[...]

One by one, the cut stones of the ribs, called voussoirs, were hoisted onto the centering and mortared into place by the masons. Finally the keystone was lowered into place to lock the ribs together at the crown, the highest point of the arch.

The carpenters then installed pieces of wood, called lagging, that spanned the space between two centerings. On top of the lagging the masons laid one course or layer of webbing stones. The lagging supported the course of webbing until the mortar was dry. . . . Two teams, each with a mason and a carpenter, worked simultaneously from both sides of the vault – installing first the lagging, then the webbing. When they met in the center the vault was complete. The vaulting over the aisle was constructed in the same way and at the same time.

When the mortar in the webbing had set, a four-inch layer of concrete was poured over the entire vault to prevent any cracking between the stones. Once the concrete had set, the lagging was removed and the centering was lowered and moved onto the scaffolding of the next bay. The procedure was repeated until eventually the entire choir was vaulted.

***The Building of Manhattan* by Donald A. Mackay (1987)**

From “Concrete”

Concrete arrives at a construction site as a soupy mixture of Portland cement, aggregate, and water which, by chemical accretion, will harden into a solid mass as hard as stone. On some projects small amounts are mixed right on the spot.

It can be formed or cast into almost any shape. The aggregate—sand and crushed stone or gravel—is added to the mixture to give more volume. Portland cement is a combination of limestone and clay, ground to very fine powder and heated in a kiln to drive out the moisture.

Chemicals and other materials can be added to give special properties to the concrete: for waterproofing, for insulation, to make a lighter, more porous concrete, or to affect the drying time.

The ingredients in concrete are proportioned for specific uses. In the foundation of a skyscraper there is more sand and stone in the mix than cement. In the upper structure of the building more cement is used and less aggregate, since this allows the support columns and other parts of the building to be thinner, or reduced in bulk, without losing strength.

The amount of water in the mix is also carefully controlled—just enough to ensure maximum hardening, yet a sufficient amount to keep the concrete fluid and workable as it is poured and formed at the job site. Concrete however, requires an additional ingredient to make high-rise construction practical.

Steel reinforcing bars—some are 2¼ inches in diameter and weigh 13.6 pounds per foot—are embedded in the concrete. When tied in clusters, or woven into a mesh of wires and bars, the steel bars give the hardened concrete the strength to withstand any vertical stress and strain as well as horizontal pressure.

The protruding ends of the steel bars seen at all concrete construction sites are for the connection of this reinforcement, by which a freshly formed concrete section is solidly bonded to the metal reinforcing of the rest of the concrete building. The bars must be placed in the areas of maximum tensile stress as determined by the engineers.

**Media Text:**

Manhattan on the Web: History, a Web portal hosted by the New York Public Library:  
<http://legacy.www.nypl.org/branch/manhattan/index2.cfm?Trg=1&d1=865>

***The Number Devil: A Mathematical Adventure* by Hans Magnus Enzensberger & Rotraut Susanne Berner (1998)**

... “I see,” said the number devil with a wry smile. “I have nothing against your Mr. Bockel, but that kind of problem has nothing whatever to do with what I’m interested in. Do you want to know something? Most genuine mathematicians are bad at sums. Besides, they have no time to waste on them. That’s what pocket calculators are for. I assume you have one.

“Sure, but we’re not allowed to use them in school.”

“I see,” said the number devil. “That’s all right. There’s nothing wrong with a little addition and subtraction. You never know when your battery will die on you. But *mathematics*, my boy, that’s something else again!” .

... “The thing that makes numbers so devilish is precisely that they *are* simple. And you don’t need a calculator to prove it. You need one thing and one thing only: one. With one—I am speaking of the numeral of course—you can do almost anything. If you are afraid of large numbers—let’s say five million seven hundred and twenty-three thousand eight hundred and twelve—all you have to do is start with

1 + 1  
1+1+1  
1+1+1+1  
1+1+1+1+1  
...

and go on until you come to five million etcetera. You can’t tell me that’s too complicated for you, can you?

***Math Trek: Adventures in the Math Zone* by Ivars Peterson and Nancy Henderson (2000)**

From the meanderings of a pond’s edge to the branching of trees and the intricate forms of snowflakes, shapes in nature are often more complicated than geometrical shapes such as circles, spheres, angles, cones, rectangles, and cubes. . . . Benoit Mandelbrot, a mathematics professor at Yale University and an IBM fellow, was the first person to recognize how amazingly common this type of structure is in nature. In 1975, he coined the term **fractal** for shapes that repeat themselves within an object. The word fractal comes from the Latin term for “broken.”

In 1904, long before Mandelbrot conceived of fractals, Swedish mathematician Helge von Koch created and intriguing but puzzling curve. It zigzags in such an odd pattern that it seems impossible to start at one point and follow the curve to reach another point.

Like many figures now known to be fractals, Koch’s curve is easy to generate by starting with a simple figure and turning it into an increasingly crinkly form.

[...]

What to Do

1. Draw an equilateral triangle with each side measuring 9 centimeters. (Remember, each angle of an equilateral triangle measures  $60^\circ$ .)
2. Divide each 9-centimeter side into three parts, each measuring three centimeters. At the middle of each side, add an equilateral triangle one third the size of the original, facing outward. Because each side of the original triangle is 9 centimeters, the new triangles will have 3-centimeter sides. When you examine the outer edge of your diagram you should see a six-pointed star made up of 12 line segments.
3. At the middle of each segment of the star, add a triangle one ninth the side of the original triangle. The new triangles will have sides 1 centimeter in length so divide each 3-centimeter segment into thirds, and use the middle third to form a new triangle.
4. Going one step farther, you create a shape that begins to resemble a snowflake. If you were to continue the process by endlessly adding smaller and smaller triangles to every new side, you would produce the Koch snowflake curve. Between any two points, the snowflake would have an infinite number of zigzags.

### **“The Evolution of the Grocery Bag” by Henry Petroski (2003)**

That much-reviled bottleneck known as the American supermarket checkout lane would be an even greater exercise in frustration were it not for several technological advances. The Universal Product Code and the decoding laser scanner, introduced in 1974, tally a shopper's groceries far more quickly and accurately than the old method of inputting each purchase manually into a cash register. But beeping a large order past the scanner would have led only to a faster pileup of cans and boxes down the line, where the bagger works, had it not been for the introduction, more than a century earlier, of an even greater technological masterpiece: the square-bottomed paper bag.

The geometry of paper bags continues to hold a magical appeal for those of us who are fascinated by how ordinary things are designed and made. Originally, grocery bags were created on demand by storekeepers, who cut, folded, and pasted sheets of paper, making versatile containers into which purchases could be loaded for carrying home. The first paper bags manufactured commercially are said to have been made in Bristol, England, in the 1840s. In 1852, a "Machine for Making Bags of Paper" was patented in America by Francis Wolle, of Bethlehem, Pennsylvania. According to Wolle's own description of the machine's operation, "pieces of paper of suitable length are given out from a roll of the required width, cut off from the roll and otherwise suitably cut to the required shape, folded, their edges pasted and lapped, and formed into complete and perfect bags." The "perfect bags" produced at the rate of eighteen hundred per hour by Wolle's machine were, of course, not perfect, nor was his machine. The history of design has yet to see the development of a perfect object, though it has seen many satisfactory ones and many substantially improved ones. The concept of comparative improvement is embedded in the paradigm for invention, the better mousetrap. No one is ever likely to lay claim to a "best" mousetrap, for that would preclude the inventor himself from coming up with a still better mousetrap without suffering the embarrassment of having previously declared the search complete. As with the mousetrap, so with the bag.

**“Geology” from *U\*X\*L Encyclopedia of Science* edited by Rob Nagel (2007)**

Geology is the scientific study of Earth. Geologists study the planet--its formation, its internal structure, its materials, its chemical and physical processes, and its history. Mountains, valleys, plains, sea floors, minerals, rocks, fossils, and the processes that create and destroy each of these are all the domain of the geologist. Geology is divided into two broad categories of study: physical geology and historical geology.

Physical geology is concerned with the processes occurring on or below the surface of Earth and the materials on which they operate. These processes include volcanic eruptions, landslides, earthquakes, and floods. Materials include rocks, air, seawater, soils, and sediment. Physical geology further divides into more specific branches, each of which deals with its own part of Earth's materials, landforms, and processes. Mineralogy and petrology investigate the composition and origin of minerals and rocks. Volcanologists study lava, rocks, and gases on live, dormant, and extinct volcanoes. Seismologists use instruments to monitor and predict earthquakes and volcanic eruptions.

Historical geology is concerned with the chronology of events, both physical and biological, that have taken place in Earth's history. Paleontologists study fossils (remains of ancient life) for evidence of the evolution of life on Earth. Fossils not only relate evolution, but also speak of the environment in which the organism lived. Corals in rocks at the top of the Grand Canyon in Arizona, for example, show a shallow sea flooded the area around 290 million years ago. In addition, by determining the ages and types of rocks around the world, geologists piece together continental and oceanic history over the past few billion years. Plate tectonics (the study of the movement of the sections of Earth's crust) adds to Earth's story with details of the changing configuration of the continents and oceans.

**“Space Probe” from *Astronomy & Space: From the Big Bang to the Big Crunch* edited by Phillis Engelbert (2009)**

A space probe is an unpowered spacecraft that leaves Earth's orbit to explore the Moon, planets, asteroids, comets, or other objects in outer space as directed by onboard computers and/or instructions sent from Earth. The purpose of such missions is to make scientific observations, such as taking pictures, measuring atmospheric conditions, and collecting soil samples, and to bring or report the data back to Earth.

Numerous space probes have been launched since the former Soviet Union first fired *Luna 1* toward the Moon in 1959. Probes have now visited each of the eight planets in the solar system.

In fact, two probes--*Voyager 1* and *Voyager 2*--are approaching the edge of the solar system, for their eventual trip into the interstellar medium. By January 2008 *Voyager 1* was about 9.4 billion miles (15.2 billion kilometers) from the Sun and in May 2008 it entered the heliosheath (the boundary where the solar wind is thought to end), which is the area that roughly divides the solar system from interstellar space. *Voyager 2* is not quite as far as its sister probe. *Voyager 1* is expected to be the first human space probe to leave the solar system. Both Voyager probes are still transmitting signals back to Earth. They are expected to help gather further information as to the true boundary of the solar system.

The earliest probes traveled to the closest extraterrestrial target, the Moon. The former Soviet Union launched a series of Luna probes that provided humans with first pictures of the far side of the Moon. In 1966, *Luna 9* made the first successful landing on the Moon and sent back television footage from the Moon's surface.

The National Aeronautics and Space Administration (NASA) initially made several unsuccessful attempts to send a probe to the Moon. Not until 1964 did a Ranger probe reach its mark and send back thousands of pictures. Then, a few months after *Luna 9*, NASA landed *Surveyor* on the Moon.

In the meantime, NASA was moving ahead with the first series of planetary probes, called Mariner. *Mariner 2* first reached the planet Venus in 1962. Later Mariner spacecrafts flew by Mars in 1964 and 1969, providing detailed images of that planet. In 1971, *Mariner 9* became the first spacecraft to orbit Mars. During its year in orbit, *Mariner 9*'s two television cameras transmitted footage of an intense Martian dust storm, as well as images of 90 percent of the planet's surface and the two Martian natural satellites (moons).

Encounters were also made with Mars in 1976 by the U.S. probes *Viking 1* and *Viking 2*. Each Viking spacecraft consisted of both an orbiter and a lander. *Viking 1* made the first successful soft landing on Mars on July 20, 1976. Soon after, *Viking 2* landed on the opposite side of the planet. The Viking orbiters made reports on the Martian weather and photographed almost the entire surface of the planet.

## "Elementary Particles" from *New Book of Popular Science* (2010)

Since ancient times, people have tried to discover the basic units of matter. What, they have asked, are the smallest particles from which all the objects in the universe are made?

Many people in ancient Greece thought that all matter was made of various combinations of four basic "elements"—earth, fire, air, and water. But one Greek philosopher, Democritus (c.460–c.370 B.C.), had a different theory. He suggested that matter was composed of tiny particles called atoms. The word "atom" comes from a Greek word meaning "unable to be cut" or "indivisible."

The theory of Democritus was largely ignored for 2,000 years. Then, in 1802, an English chemist and physicist named John Dalton (1766–1844) revived the atomic theory. He was the first scientist to define the atom as it is understood today—the smallest particle of an element that behaves chemically like that element.

Atomic physics is the study of atoms and their behavior. Atoms are incredibly small. A tiny speck of dust contains many millions of atoms. Some molecules, such as certain of the protein molecules, contain hundreds of thousands of atoms. Yet a protein molecule is so small, compared with things we can see with the unaided eye, that a powerful electron microscope is needed to view it. Even then, the individual atoms cannot usually be seen.

Small as the atom is, however, it is not the smallest component of matter. Particle physics is the study of the smallest, most elemental building blocks and the basic forces of nature.

### Inside the Atom

Beginning in the late 1890s, scientists discovered that the atom is composed of still smaller particles. The first of these subatomic particles to be discovered was the electron. Then it was found that the atom has a central core, which was named the nucleus. Surrounding the nucleus are the electrons.

The nucleus of the simplest atom, that of ordinary hydrogen, consists of a single particle, the proton. A single electron moves around the nucleus. A heavier nucleus, such as that of an oxygen or an iron atom, contains two kinds of particles: protons and neutrons. Neutrons are about the same size as protons. Electrons are much smaller than protons and neutrons.

By the 1930s, the basic structure of matter seemed almost completely understood. Scientists had established that electrons, protons, and neutrons are the chief components of an atom. But since that time, several hundred other particles have been discovered. In some cases, the existence of these particles was predicted on the basis of complicated theories. The particles themselves were later detected during experiments. In other cases, the particles were discovered first.

Physicists presented new theories to try to make sense out of the chaos of particles that had been detected. One theory gained favor. It states that particles such as protons and neutrons are not elementary at all, but are themselves made up of even smaller units, called quarks. This theory has revolutionized the picture of the elementary particles. Many physicists now think that quarks and a second group of particles—the leptons, which include electrons—are the fundamental building blocks of nature. Yet quarks never appear alone—only in groups of two or three, forming composite particles. Understanding why is one of many challenges in the field of particle physics. Some recent theories and discoveries are described in greater detail in the article Particle Physics. This article focuses mainly on the properties of subatomic particles and the principles that seem to govern their behavior.

Particles of subatomic size can be observed only indirectly, because they are too minute and move far too rapidly to be seen. But physicists can determine how particles interact and how they are affected by electrical

and magnetic forces. Scientists can detect new particles that form as existing particles decay or react with each other. In this way, they have learned a great deal about the nature of various particles.

## Grades 9–10

### Grades 9–10: Informational Texts (History and Social Sciences)

#### *Bury My Heart at Wounded Knee: An Indian History of the American West* by Dee Brown (1970)

From Chapter 1: “Their Manners Are Decorous and Praiseworthy”

The decade following establishment of the “permanent Indian frontier” was a bad time for the eastern tribes. The great Cherokee nation had survived more than a hundred years of the white man’s wars, diseases, and whiskey, but now it was to be blotted out. Because the Cherokees numbered several thousands, their removal to the West was planned to be in gradual stages, but the discovery of Appalachian gold within their territory brought on a clamor for their immediate wholesale exodus. During the autumn of 1838, General Winfield Scott’s soldiers rounded them up and concentrated them into camps. (A few hundred escaped to the Smoky Mountains and many years later were given a small reservation in North Carolina.) From the prison camps they were started westward to Indian Territory. On the long winter trek, one of every four Cherokees died from the cold, hunger, or disease. They called the march their “trail of tears.” The Choctaws, Chickasaws, Creeks, and Seminoles also gave up their homelands in the South. In the North, surviving remnants of the Shawnees, Miamis, Ottawas, Hurons, Delawares, and many other once mighty tribes walked or traveled by horseback and wagon beyond the Mississippi, carrying their shabby goods, their rusty farming tools, and bags of seed corn. All of them arrived as refugees, poor relations, in the country of the proud and free Plains Indians.

Scarcely were the refugees settled behind the security of the “permanent Indian frontier” when soldiers began marching westward through Indian country. The white men of the United States—who talked so much of peace but rarely seemed to practice it—were marching to war with the white men who had conquered the Indians of Mexico. When the war with Mexico ended in 1847, the United States took possession of a vast expanse of territory reaching from Texas to California. All of it was west of the “permanent Indian frontier.”

*Son of the Morning Star: Custer and the Little Bighorn* by Evan S. Connell (1984)

Sitting Bull. Sitting Bull.

In English this name sounds a little absurd, and to whites of the nineteenth century it was still more so; they alluded to him as Slightly Recumbent Gentleman Cow.

Exact Translation from the Sioux is impossible, but his name may be better understood if one realizes how plains Indians respected and honored the bull buffalo. Whites considered this animal to be exceptionally stupid. Col. Dodge states without equivocation that the buffalo is the dullest creature of which he has any knowledge. A herd of buffalo would graze complacently while every member was shot down. He himself shot two cows and thirteen calves while the survivors grazed and watched. He and others in his party had to shout and wave their hats to drive the herd away so the dead animals could be butchered.

Indians, however, regarded buffalo as the wisest and most powerful of creatures, nearest to the omnipresent Spirit. Furthermore if one says in English that somebody is sitting it means he is seated, balanced on the haunches; but the Sioux expression has an additional sense, not equivalent to but approximating the English words *situate* and *locate* and *reside*.

Thus from an Indian point of view, the name Sitting Bull signified a wise and powerful being who had taken up residence among them.

As a boy, he was called Slow, Hunkesni, because of his deliberate manner, and it has been alleged that his parents thought him ordinary, perhaps even a bit slow in the head. Most biographies state that he was known also as Jumping Badger; but Stanley Vestal, after talking to many Indians who knew him, said that none of them nor any member of Sitting Bull's family could remember his being called Jumping Badger. In any event, Slow he was called, and Slow would suffice until he distinguished himself.

***The History of Art* by E. H. Gombrich (1995)**

From Chapter 27, “Experimental Art: The first half of the twentieth century,”

In one of his letters to a young painter, Cézanne had advised him to look at nature in terms of spheres, cones and cylinders. He presumably meant that he should always keep these basic solid shapes in mind when organizing his pictures. But Picasso and his friends decided to take this advice literally. I suppose that they reasoned somewhat like this: ‘We have long given up claiming that we represent things as they appear to our eyes. That was a will-o’-the-wisp which it is useless to pursue. We do not want to fix on the canvas the imaginary impression of a fleeting moment. Let us follow Cézanne’s example, and build up the picture of our motifs as solidly and enduringly as we can. Why not be consistent and accept the fact that our real aim is rather to construct something, rather than to copy something? If we think of an object, let us say a violin, it does not appear before the eye of our mind the way it would appear before our bodily eyes. We can, and in fact do, think of its various aspects at the same time. Some of them stand out so clearly that we feel we can touch them and handle them; others are somehow blurred. And this strange medley of images represents more of the “real” violin than any single snapshot or meticulous painting could ever contain.’ This, I suppose, was the reasoning which led to such paintings as Picasso’s still life of a violin, *figure 374*. In some respects, it represents a return to what we have called Egyptian principles, in which an object was drawn from the angle from which its characteristic form came out most clearly.

[*Figure 374*]

Pablo Picasso, *Violin and Grapes*, 1912  
*Oil on canvas, 50.6 x 61 cm, 20 x 24 in; The  
Museum of Modern Art,  
New York. Mrs. David M. Levy Bequest*

The scroll and one peg are seen from the side as we imagine them when we think of a violin. The sound-holes, on the other hand, are seen as from in front – they would not be visible from the side. The curve of the rim is greatly exaggerated, as we are apt to over-estimate the steepness of such curves when thinking of the feeling it gives us to run our hands along the sides of such an instrument. The bow and strings float somewhere in space; the strings even occur twice, once related to the front view, once towards the volute. Despite this jumble of unconnected forms – and there are more than I have enumerated – the picture does not really look messy. The reason is that the artist has constructed his picture out of more or less uniform parts so that the whole presents an appearance of consistency comparable to such works of primitive art as the American totem pole.

*Cod: A Biography of the Fish That Changed the World* by Mark Kurlansky (1997)

From Chapter 1: The Race to Codlandia

A medieval fisherman is said to have hauled up a three-foot-long cod, which was common enough at the time. And the fact that the cod could talk was not especially surprising. But what *was* astonishing was that it spoke an unknown language. It spoke Basque.

This Basque folktale shows not only the Basque attachment to their orphan language, indecipherable to the rest of the world, but also their tie to the Atlantic cod, *Gadus morhua*, a fish that has never been found in Basque or even Spanish waters.

The Basques are enigmatic. They have lived in what is now the northwest corner of Spain and a nick of the French southwest for longer than history records, and not only is the origin of their language unknown, but also the origin of the people themselves remains a mystery also. According to one theory, these rosy-cheeked, dark-haired, long-nosed people were the original Iberians, driven by invaders to this mountainous corner between the Pyrenees, the Cantabrian Sierra, and the Bay of Biscay. Or they may be indigenous to this area.

They graze sheep on impossibly steep, green slopes of mountains that are thrilling in their rare, rugged beauty. They sing their own songs and write their own literature in their own language, Euskera. Possibly Europe's oldest living language, Euskera is one of only four European languages—along with Estonian, Finnish, and Hungarian—not in the Indo-European family. They also have their own sports, most notably jai alai, and even their own hat, the Basque beret, which is bigger than any other beret.

***Black, Blue, and Gray: African Americans in the Civil War* by Jim Haskins (1998)**

From “Introduction: A ‘White Man’s War?’”

In 1775 the first shots were fired in the war between the thirteen American colonies and Great Britain that ended in a victory for the colonists and the founding of a new nation, the United States of America. Only eighty-five years later, in 1861, the first shots were fired in a different war—a war between the states that became known as the Civil War. It was a war fought between the Confederate States of America and the states that remained in the Union—each side representing a distinct economy, labor system, and philosophy of government. The southern states that formed the Confederacy had agricultural economies that depended on a slave workforce and believed that any rights not granted to the federal government by the United States Constitution belonged to the states. The northern states were undergoing rapid industrialization, which depended on wage labor, and while northerners disagreed among themselves about slavery, most believed it represented a direct challenge to their own rights and freedoms. Most also believed that a strong federal government, with the ability to legislate behavior in areas not specifically set forth in the Constitution, was key to the growth and strength of the American republic. It was inevitable that these two very distinct societies would clash. For the Confederates, nicknamed Rebels, the Civil War was a new war of Independence. For the Unionists, nicknamed Yankees, it was a war to preserve the Union that had been so dearly won in the American Revolution.

In the eyes of the four and an half million African Americans, enslaved and free, it was a war about slavery; and they wanted to be part of the fight. But many northern whites did not want blacks to serve in the northern military. They called it a “white man’s war” and said that slavery was not the main point of the conflict. At first, northern generals actually sent escaped slaves back to their southern masters. Eventually, the Union did accept blacks into its army and navy.

A total of 178,895 black men served in 120 infantry regiments, twelve heavy artillery regiments, ten light artillery batteries, and seven cavalry regiments. Black soldiers constituted twelve percent of the North’s fighting forces, and they suffered a disproportionate number of casualties.

### ***The Longitude Prize* by Joan Dash (2000)**

From Chapter 1 “A Most Terrible Sea”

At six in the morning I was awaked by a great shock, and a confused noise of the men on deck. I ran up, thinking some ship had run foul of us, for by my own reckoning, and that of every other person in the ship, we were at least thirty-five leagues distant from land; but, before I could reach the quarter-deck, the ship gave a great stroke upon the ground, and the sea broke over her. Just after this I could perceive the land, rocky, rugged and uneven, about two cables' length from us. . . the masts soon went overboard, carrying some men with them. . . notwithstanding a most terrible sea, one of the [lifeboats] was launched, and eight of the best men jumped into her; but she had scarcely got to the ship's stern when she was hurled to the bottom, and every soul in her perished. The rest of the boats were soon washed to pieces on the deck. We then made a raft. . . and waited with resignation for Providence to assist us.

--From an account of the wreck of HMS *Litchfield* off the coast of North Africa, 1758

The *Litchfield* came to grief because no one aboard knew where they were. As the narrator tells us, by his own reckoning and that of everyone else they were supposed to be thirty-five leagues, about a hundred miles, from land. The word “reckoning” was short for “dead reckoning”—the system used by ships at sea to keep track of their position, meaning their longitude and latitude. It was an intricate system, a craft, and like every other craft involved the mastery of certain tools, in this case such instruments as compass, hourglass, and quadrant. It was an art as well.

Latitude, the north-south position, had always been the navigator's faithful guide. Even in ancient times, a Greek or Roman sailor could tell how far north of the equator he was by observing the North Star's height above the horizon, or the sun's at noon. This could be done without instruments, trusting in experience and the naked eye, although it is believed that an ancestor of the quadrant called the astrolabe—“star-measurer”—was known to the ancients, and used by them to measure the angular height of the sun or a star above the horizon.

Phoenicians, Greeks, and Romans tended to sail along the coasts and were rarely out of sight of land. As later navigators left the safety of the Mediterranean to plunge into the vast Atlantic—far from shore, and from the shorebirds that led them to it—they still had the sun and the North Star. And these enabled them to follow imagined parallel lines of latitude that circle the globe. Following a line of latitude—“sailing the parallel”—kept a ship on a steady east-west course. Christopher Columbus, who sailed the parallel in 1492, held his ships on such a safe course, west and west again, straight on toward Asia. When they came across an island off the coast of what would later be called America, Columbus compelled his crew to sign an affidavit stating that this island was no island but mainland Asia.

A hundred years later, in Shakespeare's *The Merchant of Venice*, one of his characters discusses trade with Mexico and the West Indies as a risky but established business. For the great voyages of exploration that followed Columbus were followed in turn by an explosion of international commerce. There was intense competition for goods and markets. Naval and merchant vessels jammed the familiar sea-lanes, the safe courses, where pirates lay in wait for them. Piracy, too, had become a flourishing trade.

And all of them, whether pirate, merchant, or naval vessel, had to crowd into the familiar sea-lanes based on latitude—because longitude, the east-west location, was not straightforward or reliable. Longitude was an awesome, mysterious, perhaps unknowable secret. It was the seaman's pot of gold, his will-o'-the-wisp, his misfortune, his curse, sometimes his deadly enemy.

*The Illustrated Book of Great Composers* by Wendy Thompson (2004)

From “Composition through the Ages”

**Music as a Language** Music as a language is the most mysterious of all art forms. People who can easily come to terms with a work of literature or a painting are still often baffled by the process by which a piece of music – appearing in material form as notation – must then be translated back into sound through the medium of a third party – the performer. Unlike a painting, a musical composition cannot be owned (except by its creator); and although a score may be published, like a book, it may remain incomprehensible to the general public until it is performed. Although a piece may be played thousands of times each repetition is entirely individual, and interpretations by different players may vary widely.

**Origins of musical notation** The earliest musical compositions were circumscribed by the range of the human voice. People from all cultures have always sung, or used primitive instruments to make sounds. Notation, or the writing down of music, developed to enable performers to remember what they had improvised, to preserve what they had created, and to facilitate interaction between more than one performer. Musical notation, like language, has ancient origins, dating back to the Middle East in the third millennium BC. The ancient Greeks appear to have been the first to try to represent variations of musical pitch through the medium of the alphabet, and successive civilizations all over the world attempted to formulate similar systems of recognizable musical notation.

**Neumatic notation** The earliest surviving Western European notational system was called “neumatic notation” – a system of symbols which attempted to portray the rise and fall of a melodic line. These date back to the 9<sup>th</sup> century AD, and were associated with the performance of sacred music particularly plainsong – in monastic institutions. Several early manuscript sources contain sacred texts with accompanying notation, although there was no standard system. The first appearance of staff notation, in which pitch was indicated by noteheads on or between lines with a symbol called a clef at the beginning to fix the pitch of one note, was in the 9<sup>th</sup> century French treatise *Musica enchiriadis*. At the same time music for instruments (particularly organ and lute) was beginning to be written down in diagrammatic form known as tablature, which indicated the positions of the player’s fingers.

***Before Columbus: The Americas of 1491* by Charles C. Mann (2009)**

From Chapter 2

If you asked modern scientists to name the world's greatest achievements in genetic engineering, you might be surprised by one of their low-tech answers: maize.

Scientists know that maize, called “corn” in the United States, was created more than 6,000 years ago. Although exactly how this well-known plant was invented is still a mystery, they do know where it was invented—in the narrow “waist” of southern Mexico. This jumble of mountains, beaches, wet tropical forests, and dry plains is the most ecologically diverse part of Mesoamerica. Today it is the home of more than a dozen different Indian groups, but the human history of these hills and valleys stretches far into the past.

From Hunting to Gathering to Farming

About 11,500 years ago a group of Paleoindians was living in caves in what is now the Mexican state of Puebla. These people were hunters, but they did not bring down mastodons and mammoths. Those huge species were already extinct. Now and then they even feasted on giant turtles (which were probably a lot easier to catch than the fast-moving deer and rabbits.)

Over the next 2,000 years, though, game animals grew scarce. Maybe the people of the area had been too successful at hunting. Maybe, as the climate grew slowly hotter and drier, the grasslands where the animals lived shrank, and so the animal populations shrank, as well. Perhaps the situation was a combination of these two reasons. Whatever the explanation, hunters of Puebla and the neighboring state of Oaxaca turned to plants for more of their food.

Their lives—and their diets—were shaped by the rhythm of the seasons. For most of the year, individual families lived by themselves, moving from place to place. During the winter, they hunted. In spring and fall, they gathered seeds and fruits. By summer, one of their favorite foods—cactus leaves—was plentiful enough to feed larger groups. With enough food available, 25 or 30 people might gather in a band to spend the season together.

Meanwhile the people kept learning about their environment. They discovered that the thick-leaved, cactus-like agave plants could be eaten if they were first roasted over a fire. They found a way to make acorns into nutritious food: grind them into powder, then soak the powder in water and let it dry. Along the way, people might have noticed the seed they threw into the garbage one year would sprout as new plants the next year. At some point, they started to intentionally scatter seed, so that they would have food to gather during the next growing season. They were practicing agriculture.

This happened in many places across southern Mexico. People began to grow food crops that are still harvested across Mesoamerica today—squash, gourds, and peppers. Then came maize.

***Elements* by Euclid (300 BCE) translated by Richard Fitzpatrick**

From *Elements*, Book 1

Definitions

1. A point is that of which there is no part.
2. And a line is a length without breadth.
3. And the extremities of a line are points.
4. A straight-line is whatever lies evenly with points upon itself.
5. And a surface is that which has length and breadth alone.
6. And the extremities of a surface are lines.
7. A plane surface is whatever lies evenly with straight-lines upon itself.
8. And a plane angle is the inclination of the lines, when two lines in a plane meet one another, and are not laid down straight-on with respect to one another.
9. And when the lines containing the angle are straight then the angle is called rectilinear.
10. And when a straight-line stood upon (another) straight-line makes adjacent angles (which are) equal to one another, each of the equal angles is a right-angle, and the former straight-line is called perpendicular to that upon which it stands.
11. An obtuse angle is greater than a right-angle.
12. And an acute angle is less than a right-angle.
13. A boundary is that which is the extremity of something.
14. A figure is that which is contained by some boundary or boundaries.
15. A circle is a plane figure contained by a single line [which is called a circumference], (such that) all of the straight-lines radiating towards [the circumference] from a single point lying inside the figure are equal to one another.
16. And the point is called the center of the circle.
17. And a diameter of the circle is any straight-line, being drawn through the center, which is brought to an end in each direction by the circumference of the circle. And any such (straight-line) cuts the circle in half.
18. And a semi-circle is the figure contained by the diameter and the circumference it cuts off. And the center of the semi-circle is the same (point) as the (center of) the circle.
19. Rectilinear figures are those figures contained by straight-lines: trilateral figures being contained by three straight-lines, quadrilateral by four, and multilateral by more than four.

20. And of the trilateral figures: an equilateral triangle is that having three equal sides, an isosceles (triangle) that having only two equal sides, and a scalene (triangle) that having three unequal sides.
21. And further of the trilateral figures: a right-angled triangle is that having a right-angle, an obtuse-angled (triangle) that having an obtuse angle, and an acute-angled (triangle) that having three acute angles.
22. And of the quadrilateral figures: a square is that which is right-angled and equilateral, a rectangle that which is right-angled but not equilateral, a rhombus that which is equilateral but not right-angled, and a rhomboid that having opposite sides and angles equal to one another which is neither right-angled nor equilateral. And let quadrilateral figures besides these be called trapezia.
23. Parallel lines are straight-lines which, being in the same plane, and being produced to infinity in each direction, meet with one another in neither (of these directions).

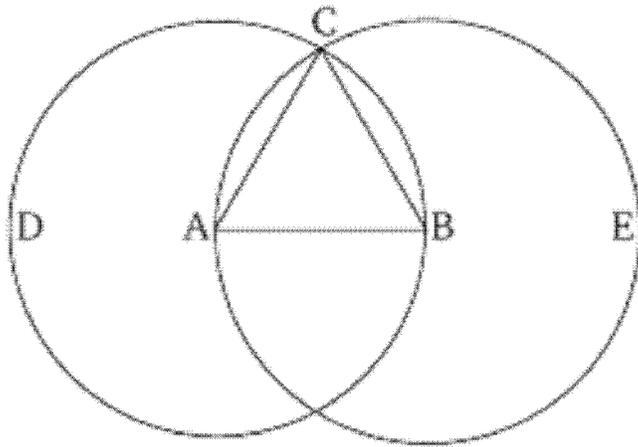
#### Postulates

1. Let it have been postulated to draw a straight-line from any point to any point.
2. And to produce a finite straight-line continuously in a straight-line.
3. And to draw a circle with any center and radius.
4. And that all right-angles are equal to one another.
5. And that if a straight-line falling across two (other) straight-lines makes internal angles on the same side (of itself) less than two right-angles, being produced to infinity, the two (other) straight-lines meet on that side (of the original straight-line) that the (internal angles) are less than two right-angles (and do not meet on the other side).

#### Common Notions

1. Things equal to the same thing are also equal to one another.
2. And if equal things are added to equal things then the wholes are equal.
3. And if equal things are subtracted from equal things then the remainders are equal.
4. And things coinciding with one another are equal to one another.
5. And the whole [is] greater than the part.

Proposition 1



To construct an equilateral triangle on a given finite straight-line.

Let  $AB$  be the given finite straight-line.

So it is required to construct an equilateral triangle on the straight-line  $AB$ .

Let the circle  $BCD$  with center  $A$  and radius  $AB$  have been drawn [Post. 3], and again let the circle  $ACE$  with center  $B$  and radius  $BA$  have been drawn [Post. 3]. And let the straight-lines  $CA$  and  $CB$  have been joined from the point  $C$ , where the circles cut one another, to the points  $A$  and  $B$  (respectively) [Post. 1].

And since the point  $A$  is the center of the circle  $CDB$ ,  $AC$  is equal to  $AB$  [Def. 1.15]. Again, since the point  $B$  is the center of the circle  $CAE$ ,  $BC$  is equal to  $BA$  [Def. 1.15]. But  $CA$  was also shown to be equal to  $AB$ . Thus,  $CA$  and  $CB$  are each equal to  $AB$ . But things equal to the same thing are also equal to one another [C.N. 1]. Thus,  $CA$  is also equal to  $CB$ . Thus, the three (straight-lines)  $CA$ ,  $AB$ , and  $BC$  are equal to one another.

Thus, the triangle  $ABC$  is equilateral, and has been constructed on the given finite straight-line  $AB$ . (Which is) the very thing it was required to do.

**Media Text:**

Translator Robert Fitzpatrick's complete version of *Euclid's Elements of Geometry*, in bookmarked PDF form, with side-by-side Greek and English text:

<http://farside.ph.utexas.edu/euclid/Elements.pdf>

### “Classifying the Stars” by Annie J. Cannon (1929)

Sunlight and starlight are composed of waves of various lengths, which the eye, even aided by a telescope, is unable to separate. We must use more than a telescope. In order to sort out the component colors, the light must be dispersed by a prism, or split up by some other means. For instance, sunbeams passing through rain drops, are transformed into the myriad-tinted rainbow. The familiar rainbow spanning the sky is Nature’s most glorious demonstration that light is composed of many colors.

The very beginning of our knowledge of the nature of a star dates back to 1672, when Isaac Newton gave to the world the results of his experiments on passing sunlight through a prism. To describe the beautiful band of rainbow tints, produced when sunlight was dispersed by his three-cornered piece of glass, he took from the Latin the word *spectrum*, meaning an appearance. The rainbow is the spectrum of the Sun.

[...]

In 1814, more than a century after Newton, the spectrum of the Sun was obtained in such purity that an amazing detail was seen and studied by the German optician, Fraunhofer. He saw that the multiple spectral tings, ranging from delicate violet to deep red, were crossed by hundreds of fine dark lines. In other words, there were narrow gaps in the spectrum where certain shades were wholly blotted out.

We must remember that the word spectrum is applied not only to sunlight, but also to the light of any glowing substance when its rays are sorted out by a prism or a grating. Each substance thus treated sends out its own vibrations of particular wave lengths, which may be likened to singing its own song. Now the spectrum of salt, called sodium chloride by chemists, is very simple and includes two bright yellow lines. In the spectrum of the Sun exactly the same shades of yellow are cut out by two black lines. Could there be any connection? Could the earthly yellow lines be made to change to black? Yes, it was found by experiment that they would do so instantly if a cooler vapor of salt were placed between the prism and a source of light that emits all wave lengths. Thus it was reasoned that some of the bright yellow light from the Sun’s hot surface was absorbed by cooler sodium vapors in the Sun’s atmosphere. Likewise two thousand black lines in the Sun’s spectrum were traced to iron, and indeed all the common substances, so familiar to us here on the Earth, have been found to exist in the Sun by comparing its “absorption” spectrum with the bright line spectra given by these substances in laboratories.

### “Biography of an Atom” by Jacob Bronowski and Millicent Selsam (1965)

The birth began in a young star. A young star is a mass of hydrogen nuclei. Because the star is hot (about thirteen million degrees at the center), the nuclei cannot hold on to their electrons. The electrons wander around. The nuclei of hydrogen—that is, the protons—are moving about very fast too. From time to time one proton runs headlong into another. When this happens, one of the protons loses its electric charge and changes into a neutron. The pair then cling together as a single nucleus of heavy hydrogen. This nucleus will in time capture another proton. Now there is a nucleus with two protons and one neutron, called light helium. When two of these nuclei smash into each other, two protons are expelled in the process. This creates a nucleus of helium with two protons and two neutrons.

This is the fundamental process of *fusion* by which the primitive hydrogen of the universe is built up into a new basic material, helium. In this process, energy is given off in the form of heat and light that make the stars shine. It is the first stage in the birth of the heavier atoms.

After billions of years, the star, now no longer young, has a central core of almost pure helium. The helium nuclei begin to run into one another headlong. Every so often two helium nuclei crash together to form a nucleus of four protons four neutrons. This is called a beryllium-8 nucleus. It is not the stable beryllium that we know on earth, which has another neutron is called beryllium-9. Beryllium-8 is an unstable isotope that has a fantastically short life flies apart almost as soon as it is formed—less than a millionth of a millionth of a second. Only if another helium nucleus crashes into the table beryllium nucleus in the brief moment its life do the parts remain together and form a new stable nucleus of six protons and six neutrons.

This is the moment when a carbon nucleus truly born. The atom of carbon whose story are telling was born by this extraordinary chance billions of years ago.

[...]

### “Amusement Park Physics” by Jearl Walker (1979)

The rides in an amusement park not only are fun but also demonstrate principles of physics. Among them are rotational dynamics and energy conversion. I have been exploring the rides at Geauga Lake Amusement Park near Cleveland and have found that nearly every ride offers a memorable lesson.

To me the scariest rides at the park are the roller coasters. The Big Dipper is similar to many of the roller coasters that have thrilled passengers for most of this century. The cars are pulled by chain to the top of the highest hill along the track. Released from the chain as the front of the car begins its descent, the unpowered cars have almost no speed and only a small acceleration. As more cars get onto the downward slope the acceleration increases. It peaks when all the cars are headed downward. The peak value is the product of the acceleration generated by gravity and the sine of the slope of the track. A steeper descent generates a greater acceleration, but packing the coaster with heavier passengers does not.

When the coaster reaches the bottom of the valley and starts up the next hill, there is an instant when the cars are symmetrically distributed in the valley. The acceleration is zero. As more cars ascend the coaster begins to slow, reaching its lowest speed just as it is symmetrically positioned at the top of the hill.

A roller coaster functions by means of transfers of energy. When the chain hauls the cars to the top of the first hill, it does work on the cars, endowing them with gravitational potential energy, the energy of a body in a gravitational field with respect to the distance of the body from some reference level such as the ground. As the cars descend into the first valley, much of the stored energy is transferred into kinetic energy, the energy of motion.

If the loss of energy to friction and air drag is small, the total of the potential and kinetic energies must remain constant throughout the descent and even throughout the rest of the ride. The coaster gains kinetic energy and speed at the expense of potential energy. If the first valley is at ground level, the transfer is complete, and for a moment the coaster has all its energy in the form of kinetic energy.

Without energy losses the coaster could climb any number of hills as high as the one from which it is released (but no higher). To be sure, friction and air drag do remove energy from the coaster, and its total energy content dwindles. It can no longer climb high hills, which is why the last stages of the track consist only of low hills.

### “Life by the Numbers” by Keith Devlin (1998)

Though animals come in many shapes and sizes, there are definite limits on the possible size of an animal of a particular shape. King Kong simply could not exist, for instance. As Labarbara has calculated, if you were to take a gorilla and blow it up to the size of King Kong, its weight would increase by more than 14,000 times but the size of its bones would increase by only a few hundred times. Kong’s bones would simply not be able to support his body. He would collapse under his own weight!

And the same is true for all those giant locusts, giant ants, and the like. Imagining giants—giant people, giant animals, or giant insects—might prove the basis for an entertaining story, but the rules of science say that giants could not happen. You can’t have a giant anything. If you want to change size, you have to change to overall design.

The reason is quite simple. Suppose you double the height (or length) of any creature, say, a gorilla. The weight will increase 8 times (i.e., 2 cubed), but the cross section of the bones will increase only fourfold (2 squared). Or, if you increase the height of the gorilla 10 times, the weight will increase, 1,000 times (10 cubed), but the cross-sectional area of the bones will increase only 100 times (10 squared). In general, when you increase the height by a certain factor, the weight will increase by the cube of that factor but the cross section of the bone will increase only by the square of that factor.

This simple relationship between the increase in length, area, and volume (and hence weight, since weight depends on volume—on how much material there is) is most easily imagined by thinking of a sugar cube. Suppose you wanted to make a “giant” sugar cube, three times the size of the original cube by sticking together lots of ordinary sugar cubes. To make a sugar cube a mere three times the size of the original one, it also has to be three times deeper and three times taller. That means you need  $3 \times 3 \times 3 = 27$  cubes altogether.

A cross section of the giant sugar cube, on the other hand, has only nine ( $= 3 \times 3$ ) cubes in it. So cross section increases faster than height (9 times faster in the case of the sugar cube), but volume (and hence weight) goes up much more rapidly (27 times for the sugar cube).

***The Race to Save Lord God Bird by Phillip Hoose (2004)***

Any species in nature, from the tiniest insect to the Blue Whale, is a collection of design experiments, field-tested and remodeled again and again over thousands of years. By looking carefully at the way a bird is built and then thinking backward-asking questions like “Why would a wing be so long? Or “Why are its eyes on the side of the head instead of the front?”—it’s possible to get some sense of how the bird got its food and defended itself, how widely it traveled, and what role it might have had within its ecosystem.

Of course my attention goes first to the amazing bill. It’s not really made of ivory like an elephant’s tusk, but of bone, covered by a sheath of a special protein call keratin. It’s broad at the base, and rooted deep into the bird’s thick-boned skull to absorb the shock of pounding a tree. Its slit-like nostrils are fringed with hair to keep out sawdust. An Ivory-bill needed this big, stout crowbar of a bill to pry strips of bark off a tree, because its favorite food lay just underneath. The Ivory-bill ate some fruits and berries when they were in season, but mostly it ate grubs-the larvae of beetles. Certain kinds of beetle would attack a dying or injured tree by boring through the bark to lay their eggs, which hatched into stout, wormlike creatures—the grubs. Ivory-bills used their bills to peel bark away from the tree and get at these fat delicacies—which were then exposed under the bark-like thieves robbing a safe.

*The Story of Science: Newton at the Center* by Joy Hakim (2005)

[...]

Probability, a branch of mathematics, began with gambling. Pierre de Fermat (of the famous Last Theorem), Blaise Pascal, and the Bernoullis wanted to know the mathematical odds of winning at the card table. Probability didn't tell them for certain that they would or wouldn't draw an ace; it just told them how likely it was. A deck of 52 cards has 4 aces, so the odds of the first drawn card being an ace are 4 in 52 (or 1 in 13).

If 20 cards have been played and not an ace among them, those odds improve to 4 in 32 (1 in 8). Always keep in mind that probability is about the likelihood of outcomes, not the certainty. If there are only 4 cards left in the deck, and no aces have been played, you can predict with certainty that the next card will be an ace—but you're not using probability; you're using fact. Probability is central to the physics that deals with the complex world inside atoms. We can't determine the action of an individual particle, but with a large number of atoms, predictions based on probability become very accurate.

[...]

***Circumference: Eratosthenes and the Ancient Quest to Measure the Globe* by Nicholas Nicastro (2008)**

“The Astrolabe”

The astrolabe (in Greek, “star reckoner”) is a manual computing and observation device with myriad uses in astronomy, time keeping, surveying, navigation, and astrology. The principles behind the most common variety, the *planispheric* astrolabe, were first laid down in antiquity by the Greeks, who pioneered the notion of projecting three-dimensional images on flat surfaces. The device reached a high degree of refinement in the medieval Islamic world, where it was invaluable for determining prayer times and the direction of Mecca from anywhere in the Muslim world. The astrolabe was introduced to Europe by the eleventh century, where it saw wide use until the Renaissance.

The fundamental innovation underlying the astrolabe was the projection of an image of the sky (usually the northern hemisphere, centered on Polaris) on a plane corresponding to the earth’s equator. This image, which was typically etched on a brass plate, was inserted into a round frame (the *mater*) whose circumference was marked in degrees or hours. Over the plate was fitted a lattice-work disk, the *rete*, with pointers to indicate the positions of major stars. A metal hand, similar to those on a clock, was hinged with the *rete* at the center of the instrument, as was a sighting vane (the *alidade*) for determining the angular height of the stars or other features, such as mountaintops. The entire device was usually not more than six to eight inches in diameter and half an inch thick.

One common use of the astrolabe was to determine the time of day, even after dark.

[...]

Other uses included determination of sunrise, and sunset times for any date past or future, predicting eclipses, finding important stars or constellations, and measuring the height of earthbound objects and the circumference of the earth. For this and other reasons, the astrolabe has been called “the world’s first personal computer.”

## Grades 11–12: Informational Texts (History and Social Sciences)

### *Democracy in America* by Alexis de Tocqueville (1835) translated by Henry Reeve

From Chapter 2 “The Origins of the Anglo-Americans”

The remarks I have made will suffice to display the character of Anglo-American civilization in its true light. It is the result (and this should be constantly present to the mind of two distinct elements), which in other places have been in frequent hostility, but which in America have been admirably incorporated and combined with one another. I allude to the spirit of Religion and the spirit of Liberty.

The settlers of New England were at the same time ardent sectarians and daring innovators. Narrow as the limits of some of their religious opinions were, they were entirely free from political prejudices. Hence arose two tendencies, distinct but not opposite, which are constantly discernible in the manners as well as in the laws of the country.

It might be imagined that men who sacrificed their friends, their family, and their native land to a religious conviction were absorbed in the pursuit of the intellectual advantages which they purchased at so dear a rate. The energy, however, with which they strove for the acquirement of wealth, moral enjoyment, and the comforts as well as liberties of the world, is scarcely inferior to that with which they devoted themselves to Heaven.

Political principles and all human laws and institutions were moulded and altered at their pleasure; the barriers of the society in which they were born were broken down before them; the old principles which had governed the world for ages were no more; a path without a turn and a field without an horizon were opened to the exploring and ardent curiosity of man: but at the limits of the political world he checks his researches, he discreetly lays aside the use of his most formidable faculties, he no longer consents to doubt or to innovate, but carefully abstaining from raising the curtain of the sanctuary, he yields with submissive respect to truths which he will not discuss. Thus, in the moral world everything is classed, adapted, decided, and foreseen; in the political world everything is agitated, uncertain, and disputed: in the one is a passive, though a voluntary, obedience; in the other an independence scornful of experience and jealous of authority.

These two tendencies, apparently so discrepant, are far from conflicting; they advance together, and mutually support each other. Religion perceives that civil liberty affords a noble exercise to the faculties of man, and that the political world is a field prepared by the Creator for the efforts of the intelligence. Contented with the freedom and the power which it enjoys in its own sphere, and with the place which it occupies, the empire of religion is never more surely established than when it reigns in the hearts of men unsupported by aught beside its native strength. Religion is no less the companion of liberty in all its battles and its triumphs; the cradle of its infancy, and the divine source of its claims. The safeguard of morality is religion, and morality is the best security of law and the surest pledge of freedom.

### ***Declaration of Sentiments by the Seneca Falls Conference (1848)***

When, in the course of human events, it becomes necessary for one portion of the family of man to assume among the people of the earth a position different from that which they have hitherto occupied, but one to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes that impel them to such a course.

We hold these truths to be self-evident: that all men and women are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness; that to secure these rights governments are instituted, deriving their just powers from the consent of the governed. Whenever any form of government becomes destructive of these ends, it is the right of those who suffer from it to refuse allegiance to it, and to insist upon the institution of a new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their duty to throw off such government, and to provide new guards for their future security. Such has been the patient sufferance of the women under this government, and such is now the necessity which constrains them to demand the equal station to which they are entitled. The history of mankind is a history of repeated injuries and usurpations on the part of man toward woman, having in direct object the establishment of an absolute tyranny over her. To prove this, let facts be submitted to a candid world.

The history of mankind is a history of repeated injuries and usurpations on the part of man toward woman, having in direct object the establishment of an absolute tyranny over her. To prove this, let facts be submitted to a candid world.

He has never permitted her to exercise her inalienable right to the elective franchise.

He has compelled her to submit to laws, in the formation of which she had no voice.

He has withheld from her rights which are given to the most ignorant and degraded men--both natives and foreigners.

Having deprived her of this first right of a citizen, the elective franchise, thereby leaving her without representation in the halls of legislation, he has oppressed her on all sides.

He has made her, if married, in the eye of the law, civilly dead.

He has taken from her all right in property, even to the wages she earns.

He has made her, morally, an irresponsible being, as she can commit many crimes with impunity, provided they be done in the presence of her husband. In the covenant of marriage, she is compelled to promise obedience to her husband, he becoming, to all intents and purposes, her master--the law giving him power to deprive her of her liberty, and to administer chastisement.

He has so framed the laws of divorce, as to what shall be the proper causes, and in case of separation, to whom the guardianship of the children shall be given, as to be wholly regardless of the happiness of women--the law, in all cases, going upon a false supposition of the supremacy of man, and giving all power into his hands.

After depriving her of all rights as a married woman, if single, and the owner of property, he has taxed her to support a government which recognizes her only when her property can be made profitable to it.

He has monopolized nearly all the profitable employments, and from those she is permitted to follow, she receives but a scanty remuneration. He closes against her all the avenues to wealth and distinction which he considers most honorable to himself. As a teacher of theology, medicine, or law, she is not known.

He has denied her the facilities for obtaining a thorough education, all colleges being closed against her.

He allows her in church, as well as state, but a subordinate position, claiming apostolic authority for her exclusion from the ministry, and, with some exceptions, from any public participation in the affairs of the church.

He has created a false public sentiment by giving to the world a different code of morals for men and women, by which moral delinquencies which exclude women from society are not only tolerated, but deemed of little account in man.

He has usurped the prerogative of Jehovah himself, claiming it as his right to assign for her a sphere of action, when that belongs to her conscience and to her God.

He has endeavored, in every way that he could, to destroy her confidence in her own powers, to lessen her self-respect, and to make her willing to lead a dependent and abject life.

Now, in view of this entire disfranchisement of one-half the people of this country, their social and religious degradation--in view of the unjust laws above mentioned, and because women do feel themselves aggrieved, oppressed, and fraudulently deprived of their most sacred rights, we insist that they have immediate admission to all the rights and privileges which belong to them as citizens of the United States.

## “Independence Day Speech” by Frederick Douglass (1852)

Fellow Citizens, I am not wanting in respect for the fathers of this republic. The signers of the Declaration of Independence were brave men. They were great men, too Ñ great enough to give frame to a great age. It does not often happen to a nation to raise, at one time, such a number of truly great men. The point from which I am compelled to view them is not, certainly, the most favorable; and yet I cannot contemplate their great deeds with less than admiration. They were statesmen, patriots and heroes, and for the good they did, and the principles they contended for, I will unite with you to honor their memory....

...Fellow-citizens, pardon me, allow me to ask, why am I called upon to speak here to-day? What have I, or those I represent, to do with your national independence? Are the great principles of political freedom and of natural justice, embodied in that Declaration of Independence, extended to us? And am I, therefore, called upon to bring our humble offering to the national altar, and to confess the benefits and express devout gratitude for the blessings resulting from your independence to us?

Would to God, both for your sakes and ours, that an affirmative answer could be truthfully returned to these questions! Then would my task be light, and my burden easy and delightful. For who is there so cold, that a nation's sympathy could not warm him? Who so obdurate and dead to the claims of gratitude, that would not thankfully acknowledge such priceless benefits? Who so stolid and selfish, that would not give his voice to swell the hallelujahs of a nation's jubilee, when the chains of servitude had been torn from his limbs? I am not that man. In a case like that, the dumb might eloquently speak, and the "lame man leap as an hart."

But such is not the state of the case. I say it with a sad sense of the disparity between us. I am not included within the pale of glorious anniversary! Your high independence only reveals the immeasurable distance between us. The blessings in which you, this day, rejoice, are not enjoyed in common. The rich inheritance of justice, liberty, prosperity and independence, bequeathed by your fathers, is shared by you, not by me. The sunlight that brought light and healing to you, has brought stripes and death to me. This Fourth July is yours, not mine. You may rejoice, I must mourn. To drag a man in fetters into the grand illuminated temple of liberty, and call upon him to join you in joyous anthems, were inhuman mockery and sacrilegious irony. Do you mean, citizens, to mock me, by asking me to speak to-day? If so, there is a parallel to your conduct. And let me warn you that it is dangerous to copy the example of a nation whose crimes, towering up to heaven, were thrown down by the breath of the Almighty, burying that nation in irrevocable ruin! I can to-day take up the plaintive lament of a peeled and woe-smitten people!

"By the rivers of Babylon, there we sat down. Yea! We wept when we remembered Zion. We hanged our harps upon the willows in the midst thereof. For there, they that carried us away captive, required of us a song; and they who wasted us required of us mirth, saying, Sing us one of the songs of Zion. How can we sing the Lord's song in a strange land? If I forget thee, O Jerusalem, let my right hand forget her cunning. If I do not remember thee, let my tongue cleave to the roof of my mouth."

Fellow-citizens, above your national, tumultuous joy, I hear the mournful wail of millions! whose chains, heavy and grievous yesterday, are, to-day, rendered more intolerable by the jubilee shouts that reach them. If I do forget, if I do not faithfully remember those bleeding children of sorrow this day, "may my right hand forget her cunning, and may my tongue cleave to the roof of my mouth!" To forget them, to pass lightly over their wrongs, and to chime in with the popular theme, would be treason most scandalous and shocking, and would make me a reproach before God and the world. My subject, then, fellow-citizens, is American slavery. I shall see this day and its popular characteristics from the slave's point of view. Standing there identified with the American bondman, making his wrongs mine, I do not hesitate to declare, with all my soul, that the character and conduct of this nation never looked blacker to me than on this 4th of July! Whether we turn to the declarations of the past, or to the professions of the present, the conduct of the nation seems equally hideous and revolting. America is false to the past, false to the present, and solemnly binds herself to be false to the future. Standing with God and the crushed and bleeding slave on this occasion, I will, in the name of humanity which is outraged, in the name of liberty which is fettered, in the name of the constitution and the Bible which are disregarded and trampled upon, dare to call in question and to denounce, with all the

emphasis I can command, everything that serves to perpetuate slavery the great sin and shame of America! "I will not equivocate; I will not excuse"; I will use the severest language I can command; and yet not one word shall escape me that any man, whose judgment is not blinded by prejudice, or who is not at heart a slaveholder, shall not confess to be right and just.

But I fancy I hear some one of my audience say, "It is just in this circumstance that you and your brother abolitionists fail to make a favorable impression on the public mind. Would you argue more, and denounce less; would you persuade more, and rebuke less; your cause would be much more likely to succeed." But, I submit, where all is plain there is nothing to be argued. What point in the anti-slavery creed would you have me argue? On what branch of the subject do the people of this country need light? Must I undertake to prove that the slave is a man? That point is conceded already. Nobody doubts it. The slaveholders themselves acknowledge it in the enactment of laws for their government. They acknowledge it when they punish disobedience on the part of the slave. There are seventy-two crimes in the State of Virginia which, if committed by a black man (no matter how ignorant he be), subject him to the punishment of death; while only two of the same crimes will subject a white man to the like punishment. What is this but the acknowledgment that the slave is a moral, intellectual, and responsible being? The manhood of the slave is conceded. It is admitted in the fact that Southern statute books are covered with enactments forbidding, under severe fines and penalties, the teaching of the slave to read or to write. When you can point to any such laws in reference to the beasts of the field, then I may consent to argue the manhood of the slave. When the dogs in your streets, when the fowls of the air, when the cattle on your hills, when the fish of the sea, and the reptiles that crawl, shall be unable to distinguish the slave from a brute, then will I argue with you that the slave is a man!

For the present, it is enough to affirm the equal manhood of the Negro race. Is it not astonishing that, while we are ploughing, planting, and reaping, using all kinds of mechanical tools, erecting houses, constructing bridges, building ships, working in metals of brass, iron, copper, silver and gold; that, while we are reading, writing and ciphering, acting as clerks, merchants and secretaries, having among us lawyers, doctors, ministers, poets, authors, editors, orators and teachers; that, while we are engaged in all manner of enterprises common to other men, digging gold in California, capturing the whale in the Pacific, feeding sheep and cattle on the hill-side, living, moving, acting, thinking, planning, living in families as husbands, wives and children, and, above all, confessing and worshipping the Christian's God, and looking hopefully for life and immortality beyond the grave, we are called upon to prove that we are men!

Would you have me argue that man is entitled to liberty? That he is the rightful owner of his own body? You have already declared it. Must I argue the wrongfulness of slavery? Is that a question for Republicans? Is it to be settled by the rules of logic and argumentation, as a matter beset with great difficulty, involving a doubtful application of the principle of justice, hard to be understood? How should I look to-day, in the presence of Americans, dividing, and subdividing a discourse, to show that men have a natural right to freedom? Speaking of it relatively and positively, negatively and affirmatively. To do so, would be to make myself ridiculous, and to offer an insult to your understanding. There is not a man beneath the canopy of heaven that does not know that slavery is wrong for him.

What, am I to argue that it is wrong to make men brutes, to rob them of their liberty, to work them without wages, to keep them ignorant of their relations to their fellow men, to beat them with sticks, to flay their flesh with the lash, to load their limbs with irons, to hunt them with dogs, to sell them at auction, to sunder their families, to knock out their teeth, to burn their flesh, to starve them into obedience and submission to their masters? Must I argue that a system thus marked with blood, and stained with pollution, is wrong? No! I will not. I have better employment for my time and strength than such arguments would imply.

What, then, remains to be argued? Is it that slavery is not divine; that God did not establish it; that our doctors of divinity are mistaken? There is blasphemy in the thought. That which is inhuman, cannot be divine! Who can reason on such a proposition? They that can, may; I cannot. The time for such argument is passed.

At a time like this, scorching irony, not convincing argument, is needed. O! Had I the ability, and could reach the nation's ear, I would, to-day, pour out a fiery stream of biting ridicule, blasting reproach, withering sarcasm, and

stern rebuke. For it is not light that is needed, but fire; it is not the gentle shower, but thunder. We need the storm, the whirlwind, and the earthquake. The feeling of the nation must be quickened; the conscience of the nation must be roused; the propriety of the nation must be startled; the hypocrisy of the nation must be exposed; and its crimes against God and man must be proclaimed and denounced.

What, to the American slave, is your 4th of July? I answer; a day that reveals to him, more than all other days in the year, the gross injustice and cruelty to which he is the constant victim. To him, your celebration is a sham; your boasted liberty, an unholy license; your national greatness, swelling vanity; your sounds of rejoicing are empty and heartless; your denunciation of tyrants, brass fronted impudence; your shouts of liberty and equality, hollow mockery; your prayers and hymns, your sermons and thanksgivings, with all your religious parade and solemnity, are, to Him, mere bombast, fraud, deception, impiety, and hypocrisy -- a thin veil to cover up crimes which would disgrace a nation of savages. There is not a nation on the earth guilty of practices more shocking and bloody than are the people of the United States, at this very hour.

Go where you may, search where you will, roam through all the monarchies and despotisms of the Old World, travel through South America, search out every abuse, and when you have found the last, lay your facts by the side of the everyday practices of this nation, and you will say with me, that, for revolting barbarity and shameless hypocrisy, America reigns without a rival....

**“Education” by Ellen Condliffe Lagemann in *The Reader’s Companion to American History* (Eric Foner and John A. Garraty, editors) (1991)**

From Part II “Education since 1877”

By the 1870s, public schools had been established throughout the United States. During the next fifty years, however, there was a movement toward more schooling for more students. In part, this was a result of the development of public high schools. Although such schools had existed since the early nineteenth century, they began to enroll a significant proportion of young people only at the turn of the century. In 1890, 4 percent of the nation’s youth between fourteen and seventeen years of age enrolled in school, a figure that rose by 1930 to 47 percent. Reflecting the realization that schooling was an alternative to early employment, the social worker Florence Kelley observed that the most effective compulsory education law was a child labor law. By 1918, all states had some form of compulsory school attendance.

At the same time that schooling was being extended upward, it was moving downward to encompass more and more young children. Never constant, the age of school entry declined as kindergartens were being added to an increasing number of school systems. Developed by the Prussian educator Friedrich Froebel, kindergartens were intended to teach children between the ages of three and seven to work, to cooperate with one another, and to appreciate the spiritual unity of all things. Kindergartens spread rapidly in the United States. Initially operating under private auspices, the first kindergarten that was part of a public school system was opened by Susan Blow in St. Louis, Missouri, in 1873; more than four thousand kindergartens were in operation by 1898. Acceptance of the idea of early childhood education programs was encouraged by such influential American educators as the psychologist G. Stanley Hall, who was a critical figure in the child study movement that began in the 1890s, and the psychologist and philosopher John Dewey, whose early writings focused attention on the need to organize schools in harmony with the interests and capacities of children. At a time of significant immigration and heightened concern with urban poverty, early childhood education became a favorite project of many philanthropic organizations and social settlements.

***What They Fought For, 1861–1865* by James M. McPherson (1994)**

From Chapter 2 “The Best Government on God’s Footstool”

One of the questions often asked a Civil War historian is, “Why did the North fight?” Southern motives seem easier to understand. Confederates fought for independence, for their own property and way of life, for their very survival as a nation. But what did the Yankees fight for? Why did they persist through four years of the bloodiest conflict in American history, costing 360,000 northern lives—not to mention 260,000 southern lives and untold destruction of resources? Puzzling over this question in 1863, Confederate War Department clerk John Jones wrote in his diary: “Our men must prevail in combat, or lose their property, country, freedom, everything. . . . On the other hand the enemy, in yielding the contest, may retire into their own country, and possess everything they enjoyed before the war began.”

If that was true, why did the Yankees keep fighting? We can find much of the answer in Abraham Lincoln’s notable speeches: the Gettysburg Address, his first and second inaugural addresses, the peroration of his message to Congress on December 1, 1862. But we can find even more of the answer in the wartime letters and diaries of the men who did the fighting. Confederates who said that they fought for the same goals as their forebears of 1776 would have been surprised by the intense conviction of the northern soldiers that *they* were upholding the legacy of the American Revolution.

*America's Constitution: A Biography* by Akhil Reed Amar (2005)

[...]

Let's begin with two tiny puzzles posed by the Article I command that "Representatives and direct Taxes shall be apportioned among the several States...by adding to the whole Number of free Persons...three fifths of all other Persons." First, although this language specified the apportionment formula "among the several states," it failed to specify the formula within each state. ....

[...]

A second small puzzle: why did Article I peg the number of representatives to the underlying number of persons, instead of the underlying number of eligible voters, a la New York?

[...]

These two small problems, centering on the seemingly innocent words "among" and "Persons" quickly spiral out into the most vicious words of the apportionment clause: "adding three fifths of all other persons." Other persons here meant other than free persons – that is, slaves. Thus, the more slaves a given state's master class bred or bought, the more seats the state could claim in Congress, for every decade in perpetuity.

The Philadelphia draftsmen camouflaged this ugly point as best they could, euphemistically avoiding the S-word and simultaneously introducing the T-word – taxes – into the equation (Representatives and direct Taxes shall be apportioned...).

[...]

The full import of the camouflaged clause eluded many readers in the late 1780s. In the wake of two decades of debate about taxation and burdens under the empire and confederation, many Founding-era Americans confronting the clause focused on taxation rather than on representation. Some Northern critics grumbled that three-fifths should have been five-fifths so as to oblige the South to pay more taxes, without noticing that five-fifths would have also enabled the South to gain more House seats.

Modern laypersons and law students confronting the words, "three fifths" for the first time often suffer a similar confusion, recoiling at the idea of valuing slaves at less than 100 percent. This initial reaction misses the point. The clause did not mean to apportion how much a slave was a person as opposed to chattel. Had this been the question, the antislavery answer in the 1780s would have been to value slaves fully: five-fifths. Yet in the context of House apportionment, a five-fifths formula would not have freed a single slave, or endowed any bondsman with more rights of personhood against his master or the world. Five-fifths would simply have given slave states even more voting power vis-à-vis free states. The precise Article I question concerned Congress's proportions, not the slaves'. The principled antislavery answer to this question in 1787 was that for legislative apportionment purposes, slaves should be valued not at five-fifths, or even three-fifths, but rather at zero-fifths.

[...]

**1776 by David McCullough (2005)**

From Chapter 3 “Dorchester Heights”

On January 14, two weeks into the new year, George Washington wrote one of the most forlorn, despairing letters of his life. He had been suffering sleepless nights in the big house by the Charles. “The reflection upon my situation and that of this army produces many an uneasy hour when all around me are wrapped in sleep,” he told the absent Joseph Reed. “Few people know the predicament we are in.”

Filling page after page, he enumerated the same troubles and woes he had been reporting persistently to Congress for so long, and that he would report still again to John Hancock that same day. There was too little powder, still no money. (Money was useful in the common affairs of life but in war it was essential, Washington would remind the wealthy Hancock.) So many of the troops who had given up and gone home had, against orders, carried off muskets that were not their own that the supply of arms was depleted to the point where there were not enough for the new recruits. “We have not at this time 100 guns in the stores of all that have been taken in the prize ship [the captured British supply ship *Nancy*],” he wrote to Reed. On paper his army numbered between 8,000 and 10,000. In reality only half that number were fit for duty.

It was because he had been unable to attack Boston that things had come to such a pass, he was convinced, The changing of one army to another in the midst of winter, with the enemy so close at hand, was like nothing, “in the pages of history.” That the British were so “blind” to what was going on and the true state of his situation he considered nearly miraculous.

He was downcast and feeling quite sorry for himself. Had he known what he was getting into, he told Reed, he would never have accepted the command.

*Mirror of the World: A New History of Art* by Julian Bell (2007)

From Chapter 7, “Theatrical Realities”

[...]

The idea that artists are transforming the cultures around them and imagining the previously unimaginable – Michelangelo painting the Sistine Chapel, for instance – makes for a more exciting story. But if we insist on looking for innovation, we may go against the historical grain. Art cultures always move, but not always in leaps. Westerners are used to thinking that small-scale societies (Aboriginal Australia, for instance) have changed their terms of reference relatively slowly, but the same might be said of the largest of all regional civilizations. Through the 16<sup>th</sup> century – as through most of the last two millennia – the world’s wealthiest and most populous state was China, then ruled by the Ming dynasty. Far from Beijing, the empire’s capital, a landed elite had converged for three centuries around the lakeside city of Suzhou. In this agreeably sophisticated environment, Weng Zhingming was one of hundreds devoting himself to painting scrolls with landscape or plant studies accompanied by poetic inscriptions. It was a high-minded pursuit, in so far as literati like Wen would not (in principle at least) take money for their work.

Wen’s *Seven Junipers* of 1532 stands out among the throng of such works on account of its whip-crack dynamism, a wild, irregular rhythm bounding over the length of three and a half metres (twelve feet) of paper. It seems to do things with pictorial space that Western painters would not attempt until the 20<sup>th</sup> century. But its force – unlike that of contemporary works by Michelangelo – is by no means a matter of radicalism. Wen, painting the scroll in his sixties, was returning to an image painted by his revered predecessor in Suzhou, Shen Zhou, and looking back beyond Shen to the style of Zhao Mengfu, who had painted around 1300. His accompanying poem, written ‘in admiration of antiquity’, identifies the junipers as morally encouraging emblems of resilience as ‘magic witnesses of days gone by’. ‘Who knows’, he adds wistfully, ‘what is to come hereafter?’ In other words, the momentum here is one of nostalgia: in the hands of a distinguished exponent in a privileged location in a politically unruffled era, backwards-looking might have a creative force of its own.

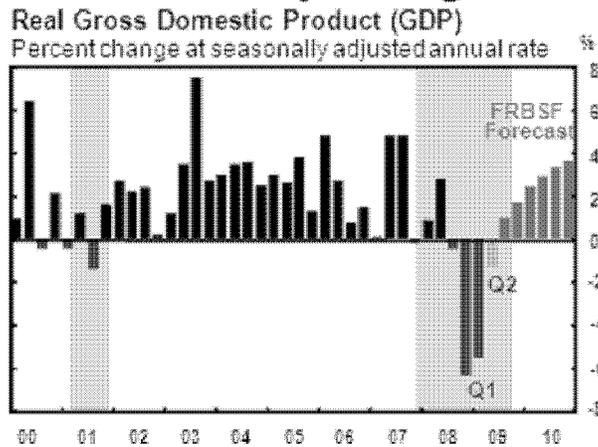
### ***FedViews* by the Federal Reserve Bank of San Francisco (2009)**

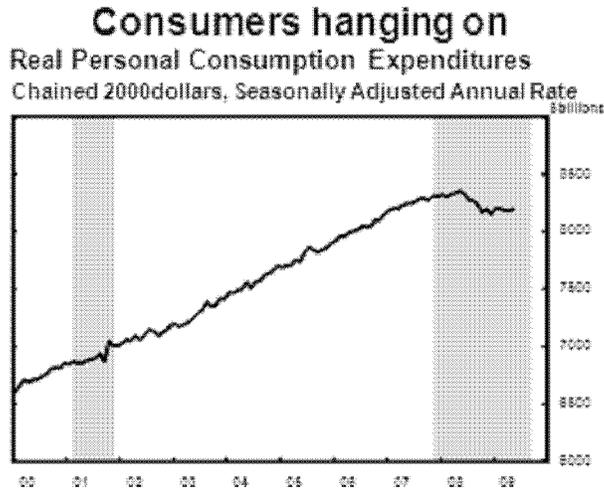
*The opinions expressed in this article do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.*

Mary C. Daly, vice president and director of the Center for the Study of Innovation and Productivity at the Federal Reserve Bank of San Francisco, states her views on the current economy and the outlook.

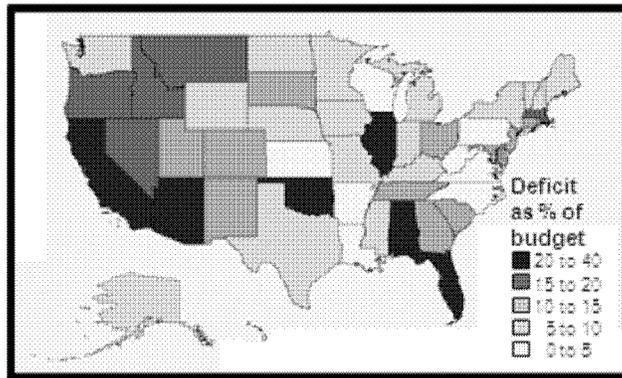
- Financial markets are improving, and the crisis mode that has characterized the past year is subsiding. The adverse feedback loop, in which losses by banks and other lenders lead to tighter credit availability, which then leads to lower spending by households and businesses, has begun to slow. As such, investors' appetite for risk is returning, and some of the barriers to credit that have been constraining businesses and households are diminishing.
- Income from the federal fiscal stimulus, as well as some improvement in confidence, has helped stabilize consumer spending. Since consumer spending accounts for two-thirds of all economic activity, this is a key factor affecting our forecast of growth in the third quarter.
- The gradual nature of the recovery will put additional pressure on state and local budgets. Following a difficult 2009, especially in the West, most states began the 2010 fiscal year on July 1 with even larger budget gaps to solve.
- Still, many remain worried that large fiscal deficits will eventually be inflationary. However, a look at the empirical link between fiscal deficits and inflation in the United States shows no correlation between the two. Indeed, during the 1980s, when the United States was running large deficits, inflation was coming down.

### **Modest recovery to begin in Q3**

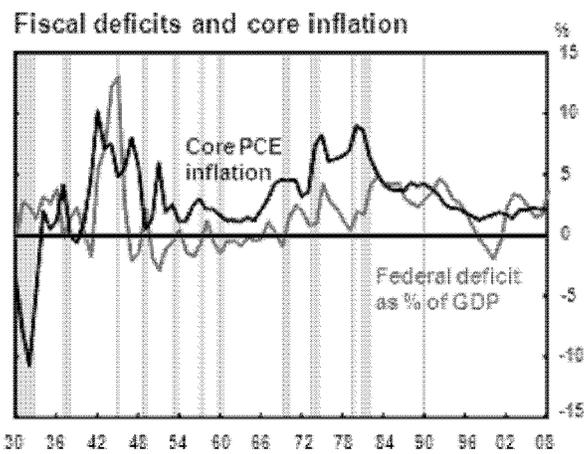




### State budget gaps pervasive in 2009



### No link between deficits and inflation



## Grades 11–12: Informational Texts (Science, Mathematics, and Technology)

### *Innumeracy: Mathematical Illiteracy and Its Consequences* by John Allen Paulos (1988)

From Chapter 1 “Examples and Principles”

#### Archimedes and Practically Infinite Numbers

There is a fundamental property of numbers named after the Greek mathematician Archimedes which states that any number, no matter how huge, can be exceeded by adding together sufficiently many of any smaller number, no matter how tiny. Though obvious in principle, the consequences are sometimes resisted, as they were by the student of mine who maintained that human hair just didn't grow in miles per hour. Unfortunately, the nanoseconds used up in a simple computer operation do add up to lengthy bottlenecks on intractable problems, many of which would require millennia to solve in general. It takes some getting accustomed to the fact that the minuscule times and distances of microphysics as well as the vastness of astronomical phenomena share the dimensions of our human world.

It's clear how the above property of numbers led to Archimedes' famous pronouncement that given a fulcrum, a long enough lever, and a place to stand, he alone could physically lift the earth. An awareness of the additivity of small quantities is lacking in innumerates, who don't seem to believe that their little aerosol cans of hairspray could play any role in the depletion of the ozone layer of the atmosphere, or that their individual automobile contributes anything to the problem of acid rain.

The pyramids, impressive as they are, were built a stone at a time over a period very much shorter than the five thousand to ten thousand years required to move the 12,000-foot Mount Fuji by truck. A similar but more classic calculation of this type was made by Archimedes, who estimated the number of grains of sand needed to fill up the earth and heavens. Though he didn't have exponential notation, he invented something comparable, and his calculations were essentially equivalent to the following.

Interpreting "the earth and heavens" to be a sphere about the earth, we observe that the number of grains of sand needed to fill it depends on the radius of the sphere and the coarseness of the sand. Assuming there are fifteen grains per linear inch, there are  $15 \times 15$  per planar inch and  $15^3$  grains per cubic inch. Since there are twelve inches per foot, there are  $12^3$  cubic inches per cubic foot and thus  $15^3 \times 12^3$  grains per cubic foot. Similarly, there are  $15^3 \times 12^3 \times 5,280^3$  grains per cubic mile. Since the formula for the volume of a sphere is  $\frac{4}{3} \times \pi \times$  the cube of the radius, the number of grains of sand needed to fill a sphere of radius one trillion miles (approximately Archimedes' estimate) is  $\frac{4}{3} \times \pi \times 1,000,000,000,000^3 \times 15^3 \times 12^3 \times 5,280^3$ . This equals approximately  $10^{54}$  grains of sand.

There is a sense of power connected with such calculations which is hard to explain but which somehow involves a mental encompassing of the world. A more modern version is the calculation of the approximate number of subatomic bits that would fill up the universe. This number plays the role of "practical infinity" for computer problems which are solvable but only theoretically.

The size of the universe is, to be a little generous, a sphere about 40 billion light-years in diameter. To be even more generous and also to simplify the rough calculation, assume it's a cube 40 billion light-years on a side. Protons and neutrons are about  $10^{-12}$  centimeters in diameter. The Archimedean question computer scientist Donald Knuth poses is how many little cubes  $10^{-13}$  centimeters in diameter (1/10 the diameter of these nucleons) would fit into the universe. An easy calculation shows the number to be less than  $10^{125}$ . Thus, even if a computer the size of the universe had working parts that were smaller than nucleons, it would contain fewer than  $10^{125}$  such parts, and thus computations on problems which require more parts wouldn't be possible. Perhaps surprisingly, there are many such problems, some of them quite ordinary and of practical importance.

A comparably tiny time unit is the amount of time required for light, which travels at 300,000 kilometers per second, to traverse the length of one of the above tiny cubes, whose edges are  $10^{-13}$  centimeters. Taking the universe to be about 15 billion years old, we determine that fewer than  $10^{42}$  such time units have passed since the beginning of time. Thus, any computer calculation which requires more than  $10^{42}$  steps (each of which is certainly going to require more time than our unit of time) requires more time than the present history of this universe. Again, there are many such problems.

Taking a human being to be spherical and about a meter in diameter (assume a person is squatting), we end with some biologically revealing comparisons that are somewhat easier to visualize. The size of a human cell is to that of a person as a person's size is to that of Rhode Island. Likewise, a virus is to a person as a person is to the earth; an atom is to a person as a person is to the earth's orbit around the sun; and a proton is to a person as a person is to the distance to Alpha Centauri.

## "Gravity in Reverse: The Tale of Albert Einstein's 'Greatest Blunder'" by Neil deGrasse Tyson (2003)

Sung to the tune of "The Times They Are A-Changin'":

Come gather 'round, math phobes,  
Wherever you roam  
And admit that the cosmos  
Around you has grown  
And accept it that soon  
You won't know what's worth knowin'  
Until Einstein to you  
Becomes clearer.  
So you'd better start listenin'  
Or you'll drift cold and lone  
For the cosmos is weird, gettin' weirder.  
--The Editors (with apologies to Bob Dylan)

Cosmology has always been weird. Worlds resting on the backs of turtles, matter and energy coming into existence out of much less than thin air. And now, just when you'd gotten familiar, if not really comfortable, with the idea of a big bang, along comes something new to worry about. A mysterious and universal pressure pervades all of space and acts against the cosmic gravity that has tried to drag the universe back together ever since the big bang. On top of that, "negative gravity" has forced the expansion of the universe to accelerate exponentially, and cosmic gravity is losing the tug-of-war.

For these and similarly mind-warping ideas in twentieth-century physics, just blame Albert Einstein. Einstein hardly ever set foot in the laboratory; he didn't test phenomena or use elaborate equipment. He was a theorist who perfected the "thought experiment," in which you engage nature through your imagination, inventing a situation or a model and then working out the consequences of some physical principle. If--as was the case for Einstein--a physicist's model is intended to represent the entire universe, then manipulating the model should be tantamount to manipulating the universe itself. Observers and experimentalists can then go out and look for the phenomena predicted by that model. If the model is flawed, or if the theorists make a mistake in their calculations, the observers will detect a mismatch between the model's predictions and the way things happen in the real universe. That's the first cue to try again, either by adjusting the old model or by creating a new one.

One of the most powerful and far-reaching theoretical models ever devised is Einstein's theory of general relativity, published in 1916 as "The Foundation of the General Theory of Relativity" and refined in 1917 in "Cosmological Considerations in the General Theory of Relativity." Together, the papers outline the relevant mathematical details of how everything in the universe moves under the influence of gravity. Every few years, laboratory scientists devise ever more precise experiments to test the theory, only to extend the envelope of its accuracy.

### Media Text:

*NOVA* animation of an Einstein "thought experiment":  
<http://www.pbs.org/wgbh/nova/einstein/relativity/>

## *Google Hacks: Tips & Tools for Smarter Searching* by Tara Calishain and Rael Dornfest (2004)

From Chapter 1 “Web: Hacks 1-20”

### Google Web Search Basics

Whenever you search for more than one keyword at a time, a search engine has a default strategy for handling and combining those keywords. Can those words appear individually in a page, or do they have to be right next to each other? Will the engine search for both keywords or for either keyword?

### Phrase Searches

Google defaults to searching for occurrences of your specified keywords anywhere on the page, whether side-by-side or scattered throughout. To return results of pages containing specifically ordered words, enclose them in quotes, turning your keyword search into a *phrase search*, to use Google’s terminology.

On entering a search for the keywords:

to be or not to be

Google will find matches where the keywords appear anywhere on the page. If you want Google to find you matches where the keywords appear together as a phrase, surround them with quotes, like this:

“to be or not to be”

Google will return matches only where those words appear together (not to mention explicitly including stop words such as “to” and “or”[...]).

Phrase searches are also useful when you want to find a phrase but aren’t sure of the exact wording. This is accomplished in combination with wildcards [...])

### Basic Boolean

Whether an engine searches for all keywords or any of them depends on what is called its *Boolean default*. Search engines can default to Boolean AND (searching for all keywords) or Boolean OR (searching for any keywords). Of course, even if a search engine defaults to searching for all keywords, you can usually give it a special command to instruct it to search for any keyword. Lacking specific instructions, the engine falls back on its default setting.

Google’s Boolean default is AND, which means that, if you enter query words without modifiers, Google will search or all of your query words. For example if you search for:

snowblower Honda “Green Bay”

Google will search for all the words. If you prefer to specify that any one word or phrase is acceptable, put an OR between each:

snowblower OR Honda OR “Green Bay”

## “The Mysteries of Mass” by Gordon Kane (2005)

From *Scientific American Special Edition* December 2005

Physicists are hunting for an elusive particle that would reveal the presence of a new kind of field that permeates all of reality. Finding that Higgs field will give us a more complete understanding about how the universe works.

Most people think they know what mass is, but they understand only part of the story. For instance, an elephant is clearly bulkier and weighs more than an ant. Even in the absence of gravity, the elephant would have greater mass--it would be harder to push and set in motion. Obviously the elephant is more massive because it is made of many more atoms than the ant is, but what determines the masses of the individual atoms? What about the elementary particles that make up the atoms--what determines their masses? Indeed, why do they even have mass?

We see that the problem of mass has two independent aspects. First, we need to learn how mass arises at all. It turns out mass results from at least three different mechanisms, which I will describe below. A key player in physicists' tentative theories about mass is a new kind of field that permeates all of reality, called the Higgs field. Elementary particle masses are thought to come about from the interaction with the Higgs field. If the Higgs field exists, theory demands that it have an associated particle, the Higgs boson. Using particle accelerators, scientists are now hunting for the Higgs.

The second aspect is that scientists want to know why different species of elementary particles have their specific quantities of mass. Their intrinsic masses span at least 11 orders of magnitude, but we do not yet know why that should be so [...]. For comparison, an elephant and the smallest of ants differ by about 11 orders of magnitude of mass.

What is mass?

Isaac Newton presented the earliest scientific definition of mass in 1687 in his landmark *Principia*: "The quantity of matter is the measure of the same, arising from its density and bulk conjointly." That very basic definition was good enough for Newton and other scientists for more than 200 years. They understood that science should proceed first by describing how things work and later by understanding why. In recent years, however, the why of mass has become a research topic in physics. Understanding the meaning and origins of mass will complete and extend the Standard Model of particle physics, the well-established theory that describes the known elementary particles and their interactions. It will also resolve mysteries such as dark matter, which makes up about 25 percent of the universe.

The foundation of our modern understanding of mass is far more intricate than Newton's definition and is based on the Standard Model. At the heart of the Standard model is a mathematical function called a Lagrangian, which represents how the various particles interact. From that function, by following rules known as relativistic quantum theory, physicists can calculate the behavior of the elementary particles, including how they come together to form compound particles, such as protons. For both the elementary particles and the compound ones, we can then calculate how they will respond to forces, and for a force  $F$ , we can write Newton's equation  $F = ma$ , which relates the force, the mass and the resulting acceleration. The Lagrangian tells us what to use for  $m$  here, and that is what is meant by the mass of the particle.

But mass, as we ordinarily understand it, shows up in more than just  $F = ma$ . For example, Einstein's special relativity theory predicts that massless particles in a vacuum travel at the speed of light and that particles with mass travel more slowly, in a way that can be calculated if we know their mass. The laws of gravity predict that gravity acts on mass and energy as well, in a precise manner. The quantity  $m$  deduced from the Lagrangian for each particle behaves correctly in all those ways, just as we expect for a given mass.

Fundamental particles have an intrinsic mass known as their rest mass (those with zero rest mass are called massless). For a compound particle, the constituents' rest mass and also their kinetic energy of motion and potential energy of

interactions contribute to the particle's total mass. Energy and mass are related, as described by Einstein's famous equation,  $E = mc^2$  (energy equals mass times the speed of light squared).

An example of energy contributing to mass occurs in the most familiar kind of matter in the universe--the protons and neutrons that make up atomic nuclei in stars, planets, people and all that we see. These particles amount to 4 to 5 percent of the mass-energy of the universe. The Standard Model tells us that protons and neutrons are composed of elementary particles called quarks that are bound together by massless particles called gluons. Although the constituents are whirling around inside each proton, from outside we see a proton as a coherent object with an intrinsic mass, which is given by adding up the masses and energies of its constituents.

The Standard Model lets us calculate that nearly all the mass of protons and neutrons is from the kinetic energy of their constituent quarks and gluons (the remainder is from the quarks' rest mass). Thus, about 4 to 5 percent of the entire universe--almost all the familiar matter around us--comes from the energy of motion of quarks and gluons in protons and neutrons.

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**“Working Knowledge: Electronic Stability Control” by Mark Fischetti (2007)**

From *Scientific American* April 2007

Steer Clear

Automakers are offering electronic stability control on more and more passenger vehicles to help prevent them from sliding, veering off the road, or even rolling over. The technology is a product of an ongoing evolution stemming from antilock brakes.

When a driver jams the brake pedal too hard, anti-lock hydraulic valves subtract brake pressure at a given wheel so the wheel does not lock up. As these systems proliferated in the 1990s, manufacturers tacked on traction-control valves that help a spinning drive wheel grip the road.

For stability control, engineers mounted more hydraulics that can apply pressure to any wheel, even if the driver is not braking. When sensors indicate the car is sliding forward instead of turning or is turning too sharply, the actuators momentarily brake certain wheels to correct the trajectory. “Going to electronic stability control was a big step,” says Scott Dahl, director of chassis-control strategy at supplier Robert Bosch in Farmington Hills, Michigan. “We had to add sensors that can determine what the driver intends to do and compare that with what the car is actually doing.” Most systems also petition the engine-control computer to reduce engine torque to dampen wayward movement.

## “The Coming Merger of Mind and Machine” by Ray Kurzweil (2008)

From *Scientific American Special Edition* January 2008

The accelerating pace of technological progress means that our intelligent creations will soon eclipse us--and that their creations will eventually eclipse them.

Sometime early in this century the intelligence of machines will exceed that of humans. Within a quarter of a century, machines will exhibit the full range of human intellect, emotions and skills, ranging from musical and other creative aptitudes to physical movement. They will claim to have feelings and, unlike today's virtual personalities, will be very convincing when they tell us so. By around 2020 a \$1,000 computer will at least match the processing power of the human brain. By 2029 the software for intelligence will have been largely mastered, and the average personal computer will be equivalent to 1,000 brains.

Once computers achieve a level of intelligence comparable to that of humans, they will necessarily soar past it. For example, if I learn French, I can't readily download that learning to you. The reason is that for us, learning involves successions of stunningly complex patterns of interconnections among brain cells (neurons) and among the concentrations of biochemicals known as neurotransmitters that enable impulses to travel from neuron to neuron. We have no way of quickly downloading these patterns. But quick downloading will allow our nonbiological creations to share immediately what they learn with billions of other machines. Ultimately, nonbiological entities will master not only the sum total of their own knowledge but all of ours as well.

As this happens, there will no longer be a clear distinction between human and machine. We are already putting computers--neural implants--directly into people's brains to counteract Parkinson's disease and tremors from multiple sclerosis. We have cochlear implants that restore hearing. A retinal implant is being developed in the U.S. that is intended to provide at least some visual perception for some blind individuals, basically by replacing certain visual-processing circuits of the brain. A team of scientists at Emory University implanted a chip in the brain of a paralyzed stroke victim that allowed him to use his brainpower to move a cursor across a computer screen.

In the 2020s neural implants will improve our sensory experiences, memory and thinking. By 2030, instead of just phoning a friend, you will be able to meet in, say, a virtual Mozambican game preserve that will seem compellingly real. You will be able to have any type of experience--business, social, sexual--with anyone, real or simulated, regardless of physical proximity.

...

## “Untangling the Roots of Cancer” by W. Wayt Gibbs (2008)

From *Scientific American Special Edition* June 2008

Recent evidence challenges long-held theories of how cells turn malignant--and suggests new ways to stop tumors before they spread.

What causes cancer?

Tobacco smoke, most people would say. Probably too much alcohol, sunshine or grilled meat; infection with cervical papillomaviruses; asbestos. All have strong links to cancer, certainly. But they cannot be root causes. Much of the population is exposed to these carcinogens, yet only a tiny minority suffers dangerous tumors as a consequence.

A cause, by definition, leads invariably to its effect. The immediate cause of cancer must be some combination of insults and accidents that induces normal cells in a healthy human body to turn malignant, growing like weeds and sprouting in unnatural places.

At this level, the cause of cancer is not entirely a mystery. In fact, a decade ago many geneticists were confident that science was homing in on a final answer: cancer is the result of cumulative mutations that alter specific locations in a cell's DNA and thus change the particular proteins encoded by cancer-related genes at those spots. The mutations affect two kinds of cancer genes. The first are called tumor suppressors. They normally restrain cells' ability to divide, and mutations permanently disable the genes. The second variety, known as oncogenes, stimulate growth--in other words, cell division. Mutations lock oncogenes into an active state. Some researchers still take it as axiomatic that such growth-promoting changes to a small number of cancer genes are the initial event and root cause of every human cancer.

For the past few years, however, prominent oncologists have increasingly challenged that theory. No one questions that cancer is ultimately a disease of the DNA. But as biologists trace tumors to their roots, they have discovered many other abnormalities at work inside the nuclei of cells that, though not yet cancerous, are headed that way. Whole chromosomes, each containing 1,000 or more genes, are often lost or duplicated. Pieces of chromosomes are frequently scrambled, truncated or fused together. Chemical additions to the DNA, or to the histone proteins around which it coils, somehow silence important genes, but in a reversible process quite different from mutation. And scans of the genomes of malignant cells within tumors have found that they typically harbor myriad rare mutations rather than a handful of common generic alterations.

The accumulating evidence has spawned new hypotheses that compete with the standard dogma to explain what changes come first and which aberrations matter most in the decadelong transformation of a cell and its descendants from well-behaved tissue to invasive tumor. The challengers dispute the dominant view of the disease as the product of a defined genetic state. They argue that it is more useful to think of cancer as the consequence of a chaotic process, a combination of Murphy's Law and Darwin's Law: anything that can go wrong will, and in a competitive environment, the most prolific variants will dominate.

Despite that shared underlying principle, the new theories make different predictions about what kind of treatments will work best. Some suggest that many cancers could be prevented altogether by better screening, changes in diet, and new drugs-- or even by old drugs, such as aspirin. Other theories cast doubt on that hope.

**“The Cost Conundrum: Health Care Costs in McAllen, Texas” by Atul Gawande (2009)**

It is spring in McAllen, Texas. The morning sun is warm. The streets are lined with palm trees and pickup trucks. McAllen is in Hidalgo County, which has the lowest household income in the country, but it's a border town, and a thriving foreign-trade zone has kept the unemployment rate below ten per cent. McAllen calls itself the Square Dance Capital of the World. "Lonesome Dove" was set around here.

McAllen has another distinction, too: it is one of the most expensive health-care markets in the country. Only Miami--which has much higher labor and living costs--spends more per person on health care. In 2006, Medicare spent fifteen thousand dollars per enrollee here, almost twice the national average. The income per capita is twelve thousand dollars. In other words, Medicare spends three thousand dollars more per person here than the average person earns.

The explosive trend in American medical costs seems to have occurred here in an especially intense form. Our country's health care is by far the most expensive in the world. In Washington, the aim of health-care reform is not just to extend medical coverage to everybody but also to bring costs under control. Spending on doctors, hospitals, drugs, and the like now consumes more than one of every six dollars we earn. The financial burden has damaged the global competitiveness of American businesses and bankrupted millions of families, even those with insurance. It's also devouring our government. "The greatest threat to America's fiscal health is not Social Security," President Barack Obama said in a March speech at the White House. "It's not the investments that we've made to rescue our economy during this crisis. By a wide margin, the biggest threat to our nation's balance sheet is the skyrocketing cost of health care. It's not even close."

The question we're now frantically grappling with is how this came to be, and what can be done about it. McAllen, Texas, the most expensive town in the most expensive country for health care in the world, seemed a good place to look for some answers.

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# Literacy for History and Science

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6-12



# Introduction

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The *Standards for English Language Arts K–12* are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of English language arts (ELA) standards. Its companion document, *Standards for Literacy in History and Science 6–12*, extends the same principle to communication skills in other content areas. The present work, led by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA), builds on the foundation laid by states in their decades-long work on crafting high-quality education standards. The *Standards* also draw upon the most important international models as well as research and input from numerous sources, including scholars, assessment developers, professional organizations, and educators from kindergarten through college. In their design and content, the *Standards* represent a synthesis of the best elements of standards-related work to date and an important advance over that previous work.

As specified by CCSSO and NGA, the *Standards* are (1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous, and (4) internationally benchmarked. A particular standard was to be included in the document only when the best available evidence indicated that its mastery was essential for students to be college and career ready in a twenty-first-century, globally competitive society. As new and better evidence emerges, the *Standards* will be revised accordingly.

The *Standards* are an extension of a prior initiative led by CCSSO and NGA to develop college and career readiness (CCR) standards in reading, writing, and speaking and listening as well as in mathematics. The CCR Reading, Writing, and Speaking and Listening Standards, released in draft form in September 2009, served as a touchstone for the present work. While the format, structure, content, and purpose of that earlier document differ in some ways from this document, the basic aims and concepts are clearly connected. The main difference is that while the earlier CCR document defined a goal toward which education efforts should aim—college and career readiness for all students—the current document describes the progressive development of skills and understandings across the grades necessary for all students to reach that goal. Just as feedback on the September 2009 CCR draft has greatly influenced the design and development of the K–12 standards, so too will the response to the K–12 standards help guide subsequent revisions to the CCR standards. In their final forms, both documents—CCR and K–12—will be tightly aligned and mutually supporting.

While the *Standards* treat college and career readiness for all students as the end point—an ambitious goal in its own right—many students will reach this point before the end of high school. For them, advanced work in literature, composition, language, history, science, and so on should be available. It is beyond the scope of the *Standards* to describe what such advanced work should consist of, but it needs to provide the next logical step up from the college and career readiness baseline established here.

As a natural outgrowth of meeting the charge to define college and career readiness, the *Standards* also lay out a vision of what it means to be a literate person in the twenty-first century. Indeed, the skills and understandings students must demonstrate have broad applicability outside of the classroom or workplace. The *Standards* insist upon the sort of close, attentive reading that is at the heart of understanding and appreciating the aesthetics of literature. They require the sort of critical reading that is necessary to sift carefully through the staggering amount of information available today in print and online. They demand the sort of wide, deep, and thoughtful engagement with high-quality literary and informational text that builds knowledge, enlarges experience, and broadens world views. They mandate the sort of cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic. In short, they promote the development of skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language.

## Key design considerations

### *A blend of cross-cutting and specific standards*

The Reading, Writing, and Speaking and Listening strands include two levels of standards. The cross-cutting Core Standards are the same across the two *Standards* documents, their commonality emphasizing the broad responsibility within the school for meeting the standards and also facilitating schoolwide professional development. Then there are specific Standards that are unique to a given content area, which respects the particular demands of reading, writing, speaking, and listening in ELA and in other disciplines.

### *A focus on results rather than means*

The *Standards* define what all students must learn, not everything that teachers are allowed to teach. By focusing on required achievements, the *Standards* leave room for teachers, curriculum developers, and states to determine how those goals should be reached and what additional topics should be addressed. The *Standards* require, for example, that all students be able to produce writing in a variety of situations, including those that allow time for revision. The *Standards* do not, however, specify a particular writing process that students must use (although certain elements common to process-writing approaches, particularly revision, are embedded in the requirements). Teachers are thus freed—and obligated—to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for those assignments that allow for multiple drafts. Similarly, the *Standards*, with their emphasis on observable outcomes, do not enumerate various metacognitive strategies that students may need to use to monitor and direct their thinking and learning.

### *Shared responsibility for literacy*

The *Standards for English Language Arts K–12* and the *Standards for Literacy in History and Science 6–12* together establish the requirement that instruction in reading, writing, speaking, listening, and language use be a shared responsibility. The *Standards* present reading instruction in K–5 as fully integrative, including a rich blend of narratives, drama, poetry, and informational text. ELA-specific instruction in grades 6 and above includes fiction, poetry, and drama but also a particular form of informational text: literary exposition and argument (e.g., speeches, essays, and historical documents with significant cultural importance and literary merit). Teachers in other content areas must use their unique disciplinary expertise to help students meet the particular challenges of reading, writing, speaking, listening, and language use in their respective field. Progress toward college and career readiness and building a rich knowledge base require that at least half of the reading students do must focus on history, science and related disciplines. This distributed approach honors the unique place of English language arts instruction in literacy development while ensuring that students have communication skills tailored to the demands of other disciplines. It also reflects the reality that students must communicate effectively in a wide range of disciplines, not just ELA.

### *Grade bands to describe growth, grades to focus instruction and assessment*

Evidence consulted in creating the *Standards* suggests that beyond the earliest grades, major developments in students' literacy skills typically occur across spans of grades rather than within individual grades. This document stays true to that evidence by organizing standards into multiyear bands (grades 6–8, 9–10, and 11–CCR).

### *Research and media skills integrated into the standards as a whole*

To be ready to meet the challenges of the twenty-first century, students need a mix of the communication skills that have served literate people for millennia and new competencies necessary in an information- and media-saturated world. To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, report on, and create a high volume and extensive range of print and nonprint texts in media forms old and new. Just as the need to research and to consume and produce media are embedded into every element of today's curriculum, so too are the associated skills and understandings embedded throughout the *Standards* rather than treated separately. Web links to sample media texts are included selectively among the reading text exemplars in Appendix B to reinforce the point that print and online materials can be used together instructionally to enhance students' understanding.

## *An integrated model of English language arts*

Although the *Standards* divide the English language arts into Reading, Writing, Speaking and Listening, and Language Development strands for conceptual purposes, the processes of communication are in theory and practice an undivided whole. As illustrated in the graphic that introduces each grade or grade band and as embodied in the content of the standards themselves, reading, writing, speaking, listening, and language development are tightly interrelated and often reciprocal.

## Central features of the document

### *Reading and Literature: Text complexity and the growth of comprehension*

As students advance through the grades, they must be able to handle independently texts of steadily increasing complexity and be able to gain more from what they read. Beginning formally at grade 2, the *Standards* specify what proportion of texts students read should be within grade band and, at some grades, above grade band. (Additional material in Appendix A of the *Standards* defines and explains text complexity in more detail.) Whatever texts they are reading, students must also show a steadily increasing ability to discern more from and make fuller use of text. This means, for example, finding and making an increasing number of connections among ideas and between texts; considering a wider range of textual evidence; and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. The *Standards* place growing demands on students' comprehension at each higher grade or grade band to ensure that all students are college- and career-ready readers no later than the end of high school.

### *Writing and Research: Text types, grade-level focuses, and research*

While some writing skills, such as the ability to reflect audience, purpose, and task in what one writes, are important for many types of writing, others are more properly part of writing in specific text types: narrative, informative and explanatory text, and argument. Although conducting research calls upon reading, speaking, listening, and language skills, writing is typically central to analyzing information and presenting findings. The *Standards* pair writing and research to signal that close connection.

### *Speaking and Listening: Flexible communication*

Including but not limited to skills necessary for formal presentations, the Speaking and Listening strand requires students to develop a range of broadly useful oral communication and interpersonal skills: listening attentively, participating productively, exchanging information, and speaking effectively. Students must learn to sift through and evaluate multiple points of view; listen thoughtfully in order to build on and constructively question the ideas of others while contributing their own ideas; and, where appropriate, reach agreement and common goals through teamwork.

### *Language Development: Conventions and Vocabulary*

The Conventions standards include the essential "rules" of formal written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. Thus, standards pertaining to grammar and usage, mechanics, and the fundamentals of language and writing are accompanied by standards on word choice and style. The Vocabulary standards focus both on understanding words and on acquiring new words through conversation and reading and by being taught them directly. Rather than require that students use one particular skill or another to determine a word's meaning, the Vocabulary standards insist only that students get the proper meaning, with the means (context, word analysis, and so on) to be chosen flexibly based on the situation.

### *Appendices*

The *Standards* include a range of supporting materials that help explain and enrich the main document:

- Appendix A contains a model of text complexity, including both qualitative and quantitative measures of how easy or hard a text is to read, as well as supplementary statements about instruction in writing, language conventions, and vocabulary
- Appendix B consists of text exemplars at all grades/bands to illustrate appropriate complexity and quality in the text types required by the Reading standards
- Appendix C consists of annotated writing samples to show how grade- or grade-band-appropriate writing embodies the relevant Writing standards

*January 2010*

# Student Practices in Reading, Writing, Speaking, Listening, and Language Use

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The following Student Practices in reading, writing, speaking, listening, and language use undergird and help unify the rest of the *Standards*. The Student Practices are not themselves standards: every idea introduced here is subsequently represented in one or more places within the larger document. They are, rather, the “premises”—broad statements about the nature of college and career readiness in reading, writing, speaking, listening, and language use—that underlie the individual standards and cut across the various sections of the document.

\* \* \*

As students progress toward being college and career ready, they exhibit with increasing fullness and regularity the following capacities in their reading, writing, speaking, listening, and language use:

## **1. They demonstrate independence as readers, writers, speakers, listeners, and language users.**

Students can, without significant scaffolding or support, comprehend and evaluate complex text across a range of types and disciplines, and they can construct effective arguments and clearly convey intricate or multifaceted information. Likewise, students are independently able to discern a speaker’s key points as well as ask questions, build on others’ ideas, and articulate their own ideas. They apply language conventions without prompting. On their own, they determine the meaning of words in context and acquire and use new words.

## **2. They build strong content knowledge.**

Students build a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They demonstrate their ability to become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and the discipline-specific expertise needed to comprehend subject matter and solve problems in different fields. They refine their knowledge and share it through substantive writing and speaking.

## **3. They respond to the varying demands of audience, task, purpose, and discipline.**

Students consider their reading, writing, speaking, listening, and language use in relation to the contextual factors of audience, task, purpose, and discipline. They appreciate nuances, such as how the composition and familiarity of the audience should affect tone and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in the sciences).

## **4. They comprehend as well as critique.**

Students are engaged and open-minded—but skeptical—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author’s or speaker’s assumptions and assess the veracity of claims.

## **5. They privilege evidence.**

Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others’ use of evidence.

## **6. They care about precision.**

Students are mindful of the impact of specific words and details, and they consider what would be achieved by different choices. Students pay especially close attention when precision matters most, such as in the case of reviewing significant data, making important distinctions, or analyzing a key moment in the action of a play or novel.

## **7. They craft and look for structure.**

Students attend to structure when organizing their own writing and speaking as well as when seeking to understand the work of others. They understand and make use of the ways of presenting information typical of different disciplines. They observe, for example, how authors of literary works craft the structure to unfold events and depict the setting.

## **8. They use technology strategically and capably.**

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

## **9. They come to understand other perspectives and cultures.**

Students appreciate that the twenty-first-century classroom and workplace are diverse settings in which people from often widely divergent backgrounds must learn and work together. They actively seek to understand other perspectives and cultures through reading and listening. They do not simply adopt other points of view as their own but rather evaluate them critically and constructively. Literature can play a special role in expanding students' horizons in this way: through reading great classic and contemporary works, students can vicariously inhabit worlds and experiences much different than their own.

# English Language Learners

The *Standards* articulate rigorous grade-level expectations in the areas of speaking, listening, reading and writing to prepare students to be college and career ready. English language learners (ELLs) must be held to the same high standards expected of students who are already proficient in English. However, because these students are acquiring English language proficiency and content area knowledge concurrently, some students will require additional time and all will require appropriate instructional support and aligned assessments.

ELLs are a heterogeneous group with differences in ethnic background, first language, socio-economic status, quality of prior schooling, and levels of English language proficiency. Effectively educating these students requires adjusting instruction and assessment in ways that consider these factors. For example ELLs who are literate in a first language that shares cognates with English can apply first-language vocabulary knowledge when reading in English; likewise ELLs with high levels of schooling can bring to bear conceptual knowledge developed in their first language when reading in a second language. On the other hand, ELLs with limited or interrupted schooling will need to acquire background knowledge prerequisite to educational tasks at hand. As they become acculturated to US schools, ELLs who are newcomers will need sufficiently scaffolded instruction and assessments to make sense of content delivered in a second language and display this content knowledge.

While some ELLs are economically and educationally advantaged, this is not the case for many of these students. Moreover, once in the U.S., the majority of ELLs attend high poverty schools with high percentages of other ELLs. These schools often lack the resources and capacity needed to help ELLs reach high academic standards. However, schools and districts can be assisted in providing a positive learning environment that capitalizes on the linguistic and cultural diversity of the student body.

To help ELLs meet high academic standards in reading, writing, speaking, listening and language use it is essential that ELLs have access to:

- The requisite coursework to prepare them for post-secondary education or the workplace;
- Coursework that is made comprehensible for students learning content in a second language, through specific pedagogical techniques and additional resources;
- Teachers, as well as school-level and district personnel, who are well prepared and qualified to support English-language learners;
- Well designed opportunities for classroom discourse and interaction to enable ELLs to develop communicative strengths in language arts
- Speakers of English who know the language well enough to provide the ELLs with models and support; and
- Ongoing assessment and feedback to guide learning.

It is also worth noting that instruction for these students is additionally guided by language proficiency standards that teachers can use in conjunction with these standards to help ELLs become fully proficient and literate in English.

## Access for Students with Disabilities

The *Standards* articulate rigorous expectations in the areas of reading, writing, speaking, listening, and language use in order to prepare students to be college and careerready. These standards identify the knowledge and skills students must acquire in order to be successful. Research shows that students with disabilities are capable of high levels of learning and should not be limited by low expectations and watered down curriculum. The vast majority of this population of students, including students with intellectual impairments,<sup>1</sup> can achieve proficiency when they receive high-level instruction and accommodations. It is imperative that these highly capable students—regardless of their disability—are held to the same expectations articulated in the Core Standards as other students.

However, *how* these high standards are taught is of the utmost importance in reaching students with special needs. When acquiring the knowledge and skills represented in the Core Standards, students with disabilities may need accommodations<sup>2</sup> or—in exceptional cases—modified goals, incorporated in an individualized education program (IEP),<sup>3</sup> to help them access information or demonstrate their knowledge. In instances when a standard asks students to perform actions they are physically incapable of, students will need to be presented with alternative options to demonstrate similar knowledge and skills within the range of their abilities. Accommodations based on individual needs allow students of all disability levels to learn within the framework of the *Standards*.

Reading, writing, speaking, listening, and language use standards—given the nature of the standards themselves—often require accommodations for students with disabilities. For example, a standard that calls for “listening” should be interpreted to include reading sign language. “Speaking” should be read broadly to include “communication” or “self-expression.” “Reading” should allow for students’ use of Braille, screen reader technology, or other assistive devices to demonstrate comprehension skills. In a similar vein, “writing” should not preclude the use of a scribe, computer, or speech-to-text technology. With appropriate accommodations and support, students with all levels of disabilities can participate in the general education curriculum and achieve grade-level proficiency with regard to the ELA content and skills articulated in the *Standards*.

In short, while the *Standards* set and retain high expectations for all students, they may need to be translated and occasionally modified to apply appropriately to students with disabilities, including all levels of intellectual impairment. Promoting a culture of high expectations for all students is a fundamental goal of the *Standards*. Achieving this goal requires the inclusion of students with disabilities.

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<sup>1</sup> Less than two percent of the population of all students and less than 20% of the population of students with disabilities.

<sup>2</sup> See the Council of Chief State School Officers, (2003). *Training District and State Personnel on Accommodations: A Study of State Practices, Challenges, and Resources* at <http://www.ccsso.org/publications/details.cfm?PublicationID=221> for further explanation and evidence around accommodations.

<sup>3</sup> According to the Individuals with Disabilities Act (IDEA), an IEP includes appropriate accommodations that are necessary to measure the individual achievement and functional performance of a child.

# How to Read This Document

The *Standards* are divided into an ELA-specific document (*Standards for English Language Arts K–12*) and a literacy document for history and science (*Standards for Literacy in History and Science 6–12*). The ELA document includes standards for and examples of history and science reading in K–5.

The ELA-specific document is organized by grade (kindergarten and grades 1, 2, and 3) and grade band (grades 4–5, 6–8, 9–10, and 11–CCR). The *Standards for Literacy in History and Science* are organized by grade band (grades 6–8, 9–10, and 11–CCR). Each grade/band is divided into strands—Reading, Writing, Speaking and Listening, and Language Development.

While all strands contain standards statements, each strand also has its own specific features.

## Reading and Literature (ELA)/Reading (History/Science)

Kindergarten and grade 1 begin with the **mix of key text types (A)**, which identifies the genres and subgenres of reading material appropriate for each grade. This is followed by a list of **illustrative texts (B)** in the key text types. This list is suggestive of the sorts of texts appropriate for the grade in terms of complexity and quality; excerpts appear in Appendix B.

Grades 2, 3, 4–5, 6–8, 9–10, and 11–CCR include this information immediately after a graphic specifying **required text complexity by grade (C)**—in brief, the proportion of texts within and above grade band that students must read each year. (For example, 70% of the texts that grade 3 students read should

come from the grades 2–3 text complexity band, while the other 30% should come from the grades 4–5 band.) An overview of the method for **determining text complexity (D)** in the particular grade band follows. (A fuller treatment is provided in Appendix A.)

All grades/bands organize standards under a number of boxed subheadings (e.g., “Grasping specific details and key ideas”). The standards at all grade levels are divided into cross-cutting **Core Standards (E)**, which are numbered and applicable to many types of reading, and more specific **Standards (F)**, which are lettered and organized by text type (e.g., “Narratives, Drama, and Poetry”).

Kindergarten and grades 1, 2, and 3 also include boxed sections of **reading foundations (G)**, which enumerate basic concepts of print and other foundational skills in reading that very young students must acquire.

Mix of Key Text Types for Grade 1

| Historical/Nonfiction   | Fiction  | Poetry  | Informational  |
|---|--|---|--|
| In the field, include children's almanacs, comics, biographies, folktales, legends, fables, fantasy, realistic fiction, and myth. | In the field, include targeted children's readings, fables, and myths. | In the field, include nursery rhymes, and other references of narrative poems, ballads, and folk songs. | In the field, include state history, and the art and other children's materials. |

Illustrative Texts for Narratives, Drama, and Poetry

Illustrative Informational Text

Grade 1

Required Text Complexity by Grade

Grade 3

Complexity Band

Grade 2-3

Grade 4-5

Grade 6-8

Grade 9-10

Grade 11-CCR

Reading and Literature Standards

Grasping specific details and key ideas

Core Standards – Student

Standards – Students can and do (by key text type):

Narratives, Drama, and Poetry

Informational Text

Reading Foundations

Phonics and Word Recognition

## Writing and Research

Cross-cutting **Core Standards (H)**, which are numbered and apply to many types of writing, are organized under a number of boxed subheadings (e.g., “Writing to reflect audience, purpose, and task”). **Standards (I)** specific to writing in particular text types—narrative, informative and explanatory text, and argument—are lettered and follow in a separate section. In kindergarten through grade 5, writing arguments takes the form of opinion writing, hence the parenthetical notation next to “Arguments” in those grades/bands.

## Speaking and Listening

Cross-cutting **Core Standards**, which are numbered and apply to speaking and listening in many situations, are grouped with lettered **Standards**, which set requirements for speaking and listening in key communication (e.g., “Presentation of Ideas and Information”).

## Language Development

This strand is organized differently in the ELA and history/science documents. The ELA strand comprises two full sections: Conventions and Vocabulary. Each section includes numbered **Core Standards** organized under a number of boxed subheadings (e.g., “Mechanics”) and introduced by a brief summative paragraph and list of **key terms (J)** intended to be taught explicitly in grade-appropriate ways. ELA Vocabulary consists of three subsections—determining the meaning of words, understanding the nuances of words, and acquiring vocabulary—under each of which numbered **Core Standards** appear. Language Development in the history/science document consists of the summative paragraphs for Conventions and all of the Vocabulary section found in ELA except for nuances in word meaning.

| Writing and Research Standards  |          |
|---|----------|
| <b>Writing to reflect audience, purpose, and task</b>   |          |
| <b>Core Standards – Students can and do:</b>  |          |
| 1. Write expository, informative and explanatory texts, and arguments that demonstrate an awareness of audience that are familiar and known to the student. |          |
| <b>Conducting research</b>  |          |
| <b>Core Standards – Students can and do:</b>  |          |
| 2. Perform short, focused research to build knowledge by exploring aspects of a single topic.   | <b>H</b> |
| 3. Analyze information for truth and digital citizenship.   |          |
| 4. Determine the accuracy of the information gathered to answer specific questions.   |          |
| 5. Research information by using one or more tools, through research or parallel use.   |          |
| 6. Provide basic bibliographic information on the print and digital sources.  |          |
| <b>Revising writing</b>   |          |
| <b>Core Standards – Students can and do:</b>  |          |
| 7. With guidance and support from peers and adults, strengthen writing through revision, editing, or beginning again to maintain a clear focus throughout.  |          |
| <b>Using tools and technology</b>   |          |
| <b>Core Standards – Students can and do:</b>  |          |
| 8. Use technology and other tools to produce, revise, and edit writing.   |          |
| <b>Developing proficiency in a range of writing</b>   |          |
| 7. Create a variety of extended and unassisted writing products to demonstrate proficiency in a range of writing.   |          |
| <b>Standards – Students can and do (by key text type):</b>  |          |
| <b>Narratives</b>   |          |
| 1. Craft the narrative by using the narrative structure, including characters, setting, and location, to be compelling.                                     | <b>I</b> |
| 2. Create an engaging plot that is significant and well-organized.  |          |
| 3. Use a variety of techniques, such as dialogue, action, climax, and resolution.   |          |
| 4. Use sensory and sensory details to describe narrative elements.  |          |
| 5. Use sensory and sensory details to describe narrative elements.  |          |

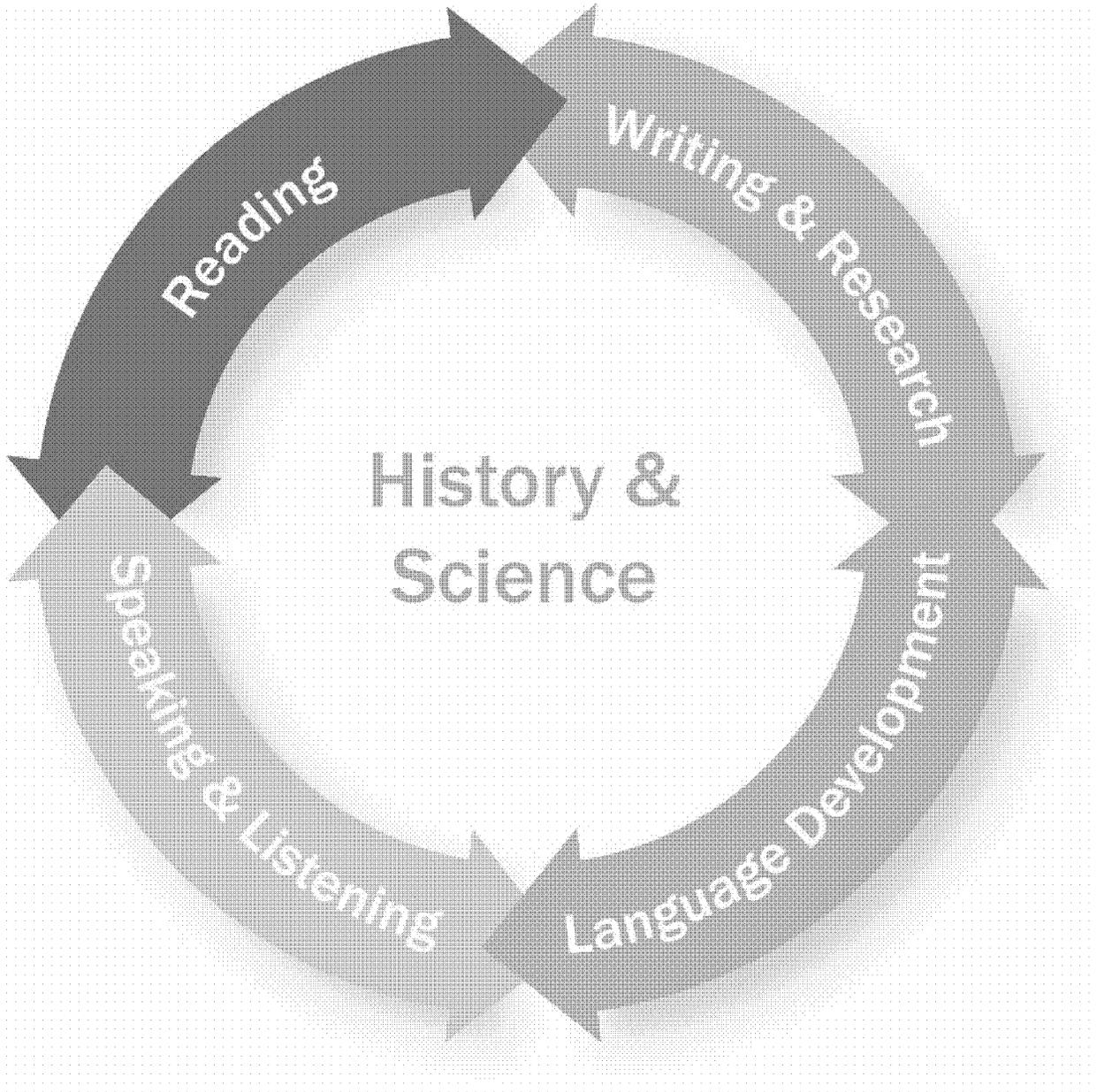
| Language Development Standards   |  |
|--|--|
| <b>Conventions</b>   |  |
| In grades 4–5, students heighten their ability to state and describe using language that is increasingly precise and clear. They form and use verbs of various tenses to locate people, actions, and events in time, and they correctly use adjectives and adverbs to modify. Students begin to gain control of frequently confused words (e.g., <i>offer, affect</i> ) and edit writing to remove language that is unnecessary. Their mastery of capitalization is complete. They use punctuation to separate items in a list to distinguish an introductory element from the main part of the sentence. Students mark dates in their writing as conventional. Their sentence structure for effect. |  |
| <b>J</b>   |  |
| Key Terms: adjective, adverb, infinitive, preposition, simple, progressive, and perfect tense.   |  |
| <b>Conventions of language and writing</b>   |  |
| <b>Core Standards – Students can and do:</b>   |  |
| 1. Maintain the focus of a paragraph on a topic through structural elements such as main ideas, supporting sentences, and transitions.   |  |
| <b>Grammar and usage</b>   |  |
| <b>Core Standards – Students can and do:</b>   |  |
| 2. Form and use the simple (e.g., <i>I walked, I walk, I will walk</i> ), progressive (e.g., <i>I am walking, I am walking, I will be walking</i> ) and the perfect (e.g., <i>I had walked, I have walked, I will have walked</i> ) verb tenses.   |  |



# Literacy in History and Science

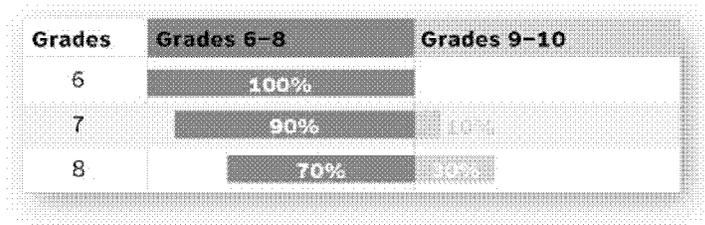
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Grades 6-8



## RequiredText Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade



While advancing through grades 6–8, students must engage with texts of steadily increasing complexity.

- **In grade 6**, students focus on reading texts in the 6–8 grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 7**, students focus on reading texts in the 6–8 grade band level (90 percent) independently and are introduced to texts in the 9–10 grade band level as “stretch” texts (10 percent), which will likely require scaffolding.
- **In grade 8**, students focus on reading texts in the 6–8 grade band level (70 percent) independently as well as sustained practice with texts in the 9–10 grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 6–8<sup>4</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts  | Quantitative Measures of Texts  |
|--|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Largely implicit and subtle; graphic representations are essential to meaning; texts are of increasing length</li> <li>• <i>Purpose</i>: Single or multiple; subtly stated</li> <li>• <i>Style and Language</i>: Moderately demanding; several literary devices; consistent use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness</i>: Several ideas/concepts; mostly abstract; moderate information density</li> <li>• <i>Relationships</i>: Several connections; largely implicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle fairly challenging themes, consider multiple perspectives, and understand unfamiliar experiences; cultural</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |

<sup>4</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004).

and historical knowledge useful for understanding characters, settings, and allusions; some discipline-specific content knowledge

Professional Judgment that weighs students' prior knowledge and life experiences as well as their interests and motivations, and maturity level.

### Illustrative

#### History/Social Science Text<sup>5</sup>

*Preamble and First Amendment to the United States Constitution* by United States (1787, 1791)

*A Short Walk through the Pyramids and through the World of Art* by Phillip Isaacson (1993)

*Freedom Walkers: The Story of the Montgomery Bus Boycott* by Russell Freedman (2006)

### Illustrative

#### Science/Technical Texts

"The Evolution of the Grocery Bag" by Henry Petroski (2003)

"Space Probe" from *Astronomy & Space: From the Big Bang to the Big Crunch* edited by Phillis Engelbert (2009)

"Elementary Particles" from *New Book of Popular Science* (2010)

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<sup>5</sup> See Appendix B for other texts illustrative of Grades 6-8 text complexity.

DRAFT

## Reading Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to support understanding in discussion and in writing.
2. Articulate the text’s main ideas and themes and provide a summary that captures the key supporting details, without taking a position or expressing an opinion.
3. Explain in detail how events, ideas, and characters unfold in the text and interact with one another.

#### Standards — Students can and do (by key text type):

##### History/Social Science Text

- a. summarize a primary source by drawing on the author’s specific description of events or information, basing the summary on information in the text rather than prior knowledge or opinions
- b. analyze precisely why significant events or actions occur, drawing on a full range of relevant text evidence to explicate the causes of events or decisions; distinguish whether earlier events caused later ones or simply preceded them
- c. identify key steps in descriptions of civics or economics processes (e.g., how a bill becomes law, how interest rates are raised or lowered)

##### Science/Technical Text

- a. outline the specific content contained in a scientific source, basing the summary on information in the text
- b. follow multi-step procedural directions exactly and sequentially to conduct scientific investigations
- c. diagram the problem or situation described in a text using pictures labeled with known information

### Observing craft and structure

#### Core Standards — Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and explain how specific word choices shape the meaning of the text.
5. Explain the text’s structure, including how specific sentences, paragraphs, and larger portions build on each other and contribute to the whole of the text.
6. Compare and contrast how two or more texts written on similar topics or themes differ in their focus and key details.

#### Standards — Students can and do (by key text type):

##### History/Social Science Text

- a. understand text using discipline-specific vocabulary used to signal relationships of time, cause and effect, and comparison or contrast
- b. demonstrate understanding of historical texts structured in a variety of ways, including a narrative of events, an explanation of events, or a comparison of events

- c. compare how two or more authors treat the same or similar historical topics, including differences in their point of view, where they choose to focus, and which details they include and emphasize

Science/Technical Text

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- a. understand the meaning of symbols and technical vocabulary defined explicitly or used repeatedly in the text
- b. navigate the text, using tables of contents and other text features to locate information efficiently and to aid comprehension
- c. determine the relationships between and among concepts or topics presented in scientific texts, including how the author categorizes information or ideas, draws comparisons or contrasts, or links causes to effects

**Integrating information and evaluating evidence**

**Core Standards — Students can and do:**

7. Interpret information presented graphically or visually in print, videos, or electronic texts and explain how this information clarifies and contributes to the text.
8. Analyze the structure and content of an argument, including its main claims or conclusions, supporting premises, and evidence.
9. Determine the point of view or purpose represented in the text, assessing how it shapes the content.

**Standards — Students can and do (by key text type):**

History/Social Science Text

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- a. integrate graphic information, including headings, pictures, videos, maps, legends, and timelines, with the text (print or digital) to understand concepts more fully
- b. analyze the relationship between primary and secondary historical documents
- c. distinguish between fact, opinion, and reasoned judgment presented in historical accounts

Science/Technical Text

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- a. integrate the information that is provided in the text with a version of that information expressed in flow charts, diagrams, models, and tables
- b. combine knowledge gained from reading a new chapter in a text with the information from previous chapters and describe how the new information builds on the previous content
- c. outline how specific scientific explanations and technical descriptions are supported by evidence from the text

**Developing habits for reading complex text**

**Core Standards — Students can and do:**

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write narratives, informative and explanatory texts, and arguments that match purpose to task and address familiar as well as somewhat distant audiences.

### Conducting research

#### Core Standards — Students can and do:

2. Perform short, focused research projects that demonstrate understanding of the material under investigation and generate additional related questions for research.
3. Gather information independently using a variety of relevant print and digital resources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered.
5. Represent and cite accurately the data, conclusions, and opinions of others, quoting and paraphrasing them into one's own work while avoiding plagiarism.
6. Provide full bibliographic information for print and digital sources in a standard format and document quotations, paraphrases, and other information.

### Revising writing

#### Core Standards — Students can and do:

7. With some guidance and support from peers and adults, strengthen writing through revising, editing, or beginning again to ensure logical organization, precision of word choice, and coherence.

### Using tools and technology

#### Core Standards — Students can and do:

8. Use technology and other tools to produce, revise, and distribute writing, as well as interact online with others about writing, including responding to and providing feedback.

### Standards— Students can and do (by key text type):<sup>6</sup>

#### Narratives

- a. orient the reader by establishing a situation or by introducing people, setting, and location
- b. create an organizing structure in which events are logically or causally sequenced
- c. use a variety of temporal words, phrases, and clauses to convey sequence, to shift from one time frame to another, and to show the relationships among events
- d. use relevant, specific details to develop setting, events, and characterization
- e. provide an engaging conclusion, such as a reflection

<sup>6</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

### Informative and Explanatory Texts

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- a. establish the topic in an introduction that provides a sense of what’s to follow
- b. develop the subject through relevant and specific facts, concrete details, quotations, or other information and examples
- c. organize specific information under broader concepts or categories and provide headings, figures, tables, or diagrams when useful
- d. use factual, precise language and maintain a formal, objective style when appropriate
- e. use strategies appropriate to informational and explanatory texts such as defining, classifying, comparing/contrasting, and cause/effect
- f. use appropriate links to join ideas and create cohesion
- g. provide only accurate and relevant information
- h. provide a conclusion that follows logically from the information or explanation presented

### Arguments

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- a. introduce a claim about a topic or concept
- b. support claims with logical reasons
- c. support reasons with detailed and relevant evidence
- d. signal the relationship between reasons, or between reasons and evidence, using words, phrases, and clauses (e.g., *another reason*, *such as*, *therefore*, *in addition*)
- e. sustain an objective style and tone appropriate for making a case when appropriate to the discipline or context
- f. include only relevant information and evidence in support of claims
- g. provide a concluding statement or section that offers reflections, a restatement, or recommendations that follow from the argument

## Speaking and Listening Standards

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### Listening closely and participating productively

#### Core Standards – Students can and do:

1. Participate productively *one on one*, in small groups, and as a whole class, joining in discussions and remaining flexible and adaptable as participants.
2. Sustain concentration on information presented orally, visually, or multi-modally and confirm understanding by drawing well-supported inferences about the purpose and meaning of the information.

#### Standards – Students can and do (by key communication type):

##### Classroom discussions and collaboration

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- a. come to discussions having completed reading or other preparation in advance and draw on that material explicitly in discussions
- b. determine a speaker’s attitude or point of view toward a topic presented orally or through other media
- c. ask questions to check understanding to clarify the main ideas and the supporting evidence of material presented orally or through other media
- d. advance a discussion by answering questions precisely and sharing specific factual knowledge and observations supported by credible evidence
- e. interpret information presented in visual and digital formats and explain how this data clarifies and contributes to a discussion or information presented orally

- f. support productive teamwork by setting clear goals and deadlines, monitoring progress and participation of each team member, and taking different views into account and modifying one’s own views when indicated in light of what others say

## Exchanging information and speaking effectively

### Core Standards – Students can and do:

3. Share experiences, opinions, and other information, gaining and maintaining the interest and response of listeners.
4. Use appropriate tone and phrasing for emphasis, demonstrating a growing command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

### Standards – Students can and do (by key communication type):

#### Presentation of ideas and information

- a. organize and present information about situations, topics, or texts that emphasize salient points and clarify and support claims and findings with pertinent and specific descriptions, facts, and examples in ways that are accessible and verifiable to listeners
- b. use gesture, tone, phrasing, and pace for emphasis
- c. incorporate visual displays and electronic media when helpful and in a manner that strengthens the presentation

## Language Development Standards

### Conventions

In grades 6–8, students develop a firm command of sentence structure. They are able to form sentences of varying structures, place phrases and clauses properly within a sentence, and use a variety of coordinating and subordinating conjunctions to express relationships between sentence parts. Students have also mastered pronoun use, ensuring proper case, number, and person and avoiding vagueness. They understand and use verb voice and mood, and identify and correct inappropriate shifts in pronouns and verbs. Students set off nonrestrictive or parenthetical elements from the rest of the sentence with proper punctuation and use a comma before a coordinating conjunction in a compound sentence. They vary sentence patterns for effect and edit writing for redundancy and wordiness.

### Vocabulary

In grades 6–8, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering the word’s use in a broader context that includes the content of the paragraph in which the word appears and the overarching structure of the text. They habitually verify their inferences of word meanings. They continue to expand their vocabulary through acquisition of Tier 3 words and phrases.

## Determining the meaning of words

### Core Standards – Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:

- using knowledge of roots, prefixes, and suffixes
  - using semantic clues, such as sentence and paragraph context as well as the organizational structure of the text (e.g., cause and effect, comparison and contrast)
  - using syntactic clues, such as using its position within the sentence as a guide to whether it is a subject, verb, or object
  - consulting reference materials, including glossaries, dictionaries, and thesauruses, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
  3. Verify the preliminary determination of a word’s meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).

### Acquiring vocabulary

#### Core Standards — Students can and do:

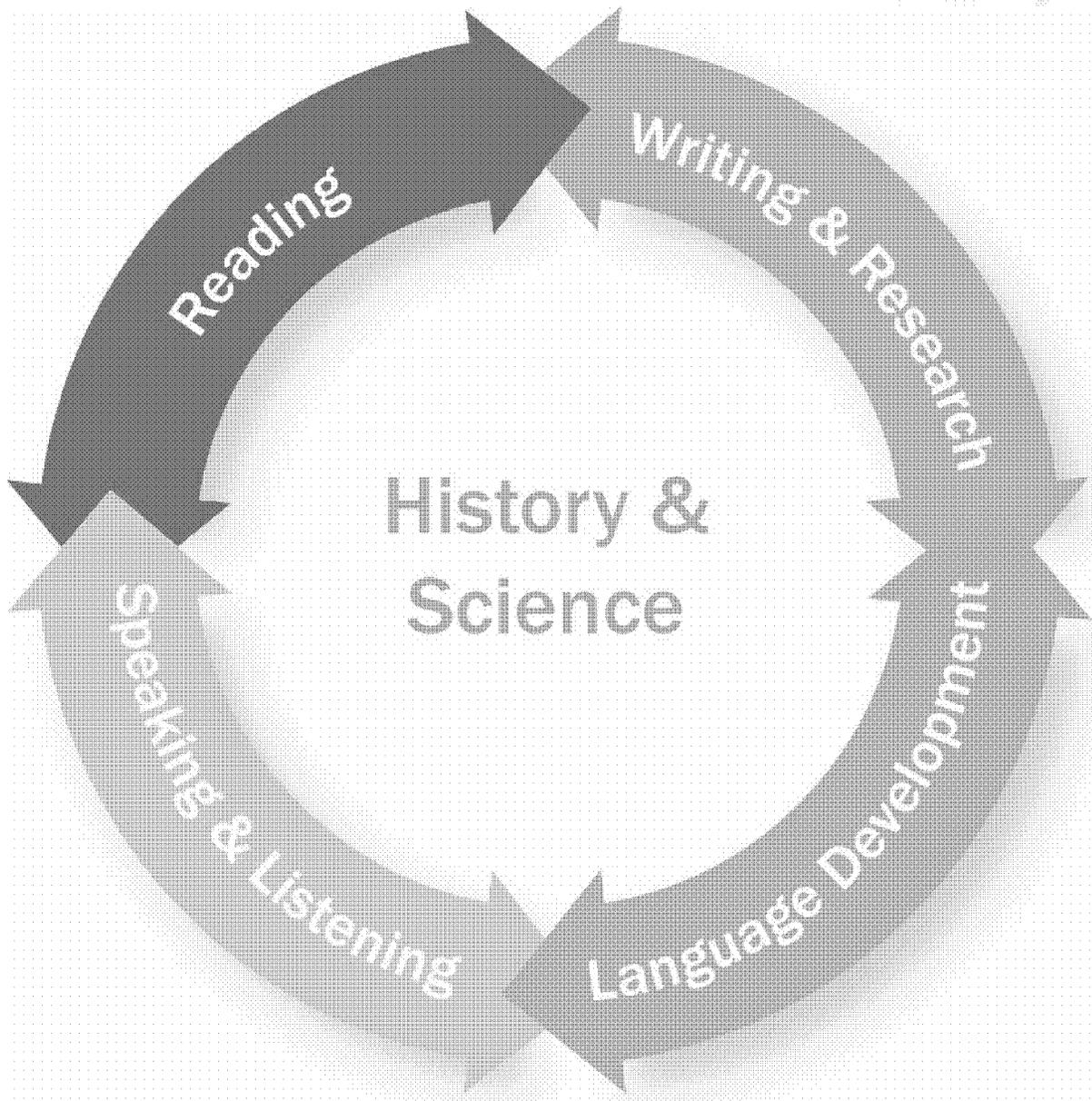
4. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.



# Literacy in History and Science

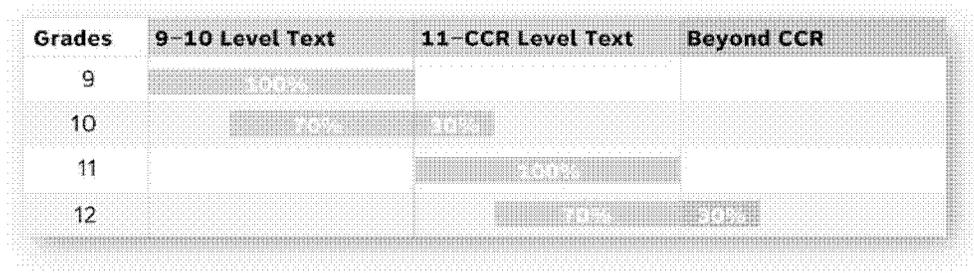
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Grades 9–10



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each Grade



While advancing through grades 9-10, students must engage with texts of steadily increasing complexity:

- **In grade 9**, students focus on reading texts in the 9–10 grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 10**, students focus on reading texts in the 9–10 grade band level (70 percent) independently and are introduced to texts in the 11–CCR grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 9-10<sup>7</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts   | Quantitative Measures of Texts  |
|---|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Implicit, subtle; graphic representations are essential to meaning; texts of increasing length</li> <li>• <i>Purpose</i>: Multiple; often implicit</li> <li>• <i>Style and Language</i>: Demanding; many literary devices; extensive use of Tier 2 and 3 words and figurative language</li> <li>• <i>Richness</i>: Several ideas/concepts; abstract</li> <li>• <i>Relationships</i>: Several connections; implicit</li> <li>• <i>Knowledge Demands</i>: Ability to handle challenging themes, consider multiple perspectives, and understand experiences distinctly different from one’s own; cultural and historical knowledge useful for understanding characters, settings, and allusions; extensive discipline-</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |

<sup>7</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004).

|                            |  |
|----------------------------|--|
| specific content knowledge |  |
|----------------------------|--|

Professional Judgment that weighs students' prior knowledge and life experiences as well as their interests and motivations, and maturity level.

### Illustrative

#### History/Social Science Text<sup>8</sup>

*Bury My Heart at Wounded Knee: An Indian History of the American West* by Dee Brown (1970)

*Cod: A Biography of the Fish That Changed the World* by Mark Kurlansky (1997)

*The Longitude Prize* by Joan Dash (2000)

#### Illustrative Science/Technical Texts

“Biography of an Atom” by Jacob Bronowski and Millicent Selsam (1965)

“Amusement Park Physics” by Jearl Walker (1979)

*The Story of Science: Newton at the Center* by Joy Hakim (2005)

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<sup>8</sup> See Appendix B for other texts illustrative of Grades 9–10 text complexity.

## Reading Standards

### Grasping specific details and key ideas

#### Core Standards — Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to support analyses in discussion and in writing.
2. Articulate the theses and themes and summarize how they develop over the course of the text and how they are expressed by the key details.
3. Analyze in detail how complex and multifaceted events, ideas, and characters unfold and interact over the course of the text.

#### Standards — Students can and do (by key text type):

##### History/Social Science Text

- a. demonstrate command of the precise details of a primary source document, drawing on specific points to support an understanding of the text
- b. weave together the details of texts to form a comprehensive understanding of individual actors in a historical account, including their overlapping or competing motivations
- c. distinguish short term or immediate causes from longer term causes in a history or social science account

##### Science/Technical Text

- a. demonstrate command of the precise details of a scientific or technical explanation or description, drawing on specific points to support an understanding of a part or the text as a whole
- b. infer and diagram the relationships among the various key terms and processes described in a text (such as the relations among *food chain*, *producers*, *consumers*, *decomposers*, *herbivores*, *carnivores*, or *force*, *friction*, *balanced forces*, *reaction force*, *energy*)
- c. analyze the development of a hypothesis or explanation in a text and summarize the relationships among the ideas and supporting details

### Observing craft and structure

#### Core Standards — Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and explain how specific word choices shape the meaning and tone of the text.
5. Analyze the structure of complex text and its parts, including how specific sentences, paragraphs, and larger portions build on each other and contribute to the whole of the text.
6. Compare and contrast the content and style of two or more texts written on similar topics or themes.

## Standards — Students can and do (by key text type):

### History/Social Science Text

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- a. demonstrate understanding of text using vocabulary that provides political, social, and economic accounts of events
- b. explain how the author of a text chooses to structure information or an explanation to emphasize key points and advance a point of view
- c. compare and contrast how and why different authors organize and categorize similar information and describe the impact of those different approaches

### Science/Technical Text

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- a. demonstrate knowledge of key terms and definitions used in a scientific or technical text and how they are used throughout the text
- b. demonstrate understanding of how each key part and section of the text contributes specifically to a fuller understanding of the concept or topic at hand
- c. compare information gained from a video or multimedia presentation of a scientific or technical topic to reading a text on the same topic

## Integrating information and evaluating evidence

### Core Standards — Students can and do:

7. Synthesize information presented graphically or visually in print, videos, or electronic texts with the information provided by the text.
8. Follow and evaluate the logic and reasoning of the text, including assessing whether the evidence provided is sufficient to support the claims.
9. Analyze the point of view or purpose represented in the text, assessing how it shapes the content, style, and tone.

## Standards — Students can and do (by key text type):

### History/Social Science Text

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- a. interpret complex, multifaceted quantitative or technical information presented in maps, legends, symbols, and videos
- b. evaluate explanations of events by carefully examining the extent to which evidence within the text supports or contradicts the claims
- c. compare how authors provide different points of views or perspectives on similar historical events or issues by assessing their claims, evidence, and reasoning

### Science/Technical Text

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- a. interpret complex, multifaceted quantitative or technical information presented in flow charts, diagrams, models, and tables
- b. interpret spatially or structurally scientific or technical information that is presented in a text by imagining and sketching its relationship of the described phenomena
- c. evaluate whether the evidence provided is sufficient to support a scientific claim or to recommend a technical approach for solving a problem

## Developing habits for reading complex text

### Core Standards — Students can and do:

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

## Writing and Research Standards

### Writing to reflect audience, purpose, and task

#### Core Standards — Students can and do:

1. Write informative and explanatory texts and arguments that match purpose to task and address familiar as well as more distant, unknown and general audiences.

### Conducting research

#### Core Standards — Students can and do:

2. Demonstrate proficiency at performing short, focused research projects as well as more sustained inquiries that demonstrate an increasing command of the subject under investigation.
3. Assemble evidence independently from authoritative and credible print and digital sources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered and determine the strengths and limitations of each source and avoiding over-reliance on any one source.
5. Represent and cite accurately the data, conclusions, and opinions of others, effectively incorporating them into one's own work while avoiding plagiarism.
6. Cite print or electronic sources correctly and document quotations, paraphrases, graphics, and other information using a standard format.

### Revising writing

#### Core Standards — Students can and do:

7. Strengthen writing through revision, editing, or beginning again to ensure to logical organization, precision of word choice, and coherence.

### Using tools and technology

#### Core Standards — Students can and do:

8. Use technology and other tools to produce, revise, and distribute writing, as well as to interact online with others about writing, including responding to and providing feedback.<sup>9</sup>

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<sup>9</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards

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## Standards— Students can and do (by key text type):<sup>10</sup>

### Narratives

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By high school, students are most often using narrative writing as a technique embedded within other genres. They use narrative writing to inform and persuade. They may, for example, provide a brief anecdote to support a point made in an argument or a scenario to illustrate an explanation. In such cases, narrative writing is a technique rather than a form in itself.

### Informative and Explanatory Texts

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- a. provide a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance
- b. develop a complex subject through relevant and specific facts, concrete details, quotations, or other information and examples
- c. organize complex information into categories that make clear distinctions and provide headings, figures, tables, and diagrams when useful
- d. employ discipline-specific and technical vocabulary and maintain a formal, objective style
- e. adapt strategies to present information and explanations (e.g., if/then, extended definitions, classification, comparison/contrast, and cause/effect) and employ them to manage the complexity of a topic
- f. link ideas with transitions and by varying sentence structures to express relationships between ideas and create cohesion
- g. emphasize the most significant information and confirm the accuracy of key points
- h. provide a conclusion that articulates the implications and significance of the information or explanation

### Arguments

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- a. establish a substantive claim and distinguish it from alternate or opposing claims
- b. support claims with logical reasons
- c. provide relevant and sufficient evidence from credible sources in support of the reasons
- d. explain how the evidence links to the claim
- e. develop the argument in part based on knowledge of the audience (e.g., building bridges by opening with areas of agreement)
- f. convey relationships between reasons, as well as between reasons and evidence, and signal alternative claims using words, phrases, and clauses (e.g., *on the other hand*, *however*, *but*, *nevertheless*, *because*, *therefore*, *in addition*).
- g. maintain a formal style when appropriate to the discipline or context
- h. enhance the reliability of the argument by employing strategies such as paraphrasing or quoting explicitly from a credible, authoritative source
- i. provide a concluding statement or section that enhances the argument, using strategies such as articulating the implications, summing up the key factors, or weighing the evidence to support the claim

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<sup>10</sup> See Appendix D for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

## Speaking and Listening Standards

### Listening closely and participating productively

#### Core Standards — Students can and do:

1. Participate productively in a range of structured interactions—both interpersonally and in groups—exchanging information constructively and with confidence.
2. Sustain concentration on complex information presented orally, visually, or multi-modally and confirm understanding by summarizing, analyzing, and elaborating on key ideas.

#### Standards — Students can and do (by key communication type):

##### Classroom discussions and collaboration

- a. come to discussions having researched, studied, and taken notes on topics or issues under study and draw upon that preparation in discussions
- b. determine the key ideas as well as the tone and mood of communications presented orally or through other media
- c. ask questions to test the evidence that supports a speaker's claims and conclusions presented orally or through other media
- d. build on essential information from others' input and respond constructively by making cogent and verifiable comments that aid in the furthering and deepening of discussions
- e. integrate multiple streams of data presented through a variety of multi-modal media into a cohesive, meaningful understanding of the information
- f. support productive teamwork by identifying the comments and claims made on all sides of an issue; evaluating the degree to which each claim is supported by evidence; sifting, summarizing, and putting to use the most important ideas developed by the group; and determining what additional information, research, and tasks are required in order to move the group towards its goals

### Exchanging information and speaking effectively

#### Core Standards — Students can and do:

3. Present information and points of view, structuring and organizing comments to support their purposes and guide the listener.
4. Vary intonation and phrasing for emphasis and effect, demonstrating command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

#### Standards — Students can and do (by key communication type):

##### Presentation of ideas and information

- a. organize and present complex information about situations, topics, or texts so that listeners can follow the line of thought by grouping related ideas, using transitional markers, and clarifying one's claims with evidence that is verifiable and accessible
- b. align verbal (tone, phrasing, pacing) and nonverbal strategies (gestures and facial expressions) for emphasis and effect
- c. make strategic use of multimedia elements and visual displays of data to enhance understanding

## Language Development Standards

### Conventions

In high school, students gain a broad range of sophisticated language skills to enhance meaning, achieve stylistic effect, and create subtle links between and among ideas. They maintain parallel structure. They acquire a more conceptual understanding of usage and the limits of “rules.” They use a full range of punctuation, including ellipses, semicolons, colons, and hyphens, and have a fuller understanding of how to employ commas and dashes. They make use of a wide range of phrases and clauses for effect. They maintain a consistent style and tone, using a style manual appropriate to the discipline in which they are working to help conventionalize their writing.

### Vocabulary

In high school, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering multiple levels of context (sentence, paragraph, and text levels) and the word’s history. They habitually verify their inferences of word meanings. They continue to expand their vocabulary through acquisition of Tier 3 words and phrases.

#### Determining the meaning of words

##### Core Standards — Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using knowledge of roots, prefixes, and suffixes
  - using context, including syntactic and semantic clues, at the sentence, paragraph, and text levels
  - consulting reference materials, including general and specialized dictionaries and thesauruses, both print and digital
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word’s meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).

#### Acquiring vocabulary

##### Core Standards — Students can and do:

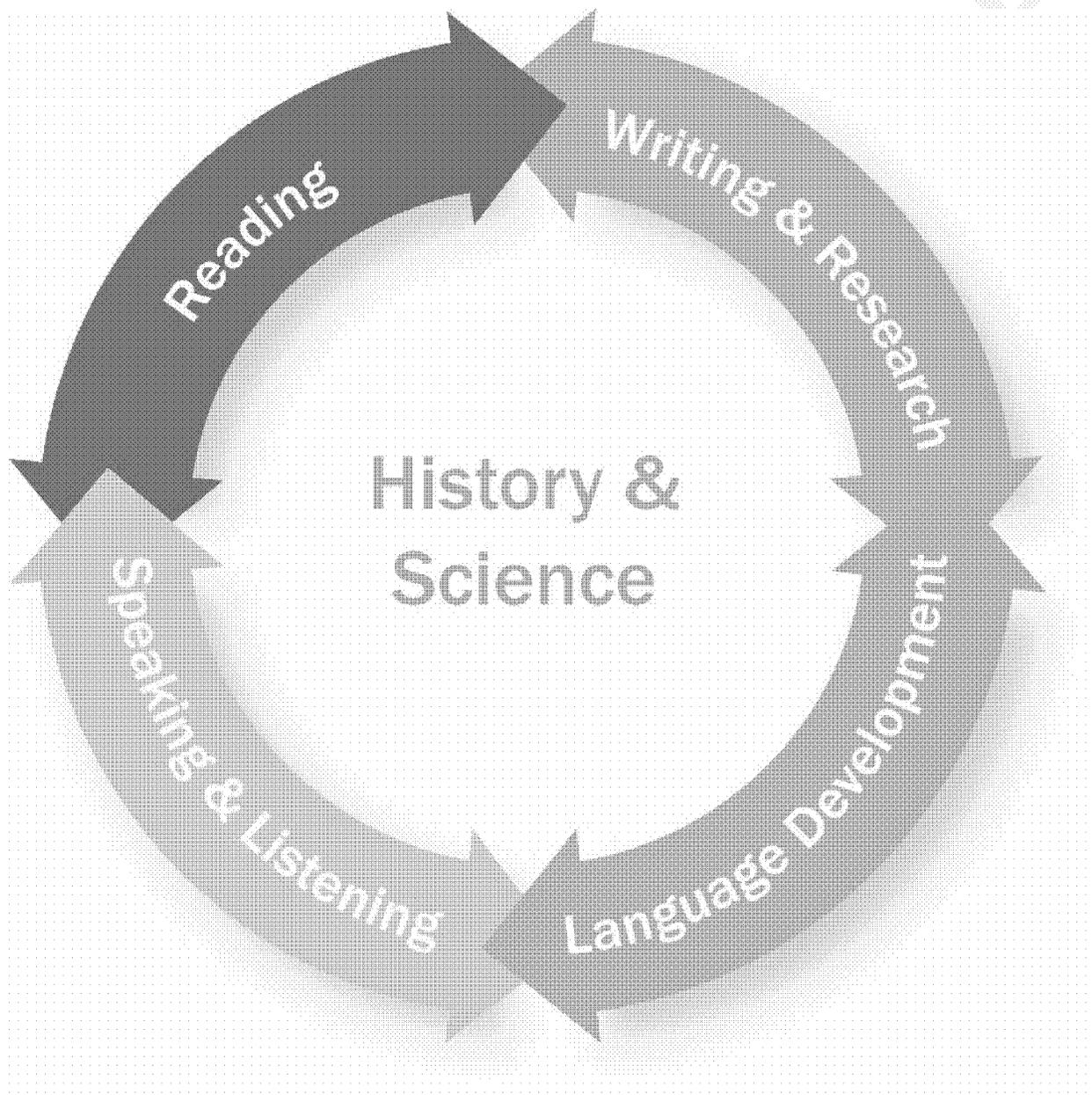
4. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.



# Literacy in History and Science

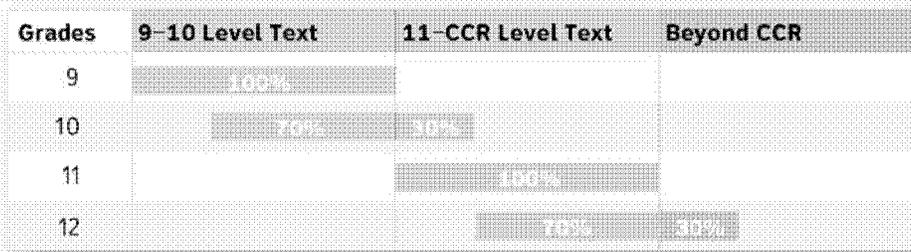
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Grades 11–CCR



## Required Text Complexity by Grade

Proportion of Texts Within and Above Grade Band to be Read in Each



Grade

While advancing through grades 11-12, students must engage with texts of steadily increasing complexity.

- **In grade 11**, students focus on reading texts in the 11-CCR grade band level with scaffolding likely required for texts at the high end of the range.
- **In grade 12**, students focus on reading texts in the 11-CCR grade band level (70 percent) independently and are introduced to texts in the “Beyond CCR” grade band level as “stretch” texts (30 percent), which will likely require scaffolding.

### Determining Text Complexity for Grades 11-CCR<sup>11</sup>

Text complexity is determined by a mix of qualitative and quantitative measures of the text itself refined by teachers’ professional judgment about the match of particular texts to particular students. The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

| Qualitative Measures of Texts   | Quantitative Measures of Texts  |
|---|---|
| <ul style="list-style-type: none"> <li>• <i>Structure</i>: Implicit, complex, unconventional; sophisticated graphic representations are essential to meaning; texts are sufficiently long to address complex subjects</li> <li>• <i>Purpose</i>: Multiple; often implicit and may be hidden or obscure</li> <li>• <i>Style and Language</i>: Unfamiliar, demanding, complex; many literary devices; extensive use of Tier 2 and 3 words and figurative language; language may be intentionally or unintentionally ambiguous</li> <li>• <i>Richness</i>: Many ideas/concepts; highly abstract; high information density</li> <li>• <i>Relationships</i>: Many implicit, complex, interwoven connections</li> <li>• <i>Knowledge Demands</i>: Ability to handle one or more complex themes, consider multiple and unusual perspectives, and understand experiences distinctly different from one’s own; cultural and historical knowledge useful for understanding characters, settings, and allusions; extensive, perhaps specialized discipline-specific content knowledge</li> </ul> | <p>A study is underway with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity.</p> |

<sup>11</sup> Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissex, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004).

Professional Judgment that weighs students' prior knowledge and life experiences as well as their interests and motivations, and maturity level.

### Illustrative

#### History/Social Science Text<sup>12</sup>

*Democracy in America* by Alexis de Tocqueville (1835)  
translated by Henry Reeve

*Declaration of Sentiments* by the Seneca Falls Conference  
(1848)

*1776* by David McCullough (2005)

#### Illustrative Science/Technical Texts

"The Mysteries of Mass" by Gordon Kane (2005)

"The Coming Merger of Mind and Machine" by Ray  
Kurzweil (2008)

"Untangling the Roots of Cancer" by W. Wayt Gibbs  
(2008)

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<sup>12</sup> See Appendix B for other texts illustrative of Grades 11-CCR text complexity.

# Reading Standards

## Grasping specific details and key ideas

### Core Standards – Students can and do:

1. Read the text closely to determine what the text says explicitly and to make logical inferences from it; cite text evidence to defend and challenge analyses in discussion and in writing.
2. Articulate the text's theses and themes and provide a summary that clarifies the relationships among ideas and the connections between key details.
3. Analyze in detail how complex and multifaceted events, ideas, and characters unfold and influence one another over the course of the text.

### Standards – Students can and do (by key text type):

#### History/Social Science Text

- a. scrutinize the details within specific portions of primary texts and connect the insights gained to develop an understanding of the text as a whole
- b. demonstrate an understanding of the precise elements of an author's explanation of historical events, including the specific distinctions the author makes between types of causes (e.g., economic, political, social)
- c. analyze how the ideas and beliefs of historical actors influence events; describe the interactions between complex ideas and multifaceted events

#### Science/Technical Text

- a. demonstrate an understanding of the precise elements of an author's account of phenomena and processes, including the specific distinctions the author makes when describing information or ideas
- b. follow complex directions exactly to carry out experiments, measurements, or technical tasks, checking the text for fidelity at key points in the process
- c. articulate the problem or situation presented in a complex technical or scientific text and, where possible, translate it into simpler terms or relationships (e.g., an equation)

## Observing craft and structure

### Core Standards – Students can and do:

4. Interpret the meanings of words and phrases, including connotative and figurative meanings, and analyze how word choices have a significant effect on the meaning and tone of the text.
5. Analyze the ways the author chooses to structure the text, including how to present complex ideas and events and where to begin and end.
6. Compare and contrast the choices different authors make in treating similar topics or themes, including content, style, and tone.

## Standards – Students can and do (by key text type):

### History/Social Science Text

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- a. describe how the choice of a particular word, phrase, or series of words can impact significantly the meaning of a document (e.g., contract, court opinion)
- b. explain the significance of literal and metaphorical meanings of terminology (e.g., *Black Monday*, *Dark Ages*)
- c. compare and contrast presentations of the same topic in different media, and describe the differences in focus, organization, and complexity

### Science/Technical Text

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- a. understand the precise meaning of key terminology as used in its particular scientific or technical context
- b. compare and contrast presentations of the same scientific or technical topic in different media and formats, including popular media and digital formats, and describe the differences in focus, depth of evidence, and links to other sources
- c. compare and contrast various hypotheses, arguments, and points of view about the same scientific issue presented by different authors

## Integrating information and evaluating evidence

### Core Standards – Students can and do:

7. Synthesize information presented graphically or visually in print, videos, or electronic texts and, when appropriate, note discrepancies of fact or interpretation (e.g., data in a table inconsistent with the author's analysis).
8. Rigorously evaluate the logic and reasoning of the text, including assessing whether the evidence provided is relevant and sufficient.
9. Analyze how the point of view or purpose develops in the text and explain how it is revealed in the key details.

## Standards – Students can and do (by key text type):

### History/Social Science Text

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- a. synthesize ideas and data presented graphically and determine their purpose and relationship to the rest of the text (print or digital), noting any inconsistencies or discrepancies between the two
- b. identify aspects in an account that might reveal an author's perspective (such as biased vocabulary and elimination or inclusion of particular facts)
- c. evaluate an author's perspective and credibility by corroborating information across different sources

### Science/Technical Text

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- a. translate a text into an analogous table or chart and translate a graphic or equation into verbal form
- b. recognize the cumulative nature of scientific evidence and describe the significance of experimental findings presented in texts and explain how and why they support or contradict known explanations or accounts
- c. evaluate the reasoning that supports a scientific argument or explanation, including assessing the sufficiency and relevance of the evidence as well as identifying any misleading or unsubstantiated statements

## Developing habits for reading complex text

**Core Standards – Students can and do:**

10. Develop the habit of reading independently and productively, sustaining concentration and stamina to read increasingly demanding texts.

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## Writing and Research Standards

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### Writing to reflect audience, purpose, and task

**Core Standards – Students can and do:**

1. Write informative and explanatory texts and arguments that match purpose to task and are tailored to audiences with specific requirements.

### Conducting research

**Core Standards – Students can and do:**

2. Demonstrate proficiency at performing short, focused research projects as well as more sustained inquiries that synthesize multiple authoritative sources on a subject.
3. Analyze evidence independently gathered from multiple authoritative and credible print and digital sources.
4. Assess the credibility, reliability, consistency, and accuracy of the information and sources gathered and determine their usefulness and relevance for the specific audience, purpose, and task.
5. Represent and cite accurately the data, conclusions, and opinions of others, effectively incorporating them into one's own work while avoiding plagiarism.
6. Cite print or electronic sources correctly and document quotations, paraphrases, graphics, and other information using a standard format.

### Revising writing

**Core Standards – Students can and do:**

7. Strengthen writing through revision, editing, or beginning again to ensure to ensure logical organization, precision of word choice, and coherence.

### Using tools and technology

**Core Standards – Students can and do:**

8. Demonstrate command of technology and other tools to produce, revise, and distribute writing, as well as to interact online with others about writing, including responding to and providing feedback.

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### Standards— Students can and do (by key text type):<sup>13</sup>

#### Narratives

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<sup>13</sup> See Appendix C for samples of student writing that illustrate through annotations the level of quality required to meet the writing standards.

By high school, students are most often using narrative writing as a technique embedded within other genres. They use narrative writing to inform and persuade. They may, for example, provide a brief anecdote to support a point made in an argument or a scenario to illustrate an explanation. In such cases, narrative writing is a technique rather than a form in itself.

#### Informative and Explanatory Texts

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- a. provide a clear and coherent introduction that establishes the subject and conveys a knowledgeable stance
- b. develop complex subjects through judicious use of relevant and specific facts, details, quotations, examples, or other information
- c. organize and present information so that each new piece of information builds upon what precedes it to create a unified whole
- d. demonstrate command of discipline-specific and technical vocabulary when appropriate and adjust style as appropriate to the situation
- e. demonstrate control of a range of strategies to present complex information or explanations and employ them effectively to manage the complexity of the topic and accomplish the writer's purpose
- f. link ideas with transitions and by varying sentence structures to express the precise relationships among ideas and create cohesion
- g. provide a conclusion that articulates the implications and significance of the information or explanation

#### Arguments

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- a. establish the importance of the issue, make a substantive claim, and distinguish it from alternate or opposing claims
- b. support claims with logical reasons
- c. provide relevant, sufficient, and convincing evidence from credible sources in support of the reasons
- d. make logical connections between the evidence and the claim
- e. develop the argument in part based on an awareness of the audience's values, knowledge of the issue, and possible biases
- f. convey relationships between reasons, as well as between reasons and evidence, and signal alternative claims using words, phrases and clauses (e.g., *on the other hand*, *however*, *but*, *nevertheless*, *because*, *therefore*, *in addition*)
- g. maintain a formal style when appropriate to the discipline or context
- h. enhance the credibility of the argument by demonstrating control of strategies, including paraphrasing or quoting from authoritative sources and citing logical consequences
- i. provide a concluding statement or section that enhances the argument, using strategies such as articulating the implications, summing up the key factors, or weighing the evidence to support the claim

## Speaking and Listening Standards

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### Listening closely and participating productively

Core Standards — Students can and do:

1. Participate productively in a range of structured interactions—both interpersonally and in groups—exchanging information constructively and with confidence, adapting to different levels of formality.
2. Sustain concentration on complex information presented orally, visually, or multi-modally and confirm understanding by challenging or defending key ideas and supporting evidence.

### **Standards – Students can and do (by key communication type):**

#### Classroom discussions and collaboration

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- a. come to discussions having formulated considered judgments on the topics or issues under study and draw upon that preparation in discussions
- b. evaluate the content and rhetoric of a speaker, noting when evidence is exaggerated or distorted
- c. ask questions that probe the reasoning and evidence that support the claims and conclusions made orally or through other media, including offering counter examples or other points of view
- d. propel conversations forward by providing essential information and sharing findings that clarify, accommodate, or challenge ideas
- e. synthesize information presented visually or digitally with other information presented orally, noting the effect on meaning of any discrepancies between the two presentations
- f. assist in the formulation and productive functioning of both formal and informal self-directed work groups by identifying and assigning tasks and maintaining conversational norms as well as evaluating the progress of the team towards its goals

#### Exchanging information and speaking effectively

### **Core Standards – Students can and do:**

3. Present information clearly and persuasively to others, selecting the most appropriate way to structure comments for clarity and effect.
4. Adapt delivery, tone, and mood for emphasis and effect, demonstrating command of formal English when indicated or appropriate (e.g., presenting ideas versus class discussion).

### **Standards – Students can and do (by key communication type):**

#### Presentation of ideas and information

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- a. organize and present complex information about topics, situations, or texts, providing reliable and credible evidence from authoritative sources in support of findings and claims such that the line of reasoning is clear and alternative perspectives are addressed
- b. shape delivery and message to the occasion and the audience's values, knowledge of the issue, and possible biases
- c. engage an audience and improve comprehension through visual aids in presentations, including multimedia platforms

## **Language Development Standards**

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### **Conventions**

In high school, students gain a broad range of sophisticated language skills to enhance meaning, achieve stylistic effect, and create subtle links between and among ideas. They maintain parallel structure. They acquire a more conceptual understanding of usage and the limits of “rules.” They use a full range of punctuation, including ellipses, semicolons,

colons, and hyphens, and have a fuller understanding of how to employ commas and dashes. They make use of a wide range of phrases and clauses for effect. They maintain a consistent style and tone, using a style manual appropriate to the discipline in which they are working to help conventionalize their writing.

## Vocabulary

In high school, students continue to make use of a range of strategies to determine and clarify the meaning of unknown and multiple-meaning words. This repertoire now includes considering multiple levels of context (sentence, paragraph, and text levels) and the word's history. They habitually verify their inferences of word meanings. They continue to expand their vocabulary through acquisition of Tier 3 words and phrases.

### Determining the meaning of words

#### Core Standards – Students can and do:

1. Determine or clarify the meaning of an unknown word by using one or more of the following strategies:
  - using knowledge of roots, prefixes, and suffixes
  - using context, including syntactic and semantic clues, at the sentence, paragraph, and text levels
  - consulting reference materials, including general and specialized dictionaries and thesauruses, both print and digital
  - using the word's history (etymology)
2. Determine the relevant meaning of multiple-meaning words by using context.
3. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or by looking up the word in a dictionary).

### Acquiring vocabulary

#### Core Standards – Students can and do:

4. Acquire and use a grade-appropriate vocabulary of Tier 3 words taught directly and gained through reading.

## APPENDIX A

### Text Complexity Next Steps

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A key requirement of the Core Standards in Reading is that all students engage with texts of steadily increasing complexity as they advance through school. The Core Standards' model of *text complexity*—in the simplest terms, how easy or difficult a text is to read—blends qualitative and quantitative measures of inherent text difficulty with educators' knowledge of their students. All three elements should be considered together when evaluating a text's appropriateness for particular students.

*Qualitative dimensions* are aspects of text best measured by readers applying trained judgment to the evaluation task. These dimensions include the text's structure, format, and length; its purpose; its style and language; the quality, nature, and density of its ideas, concepts, and information; relationships among ideas, information, and characters in it; and the knowledge and experience demands it places upon readers.

*Quantitative dimensions* include not only those aspects of text traditionally measured by readability formulas—word length and sentence length—but also computer-assessable aspects of text cohesion. These include referential cohesion (the degree to which a text refers back to previous points) and word frequency.

The qualitative and quantitative measures of a text are balanced in the model by educators' *professional judgment* of the appropriateness of the text for particular students given their background knowledge, interests, and motivation. Harder texts may be appropriate for highly knowledgeable or motivated students, and easier texts may be suitable as a means for building struggling readers' skills up to required levels.

While the tools included in this draft and the forthcoming ones described below represent an important advance over those previously available, no measure or set of measures is perfectly accurate. The mandate is that the body of works that students study in a given year represent an appropriate level of complexity as defined by these standards.

#### Current and next steps

A qualitative rubric, derived from prior studies and refined through feedback from trained teacher-raters, is included in this draft to define some ways in which text complexity should increase as students move through the grades. The rubric can be used (in conjunction with forthcoming quantitative measures) to place individual texts into grade bands by complexity. The qualitative dimensions are best understood, however, as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; assigning a text to a grade band is therefore a matter of "best fit," or determining which grade band's set of descriptors most accurately describes the text.

The Core Standards work team is presently conducting a study with Coh-Metrix, a nonprofit research organization, to identify roughly five to seven computer-measurable dimensions of text cohesion. These dimensions, paired with a Lexile score, will yield a robust quantitative assessment of text complexity that, along with both the qualitative dimensions and professional judgment, will round out the Core Standards model of complexity. Graphically, these three elements will appear together in a "label" defining complexity for a given text.

Following the completion of that study in early 2010, the work team will oversee the development of a Web site designed to make the text complexity tools more user-friendly and broadly available. The site will contain a database of complexity information for a range of widely used texts, including links to texts and test passages of similar complexity. Educators will be able to input additional texts for evaluation and comment on the suitability of particular texts for particular groups of students. The overarching goal is to make text complexity a vital and easy-to-incorporate element of reading instruction.

## Text Complexity Qualitative Scheme

| Dimension of Text  |  | Grade Span  |   |  |  |  |
|--------------------|--|---|---|--|--|--|
|                    |  | 2-3   | 4-5   | 6-8  | 9-10   | 11-12  |
| Structure          |  | Explicit, simple, conventional; simple graphic representations are supplementary to meaning; texts are relatively short | Largely explicit and direct; graphic representations are supplementary to meaning; texts are of increasing length                       | Largely implicit and subtle; graphic representations are essential to meaning; texts are of increasing length      | Implicit, subtle; graphic representations are essential to meaning; texts are of increasing length                                   | Implicit, complex, unconventional; sophisticated graphic representations are essential to meaning; texts are sufficiently long to address complex subjects |
| Purpose            |  | Single; explicitly stated   | Single or twofold; clearly indicated  | Single or multiple; subtly stated  | Multiple; often implicit   | Multiple; often implicit and may be hidden or obscure  |
| Style and Language | Style  | Familiar, accessible, plain; few literary devices   | Moderately accessible; some literary devices  | Moderately demanding; several literary devices   | Demanding; many literary devices   | Unfamiliar, demanding, complex; many literary devices  |
|                    | Language   | Mostly clear, everyday language; limited use of Tier 2 and 3 words and figurative language                              | Some everyday language; some use of Tier 2 and 3 words and figurative language  | Consistent use of Tier 2 and 3 words and figurative language   | Extensive use of Tier 2 and 3 words and figurative language  | Extensive use of Tier 2 and 3 words and figurative language; language may be intentionally or unintentionally ambiguous                                    |
| Richness           |  | A few ideas/concepts; concrete; low information density   | Some ideas/concepts; mostly concrete; moderate information density  | Several ideas/concepts; mostly abstract; moderate information density  | Several ideas/concepts; abstract; high information density   | Many ideas/concepts; highly abstract; high information density   |
| Relationships      |  | A few connections; explicit; simple   | Some connections; largely explicit  | Several connections; largely implicit  | Several connections; implicit  | Many connections; implicit; complex and interwoven   |
| Knowledge Demands  | Life experiences (literary texts)                          | Ability to handle simple themes and fantastical elements as well as draw upon common, everyday experiences              | Ability to handle fairly simple themes, consider a perspective somewhat different from one's own, and understand unfamiliar experiences | Ability to handle fairly challenging themes, consider multiple perspectives, and understand unfamiliar experiences | Ability to handle challenging themes, consider multiple perspectives, and understand experiences distinctly different from one's own | Ability to handle one or more complex themes, consider multiple and unusual perspectives, and understand experiences distinctly different from one's own   |
|                    | Cultural/literary knowledge (chiefly literary texts)       | General background knowledge and familiarity with genre conventions required  |   | Cultural and historical knowledge useful for understanding characters, settings, and allusions                     |  |  |
|                    | Content/discipline knowledge (chiefly informational texts) | Some everyday and general content knowledge   | Some general and discipline-specific content knowledge  | Some discipline-specific content knowledge   | Extensive discipline-specific content knowledge  | Extensive, perhaps specialized discipline-specific content knowledge   |

Adapted from ACT, Inc., (2005); Carnegie Council on Advancing Adolescent Literacy (2010); Chall, Bissett, Conrad, & Harris-Sharples (1996); and Hess and Biggam (2004)

The qualitative dimensions of text complexity are best understood as continua of increasing complexity rather than as representing discrete and easily defined stages. Most authentic texts will exhibit some but not all of the traits linked to a particular grade band; qualitatively assigning a text to a grade band is therefore a matter of “best fit,” or determining which grade band’s set of descriptors most accurately describes the text.

#### Structure

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- Explicit, simple, conventional → Implicit, complex, unconventional
- Simple graphic representations → Sophisticated graphic representations
- Graphic representations supplementary to meaning → Graphic representations essential to meaning
- Relatively short texts → Texts sufficiently long to address complex subjects

#### Purpose

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- Single purpose → Multiple purposes
- Explicitly stated → Often implicit and may be hidden or obscure

#### Style

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- Familiar, accessible, plain → Unfamiliar, demanding, complex
- Few literary devices → Many literary devices

#### Language

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- Mostly everyday language → Extensive use of Tier 2 and 3 words
- Limited use of figurative language → Extensive use of figurative language
- Clear language → Potentially ambiguous language

#### Richness

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- A few ideas/concepts → Many ideas/concepts
- Concrete ideas/concepts → Abstract ideas/concepts
- Low information density → High information density

#### Relationships

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- A few connections → Many connections
- Explicit connections → Implicit connections
- Simple connections → Complex, interwoven connections

#### Knowledge Demands: Life Experiences

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- Simple themes → Complex themes
- Single theme → Multiple themes
- Common, everyday experiences and fantastical elements → Experiences distinctly different from one’s own
- Single perspective like one’s own → Multiple and unusual perspectives

#### Knowledge Demands: Cultural Knowledge

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- General background knowledge and familiarity with genre conventions required → Cultural and historical knowledge useful

#### Knowledge Demands: Content/Discipline Knowledge

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- Some everyday and general content knowledge → Extensive, perhaps specialized discipline-specific content knowledge

## Definitions of Key Writing Types

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### Narrative

Narrative writing is organized by time. Time is central because narrative writing depicts events, whether real or imagined. Narrative writing is fundamental to novels, short stories, biographies, autobiographies, historical accounts, and plays. With practice, students' repertoire of narrative strategies expands and their control of them increases. Students learn to provide visual details of scenes, objects, or people; to depict specific actions (movements, gestures, postures, and expressions); to use dialogue and interior monologue in order to provide insight into the narrator's and characters' personalities and motives; and to manipulate pace in order to highlight the significance of certain events and create tension and suspense. Narrative writing serves a variety of purposes; frequently it is embedded in other kinds of writing, such as writing intended to inform, instruct, or persuade.

### Informative/Explanatory Text

Informative/explanatory writing conveys information accurately. This kind of writing can serve one or more of several closely related purposes: to increase readers' knowledge of a subject, to help readers better understand a procedure or process, or to enhance readers' comprehension of a concept. Informative/explanatory writing addresses questions, such as questions about types (What are the different types of whales?), about components (What are the parts of a motor?), about aspects of a subject such as its size, function, or behavior (How big is the United States? What is an x-ray used for? How do penguins find food?), about how things work (How does a camera work?), and about why things happen (Why is Earth warming?). To produce this kind of writing, students draw on what they already know and on primary and secondary sources. With practice, students become better able to develop a controlling idea that supports coherence and focus, and they can select examples, facts, and details that are relevant. They are also able to employ a variety of techniques that writers use to convey information, such as naming, describing, or differentiating different types or parts; comparing or contrasting one subject with another; and relating an anecdote or scenario to illustrate a point.

### Argument

The purpose of argument is to persuade in order to change the reader's point of view or to bring about some action on the reader's part. There are many techniques employed by writers to persuade readers—for example, appeals to emotions, appeals to common beliefs, and the creation of a believable authorial voice. However, the core of argument is logic and evidence. A logical argument convinces its audience of the merit and reasonableness of the claims and the proof offered in support of the claims. Writers of logical arguments provide credible evidence (facts and details) to support their assertions. Although young children are not able to produce fully developed logical arguments, they are developing a variety of ways to extend and elaborate their work around opinions or judgments. They provide examples, they offer reasons for their assertions, and they explain cause and effect. These kinds of expository structures are steps on the road to argument.

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# Vocabulary Instruction

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Words are not just words. They are the nexus — the interface — between communication and thought. When we read, it is through words that we build, refine, and modify our knowledge. What makes vocabulary valuable and important is not the words themselves so much as the understandings they afford.

Marilyn Adams<sup>14</sup>

The importance of students acquiring a rich and varied vocabulary cannot be overstated. Research suggests that if students are going to grasp and retain words and comprehend text, they need incremental, repeated exposure to words they are trying to learn in a variety of contexts. When students make multiple connections between new words and their own experiences they develop a nuanced and flexible understanding of the word. In this way, students learn not only what a word means, but how to use that word in a variety of contexts and apply appropriate senses of the word's meaning in order to understand different contexts.<sup>15</sup>

Initially children readily learn words from oral conversation because oral conversations are context rich in ways that aid in vocabulary acquisition: in discussion a small set of words (accompanied by gesture and intonation) is used with great frequency to talk about a narrow range of situations children are exposed to on a day to day basis. Yet as children reach school age, new words are less frequently introduced in conversation, and consequently vocabulary acquisition eventually stagnates by fourth or fifth grade unless students acquire additional words from written context.<sup>16</sup>

Written language, by contrast, contains hundreds of times as many different words as are typically used in conversational language. Yet writing lacks the interactive opportunities and nonverbal context provided by oral conversation so it presents a special challenge towards successful vocabulary acquisition without purposeful and ongoing concentration on vocabulary.<sup>17</sup> In fact, at most, between five and fifteen percent of new words encountered when reading are retained.<sup>18</sup> The weaker a student's vocabulary is, the slighter the gain.<sup>19</sup> Yet research shows that if students are going to understand what they read, they must understand upward of 95 percent of the words.<sup>20</sup>

As this "tipping point" for lexical dexterity is quite challenging for students to reach, every classroom needs to focus on providing students with high quality contextual encounters with vocabulary words that epitomize what they encounter in written texts. The aim should be to expose students to words that have the widest application— concepts that students are likely to meet again and again not just in classroom settings but outside the school walls as well. Some of these highly transferable academic words, often referred to as Tier 2 words, such as qualifying adjectives and adverbs (e.g., important, typically) are used broadly across domains and indeed in contexts that

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<sup>14</sup> Adams, M. (2009). "The Challenge of Advanced Texts: The Interdependence of Reading and Learning," in Hiebert (Ed.), *Reading more, reading better: Are American students reading enough of the right stuff?*, New York: Guilford Publications.

<sup>15</sup> Landauer, TK, McNamara, DS, Dennis, S and Kintsch, W (2007) *Handbook of Latent Semantic Analysis*; Landauer, T. K., & Dumais, S. T. (1997). A solution to Plato's problem: The latent semantic analysis theory of acquisition, induction, and representation of knowledge. *Psychological Review*, 104(2), 211-240; Nagy, W. E., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly*, 20, 233-253.

<sup>16</sup> Hayes, D and Ahrens, M: "Vocabulary simplification for children: A special case of "motherese?" *Journal of Child Language*. Vol 15(2), Jun 1988, 395-410

<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

<sup>19</sup> Daneman & Green, 1986; Herman, Anderson, Person & Nagy, 1987; Sternberg & Powell

<sup>20</sup> Betts, E. A. (1946). *Foundations of reading instruction*. New York, NY: American Book Company; Carver, R. P. (1994). Percentage of unknown vocabulary words in text as a function of the relative difficulty of the text: Implications for instruction. *Journal of Reading Behavior*, 26, 413-437; Hu, M., & Nation, P. (2000). Unknown vocabulary density and reading comprehension. *Reading in a Foreign Language*, 13(1), 403-430; Laufer, B. (1988). What percentage of text-lexis is essential for comprehension. In C. Lauren & M. Nordmann (Eds.), *Special language: From humans to thinking machines*, pp. 316-323. Clevedon, UK: Multilingual Matters.

transcend the classroom.<sup>21</sup> However, the meanings of most words are specific to their domains—often referred to as Tier 3 words—including those that arise in multiple domains (e.g., chemical constituents, constituent voting patterns). To learn words, students have to read multiple selections from multiple authors within key domains of learning.

The problem is that, in any given instance, it is not the entire spectrum of a word's history, meanings, usages, and features that matters, but only those aspects that are relevant to the surrounding context. That means, first, that the reader's internal representation of the word must be sufficiently complete and well-articulated so that the intended meaning is available and, second, that the reader must understand the context well enough to select the intended meaning – which, in turn, depends on good understanding of the surrounding words of the passage.

Key to students' vocabulary development is building rich and flexible word knowledge. Students need plentiful opportunities to use and respond to the words they learn, through playful informal talk, discussion, and reading or being read to and responding to what is read. Along with attention to academic (Tier 2 words) and content-specific words (Tier 3 words), students benefit from instruction about the connections and patterns in language. Developing in students an analytical attitude toward the logic and sentence structure of their texts alongside an awareness of word parts, word origins, and word relationships provides students with a sense of how language works so that syntax, morphology and etymology can become useful cues to word in building meaning as students encounter new words and concepts in their reading.<sup>22</sup> As students are exposed to and interact with language throughout their school careers, they are able to acquire understandings of word meanings, build awareness of the workings of language, and apply word meanings to comprehend and produce language.

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<sup>21</sup> Indeed, the fact that these words transcend specific disciplines argues for them being taught and used across the curriculum by all teachers.

<sup>22</sup> Beck, I. L., McKeown, M. & Kucan, L. (2008). *Creating robust vocabulary: Frequently asked questions and extended examples*.

## APPENDIX B

# Exemplars of Reading Text Complexity and Quality, History/Science 6–12

### Selecting Text Samples

The following text samples primarily serve to exemplify the level of complexity and quality that the *Standards* require all students in a given grade band to engage with while additionally suggesting the breadth of text types that students should encounter. The choices should serve as useful guideposts in helping educators select texts of similar **complexity**, **quality**, and **breadth** for their own classrooms. The process of text selection was guided by these criteria in the following fashion:

- *Complexity.* Appendix A describes in detail a three-part model of measuring text complexity based on qualitative and quantitative indices of inherent text difficulty balanced with educators' professional judgment. In selecting texts to serve as exemplars, the work group began by soliciting contributions from teachers, educational leaders, and researchers who have experience working with students in the grades for which the texts have been selected. These contributors were asked to propose texts that they or their colleagues have used successfully with students in a given grade band. The work group made final selections based in part on whether qualitative and quantitative measures identified by the *Standards* indicated that the proposed texts were of sufficient complexity for the grade band. For those types of texts—particularly poetry and multimedia sources—for which these measures are not as well suited, professional judgment necessarily played a greater role in selection.
- *Quality.* While it is possible to have high-complexity texts of low inherent quality, the work group solicited only texts of recognized value. From the pool of submissions gathered from outside contributors, the work group selected classic or historically significant texts as well as contemporary works of comparable literary merit, cultural significance, and/or content richness.
- *Breadth.* After identifying texts of appropriate complexity and quality, the work group applied a range of secondary criteria to ensure that the samples presented in each band represented as broad a range of sufficiently complex, high-quality texts as possible. Among the factors considered were initial publication date, authorship, and subject matter.

### Copyright and Permissions

For those exemplar texts not in the public domain, the work group is seeking permission from the rights holders for limited use by the Common Core State Standards Initiative of the National Governors Association.

While we await permissions grants from the rights holders, we will make use of texts under a conservative interpretation of Fair Use, which allows limited, partial use of copyrighted text for a nonprofit, educational purpose as long as that purpose does not impair the rights holder's ability to seek a fair return for his or her work.

Please note that these texts are included solely as exemplars in support of the *Standards*. Any additional use of those texts that are not in the public domain, such as for classroom use or curriculum development, requires independent permission from the rights holders. The texts may not be copied or distributed in any way other than as part of the overall Common Core Standards Initiative document.

## Organization and Excerpting

Texts are organized first by category, with narrative texts followed by drama and poetry and then the informational texts. Within each category, the texts are organized by date, usually of first publication, beginning with the oldest and ending with the most recent. In some cases, the date of any given work may be open to debate.

The excerpts given here are meant to stand in for the full work in most instances. Works that are not in the public domain may be represented by short excerpts or snippets while the work group awaits permission from the rights holders for full use.

### Media Texts

Selected excerpts are accompanied by annotated links to related media texts available online at the time of the publication of this document.

## Grades 6–8 Text Exemplars

### Informational Texts (History and Social Sciences)

Preamble and First Amendment to the United States Constitution by United States (1787, 1791)

*A Night to Remember* by Walter Lord (1955)

*A Short Walk through the Pyramids and through the World of Art* by Phillip Isaacson (1993)

*The Great Fire* by Jim Murphy (1995)

*Vincent Van Gogh: Portrait of an Artist* by Jan Greenberg and Sandra Jordan (2001)

*This Land Was Made for You and Me: The Life and Songs of Woody Guthrie* by Elizabeth Partridge (2002)

*Words We Live By: Your Annotated Guide to the Constitution* by Linda R. Monk (2003)

*Freedom Walkers: The Story of the Montgomery Bus Boycott* by Russell Freedman (2006)

### **Informational Texts (Science, Mathematics, and Technology)**

*Cathedral: The Story of Its Construction* by David Macaulay (1973)

*The Building of Manhattan* by Donald A. Mackay (1987)

*The Number Devil: A Mathematical Adventure* by Hans Magnus Enzensberger & Rotraut Susanne Berner (1998)

*Math Trek: Adventures in the Math Zone* by Ivars Peterson and Nancy Henderson (2000)

"The Evolution of the Grocery Bag" by Henry Petroski (2003)

"Geology" from *U\*X\*L Encyclopedia of Science* edited by Rob Nagel (2007)

"Space Probe" from *Astronomy & Space: From the Big Bang to the Big Crunch* edited by Phillis Engelbert (2009)

"Elementary Particles" from *New Book of Popular Science* (2010)

### **Grades 9–10 Exemplar Texts**

#### **Informational Texts (History and Social Sciences)**

*Bury My Heart at Wounded Knee: An Indian History of the American West* by Dee Brown (1970)

*Son of the Morning Star: Custer and the Little Bighorn* by Evan S. Connell (1984)

*The History of Art* by E. H. Gombrich (1995)

*Cod: A Biography of the Fish That Changed the World* by Mark Kurlansky (1997)

*Black, Blue, and Gray: African Americans in the Civil War* by Jim Haskins (1998)

*The Longitude Prize* by Joan Dash (2000)

*The Illustrated Book of Great Composers* by Wendy Thompson (2004)

*Before Columbus: The Americas of 1491* by Charles C. Mann (2009)

#### **Informational Texts (Science, Mathematics, and Technology)**

*Elements* by Euclid (300 BCE) translated by Richard Fitzpatrick

"Classifying the Stars" by Annie J. Cannon (1929)

"Biography of an Atom" by Jacob Bronowski and Millicent Selsam (1965)

"Amusement Park Physics" by Jearl Walker (1979)

"Life by the Numbers" by Keith Devlin (1998)

*The Race to Save Lord God Bird* by Phillip Hoose (2004)

*The Story of Science: Newton at the Center* by Joy Hakim (2005)

*Circumference: Eratosthenes and the Ancient Quest to Measure the Globe* by Nicholas Nicastro (2008)

## **Grades 11–12 Exemplar Texts**

### **Informational Texts (History and Social Sciences)**

*Democracy in America* by Alexis de Tocqueville (1835) translated by Henry Reeve

*Declaration of Sentiments* by the Seneca Falls Conference (1848)

“Independence Day Speech” by Frederick Douglass (1852)

“Education” by Ellen Condliffe Lagemann in *The Reader’s Companion to American History* (Eric Foner and John A. Garraty, editors) (1991)

*What They Fought For, 1861–1865* by James M. McPherson (1994)

*America’s Constitution: A Biography* by Akhil Reed Amar (2005)

*1776* by David McCullough (2005)

*Mirror of the World: A New History of Art* by Julian Bell (2007)

*FedViews* by the Federal Reserve Bank of San Francisco (2009)

### **Informational Texts (Science, Mathematics, and Technology)**

*Innumeracy: Mathematical Illiteracy and Its Consequences* by John Allen Paulos (1988)

“Gravity in Reverse: The Tale of Albert Einstein’s ‘Greatest Blunder’” by Neil deGrasse Tyson (2003)

*Google Hacks: Tips & Tools for Smarter Searching* by Tara Calishain and Rael Dornfest (2004)

“The Mysteries of Mass” by Gordon Kane (2005)

“Working Knowledge: Electronic Stability Control” by Mark Fischetti (2007)

“The Coming Merger of Mind and Machine” by Ray Kurzweil (2008)

“Untangling the Roots of Cancer” by W. Wayt Gibbs (2008)

“The Cost Conundrum: Health Care Costs in McAllen, Texas” by Atul Gawande (2009)

## APPENDIX TABLE OF CONTENTS

|   |     |
|---|-----|
| (A)(1) – Exhibit A: <i>Minnesota ACT scores</i>   | 7   |
| (A)(1) – Exhibit B: <i>Matrix of broad support for Education Reform in Minnesota</i>                                      | 9   |
| (A)(1) – Exhibit C: <i>National Alliance for Public Charter Schools Minnesota Ranking</i>                                 | 13  |
| (A)(1) – Exhibit D: <i>Minneapolis Public Schools 2007 Strategic Plan</i>   | 18  |
| (A)(1) – Exhibit E: <i>Governor’s Education Council Report and Goals</i>  | 38  |
| (A)(1) – Exhibit F: <i>Minnesota’s Power Indicators</i>   | 92  |
| (A)(1) – Exhibit G: <i>Sample detail from 114-page mid-December LEA Race to the Top presentation and discussion</i>       | 93  |
| (A)(1) – Exhibit H: <i>Minnesota’s Standard RTTT MOA</i>  | 97  |
| (A)(1) – Exhibit I: <i>Detailed Table for (A)(1) including participating LEAs, enrollment, etc. (see end of appendix)</i> | 124 |
| (A)(2) – Exhibit A: <i>RTTT Office and Organizational structure of implementation</i>                                     | 125 |
| (A)(2) – Exhibit B: <i>Key Program Metrics and Implementation Assessment Framework</i>                                    | 127 |
| (A)(2) – Exhibit C: <i>Sample outside evaluator RFP</i>   | 130 |
| (A)(2) – Exhibit D: <i>Sample Aspirational Changes to Conceptions through RTTT</i>  | 143 |
| (A)(2) – Exhibit E: <i>Sample Teacher Satisfaction Survey Excerpt</i>   | 146 |
| (A)(2) – Exhibit F: <i>Federal Fund Management</i>  | 147 |
| (A)(2) – Exhibit G: <i>Stakeholder Engagement Detail</i>  | 148 |
| (A)(2) – Exhibit H: <i>Stakeholder Letters of Support Overview and Letters (See end of Appendix)</i>                      | 150 |
| (A)(3) – Exhibit A: <i>Minnesota NAEP score progress</i>  | 151 |

|  |     |
|--|-----|
| (A)(3) – Exhibit B: <i>Letter from Michigan State University Distinguished Professor William Schmidt on Minnesota’s Standards, 5/18/2007</i>   | 158 |
| (A)(3) – Exhibit C: <i>Minnesota TIMSS scores</i>  | 160 |
| (A)(3) – Exhibit D: <i>Minnesota Comprehensive Assessment II score progress</i>  | 166 |
| (A)(3) – Exhibit E: <i>“Get Ready, Get Credit” legislative package</i>   | 199 |
| (A)(3) – Exhibit F: <i>Minnesota Four-Year Graduation Rates</i>  | 205 |
| (A)(3) – Exhibit G: <i>Advanced Placement Support and Score Trends</i>   | 206 |
| (B)(1) – Exhibit A: <i>Common Core Standards Memorandum of Agreement</i>   | 229 |
| (B)(1) – Exhibit B: <i>Evidence Common Core Standards ensure college and career readiness</i>  | 233 |
| (B)(1) – Exhibit C: <i>Confidential drafts of Common Core Standards (see end of appendix)</i>  | 235 |
| (B)(1) – Exhibit D: <i>Achieve assessment of MN standards</i>  | 236 |
| (B)(1) – Exhibit E: <i>CCRPI - MN Power Indicators</i>   | 252 |
| (B)(1) – Exhibit F: <i>Detail on Minnesota Early Learning Standards Alignment, excerpts from Minnesota’s Early Learning Standards overview</i> | 255 |
| (B)(1) – Exhibit G: <i>Minn. Stat. § 120B.021 – Required Academic Standards</i>  | 259 |
| (B)(1) – Exhibit H: <i>Minn. Stat. § 120B.023 Benchmarks</i>   | 263 |
| (B)(2) – Exhibit A: <i>Minnesota Assessment System Overview</i>  | 266 |
| (B)(2) – Exhibit B: <i>Summative Assessment Consortium – SMARTER Memorandum of Understanding and list of participating states</i>              | 271 |
| (B)(2) – Exhibit C: <i>Formative Assessment Consortium – MOSAIC Memorandum of Understanding</i>  | 275 |

|  |     |
|--|-----|
| (B)(2) – Exhibit D: <i>Formative Assessment Consortium – MOSAIC list of participating states</i>                     | 278 |
| (B)(2) – Exhibit E: <i>Achieve Assessment Partnership confirmation letter</i>  | 280 |
| (B)(3) – Exhibit A: <i>Math and Science Teacher Academy Press Release</i>  | 282 |
| (B)(3) – Exhibit B: <i>AVID and Admission Possible Additional Information</i>  | 285 |
| (B)(3) – Exhibit C: <i>EPAS – Explore and Plan test participation</i>  | 287 |
| (B)(3) – Exhibit D: <i>Raising Academic Achievement Grants</i>   | 288 |
| (B)(3) – Exhibit E: <i>High School Redesign Framework</i>  | 312 |
| (B)(3) – Exhibit F: <i>Standards and Supports Implementation timeline</i>  | 324 |
| (B)(3) – Exhibit G: <i>Interim Assessments (RFP sample Details)</i>  | 325 |
| (C)(1) – Exhibit A: <i>Establishment of P-20 Education Partnership Longitudinal Data System Governance Committee</i> | 326 |
| (C)(1) – Exhibit B: <i>Statewide Longitudinal Data System data elements</i>  | 327 |
| (C)(1) – Exhibit C: <i>Statewide Longitudinal Data System progress</i>   | 329 |
| (C)(3) – Exhibit A: <i>M<sup>2</sup>D<sup>3</sup> overview</i>   | 337 |
| (D)(1) – Exhibit A: <i>Minn. Stat. § 122A.24 - Alternative Certification Legislation for Teachers</i>                | 343 |
| (D)(1) – Exhibit B: <i>Alternative Certification – Board of Teaching Rules</i>                                       | 345 |
| (D)(1) – Exhibit C: <i>Current Alternative Preparation Programs</i>  | 347 |
| (D)(1) – Exhibit D: <i>Board of Teaching Proposed Rules Amendments</i>   | 352 |
| (D)(1) – Exhibit E: <i>Alternative Certification Legislation for Principals</i>                                      | 356 |
| (D)(1) – Exhibit F: <i>Teacher Supply and Demand Survey</i>  | 358 |
| (D)(2) – Exhibit A: <i>Minnesota Growth Model</i>  | 361 |
| (D)(2) – Exhibit B: <i>Quality Compensation for Teachers Program Details</i>   | 365 |

|   |     |
|---|-----|
| (D)(2) – Exhibit C: <i>Quality Compensation for Teachers legislation - Minn. Stat. § 122A.414 Alternative Teacher Pay</i> | 367 |
| (D)(2) – Exhibit D: <i>Outside Evaluation of Q Comp</i>   | 371 |
| (D)(2) – Exhibit E: <i>Randi Weingarten Praise of Q Comp</i>  | 374 |
| (D)(2) – Exhibit F: <i>Sample quotes from Q Comp participants</i>   | 376 |
| (D)(2) – Exhibit G: <i>Minn. Stat. § 122A.40 subd 5 (related to Employment; Contracts; Terminations)</i>                  | 380 |
| (D)(2) – Exhibit H: <i>Board of Teaching Tiered Licensure Workshop Series</i>   | 381 |
| (D)(2) – Exhibit I: <i>Minn. Stat. § 122A.18 – Board to Issue Licenses</i>  | 386 |
| (D)(2) – Exhibit J: <i>PAR in The New Teacher Project Report on MPS</i>   | 393 |
| (D)(2) – Exhibit K: <i>Education Week article from November 12, 2009 on Peer Assistance and Review</i>                    | 394 |
| (D)(3) – Exhibit A: <i>State Report Card – Minnesota Growth Model</i>   | 401 |
| (D)(4) – Exhibit A: <i>Star Tribune Cover Story “How to Build a Better Teacher”</i>                                       | 407 |
| (D)(4) – Exhibit B: <i>Bush Foundation Teacher Preparation Program Grantmaking Press release, December 3, 2009</i>        | 411 |
| (D)(4) – Exhibit C: <i>Carnegie Corporation praise of Bush Foundation Teacher Preparation Initiative</i>                  | 414 |
| (D)(5) – Exhibit A: <i>Teacher Support Partnership Induction Framework</i>  | 416 |
| (D)(5) – Exhibit B: <i>Minnesota Principals’ Academy</i>  | 419 |
| (E)(1) – Exhibit A: <i>Implementation of No Child Left Behind Minn. Stat. § 127A.095</i>                                  | 420 |
| (E)(1) – Exhibit B: <i>Minn. Stat. §120B.35 Student Academic Achievement</i>  | 422 |
| (E)(2) – Exhibit A: <i>Minnesota Growth Matrix “On Track” explanation</i>   | 426 |
| (E)(2) – Exhibit B: <i>Minnesota’s Persistently Lowest-Achieving Schools</i>  | 427 |

|   |     |
|---|-----|
| (E)(2) – Exhibit C: <i>Minnesota Intervention Models</i>  | 428 |
| (E)(2) – Exhibit D: <i>Minn. Stat. § 123B.045 District-created site governed schools</i>                      | 429 |
| (E)(2) - Exhibit E: <i>Office of Turnaround Schools Organizational Structure</i>                              | 433 |
| (E)(2) – Exhibit F: <i>Parent Support Programs in Minnesota’s Urban Core</i>                                  | 434 |
| (E)(2) – Exhibit G: <i>Support letter for PIQE, upon which MPS CPEO Parents group is based and affiliated</i> | 439 |
| (F)(1) – Exhibit A: <i>Minnesota Education Expenditures as percentage of overall state budget</i>             | 440 |
| (F)(1) – Exhibit B: <i>FY 2009 General Revenues Per ADM: High Poverty vs. Low Poverty LEA's</i>               | 441 |
| (F)(1) – Exhibit C: <i>Minn. Stat. § 126C General Education Revenue</i>                                       | 442 |
| (F)(1) – Exhibit D: <i>Minnesota Statutes providing compensatory and limited English proficiency revenue</i>  | 445 |
| (F)(1) – Exhibit E: <i>Q Comp funding history</i>   | 447 |
| (F)(2) – Exhibit A: <i>Minn. Stat. § 124D.10 Charter Schools</i>  | 449 |
| (F)(2) – Exhibit B: <i>Current Charter Schools: Types and Geographic Trends</i>                               | 469 |
| (F)(2) – Exhibit C: <i>List of Current Charter Schools in Minnesota</i>                                       | 470 |
| (F)(2) – Exhibit D: <i>Charter applications and closings since 2003</i>                                       | 475 |
| (F)(2) – Exhibit E: <i>MN Charter School Funding Overview</i>   | 476 |
| (F)(3) – Exhibit A: <i>Minnesota School Finance History</i>   | 487 |
| (F)(3) – Exhibit B: <i>Minnesota Public Radio Report on 2001 Special Session</i>                              | 497 |
| (F)(3) – Exhibit C: <i>Minn. Stat. § 125A.18 Special Instruction Nonpublic Schools</i>                        | 499 |

|  |            |
|--|------------|
| <b>(F)(3) – Exhibit D: <i>Minn. Stat. § 124D.03 Enrollment Options Program</i></b>   | <b>501</b> |
| <b>(F)(3) – Exhibit E: <i>Minn. Stat. § 124D.09 Postsecondary Enrollment Options Act</i></b>                                     | <b>506</b> |
| <b>(F)(3) – Exhibit F: <i>Minn. Stat. § 290.0674 Minnesota Education Credit</i></b>  | <b>514</b> |
| <b>(F)(3) – Exhibit G: <i>Minn. Stat. § 120B.30 Statewide testing and reporting system</i></b>                                   | <b>517</b> |
| <b>(F)(3) – Exhibit H: <i>Minn. Stat. § 122A.72 Teacher Centers</i></b>  | <b>523</b> |
| <b>(F)(3) – Exhibit I: <i>Minn. Stat. § 122A.60 Staff Development Program</i></b>  | <b>525</b> |
| <b>(F)(3) – Exhibit J: <i>Minn. Stat. § 122A.61 – Reserved Revenue for Staff Development</i></b>                                 | <b>528</b> |
| <b>(F)(3) – Exhibit K: <i>Minn. Stat. § 120B.31 – System Accountability and Statistical Adjustments</i></b>                      | <b>530</b> |
| <b>(F)(3) – Exhibit L: <i>Minn. Stat. § 120B.024 Graduation Requirements: Course Credits</i></b>                                 | <b>532</b> |
| <b>(P)(2) – Exhibit A: <i>Minnesota STEM Overview</i></b>  | <b>533</b> |
| <b>(P)(2) – Exhibit B: <i>Project Lead the Way Enrollment Report</i></b>   | <b>553</b> |
| <b>(P)(3) – Exhibit A: <i>Early Childhood Education Programs and Funding Overview</i></b>  | <b>558</b> |
| <b>(A)(2) – Exhibit H: <i>Stakeholder Letters of Support Overview and Letters</i></b>  | <b>560</b> |
| <b>(A)(1) – Exhibit I: <i>Detailed Table for (A)(1) including participating LEAs, enrollment, etc. (see end of appendix)</i></b> | <b>561</b> |
| <b>(A)(2id)/Section VIII: <i>Budget Narrative</i></b>  | <b>562</b> |
| <b>(B)(1) – Exhibit C: <i>Confidential Drafts of Common Core Standards</i></b>   | <b>563</b> |

**(A)(1) – Exhibit A: Minnesota ACT scores**

Minnesota Student Progress as measured by ACT/ PLAN/ EXPLORE

**Average ACT Composite Score by Race/ Ethnicity**

| <b>Student group</b>       | <b>2005</b> | <b>2009</b> |
|----------------------------|-------------|-------------|
| All MN students            | 22.3        | 22.7        |
| African-American/ Black    | 17.6        | 17.8        |
| Caucasian                  | 22.6        | 23.2        |
| Amer. Indian/Alaska Native | 20.0        | 20.2        |

| <b>Percent of 2009 ACT-Tested Students Ready for College-Level Coursework</b>                            | <b>Minnesota</b> | <b>National</b> |
|--|------------------|-----------------|
| English Benchmark Score = 18   | 78               | 67              |
| Math Benchmark Score = 22  | 57               | 42              |
| Reading Benchmark Score = 21   | 65               | 53              |
| Science Benchmark Score = 24   | 39               | 28              |
| Meeting All 4 ACT Benchmark Scores   | 32               | 23              |
|  |                  |                 |
| <b>Percent of 2009 PLAN-Tested Students Ready for College-Level Coursework (10<sup>th</sup> grade)</b>   | <b>Minnesota</b> | <b>National</b> |
| English Benchmark Score = 15   | 70               | 72              |
| Math Benchmark Score = 19  | 43               | 34              |
| Reading Benchmark Score = 17   | 55               | 50              |
| Science Benchmark Score = 21   | 29               | 25              |
|  |                  |                 |
| <b>Percent of 2009 EXPLORE-Tested Students Ready for College-Level Coursework (8<sup>th</sup> grade)</b> | <b>Minnesota</b> | <b>National</b> |
| English Benchmark Score = 13   | 67               | 60              |
| Math Benchmark Score = 17  | 46               | 32              |
| Reading Benchmark Score = 15   | 45               | 37              |

|                              |    |    |
|------------------------------|----|----|
| Science Benchmark Score = 20 | 18 | 13 |
|                              |    |    |

**(A)(1) – Exhibit B: Matrix of broad support for Education Reform in Minnesota**

Minnesota has an extensive and comprehensive matrix of support for education including many in the business and foundation community (1/2)



NOT EXHAUSTIVE

|                          | Pre-K  | Elementary   | Middle  | High School   | College  |
|--------------------------|--|--|---|---|--|
| <b>Education phase</b>   | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ Thrivent Found.</li> <li>▪ McKnight</li> <li>▪ Medtronic Found.</li> <li>▪ General Mills</li> <li>▪ Cargill</li> <li>▪ Mpls. Found.</li> </ul>   | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ MBP, MN Future Award (MFA)</li> <li>▪ McKnight</li> <li>▪ Bush</li> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Cargill</li> <li>▪ Mpls. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ TCF Found.</li> <li>▪ Friends of Ed. Found.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ MBP – MFA</li> <li>▪ Best Buy Found.</li> <li>▪ Bush</li> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Cargill</li> <li>▪ Friends of Ed. Found.</li> <li>▪ Mpls. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ Travelers</li> <li>▪ TCF Found.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ MBP – MFA</li> <li>▪ Best Buy Found.</li> <li>▪ Bush</li> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Cargill</li> <li>▪ Friends of Ed. Found.</li> <li>▪ Mpls. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ Travelers</li> <li>▪ TCF Found.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Cargill</li> <li>▪ Frey Found.</li> <li>▪ Bush</li> <li>▪ General Mills</li> <li>▪ Medtronic Found.</li> <li>▪ Wallin Found.</li> </ul>               |
|                          | <b>Teachers</b>  | <b>School leaders</b>  | <b>Longitudinal data</b>  | <b>Students/families</b>  | <b>Other</b>   |
| <b>Education element</b> | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ McKnight</li> <li>▪ Bush</li> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Cargill</li> <li>▪ Friends of Ed. Found.</li> <li>▪ Mpls. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ TCF Found.</li> </ul> | <ul style="list-style-type: none"> <li>▪ MBP (MFI)</li> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Mpls. Found.</li> <li>▪ Friends of Ed. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ Travelers</li> <li>▪ Cargill</li> </ul>  | <ul style="list-style-type: none"> <li>▪ MBP (MFI)</li> <li>▪ Bush</li> <li>▪ Mpls. Found.</li> <li>▪ Friends of Ed. Found.</li> <li>▪ TCF Found.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Qwest Found.</li> <li>▪ Thrivent Found.</li> <li>▪ McKnight</li> <li>▪ General Mills</li> <li>▪ Cargill</li> <li>▪ Target</li> <li>▪ Wallin Found.</li> <li>▪ Mpls. Found.</li> <li>▪ Medtronic Found.</li> <li>▪ Travelers</li> <li>▪ Best Buy Found.</li> <li>▪ Frey Found.</li> </ul>                     | <ul style="list-style-type: none"> <li>▪ Best Buy Found.</li> <li>▪ MBP – MFA</li> <li>▪ Qwest Found.</li> <li>▪ Target</li> <li>▪ General Mills</li> <li>▪ Cargill</li> <li>▪ Bush</li> </ul> |

Minnesota has an extensive and comprehensive matrix of support for education including many in the business and foundation community (2/2)



NOT EXHAUSTIVE

|                                     | Minneapolis  | St. Paul  | Metro area   | Greater Minnesota  | Statewide  |
|-------------------------------------|--|---|--|--|--|
| <b>Geographic focus<sup>1</sup></b> | <ul style="list-style-type: none"> <li>▪ General Mills</li> <li>▪ Target</li> <li>▪ Cargill</li> <li>▪ Medtronic Found.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Travelers</li> <li>▪ Medtronic Found.</li> <li>▪ Target</li> </ul> | <ul style="list-style-type: none"> <li>▪ MRP – MFA</li> <li>▪ Qwest Found.</li> <li>▪ Best Buy Found.</li> <li>▪ Thrivent Found.</li> <li>▪ Frey Found.</li> <li>▪ McKnight</li> <li>▪ Wallin Found.</li> <li>▪ Target</li> <li>▪ Medtronic</li> </ul> | <ul style="list-style-type: none"> <li>▪ MRP – MFA</li> <li>▪ Qwest Found.</li> <li>▪ Frey Found.</li> <li>▪ Medtronic Found.</li> <li>▪ Target</li> </ul> | <ul style="list-style-type: none"> <li>▪ Bush</li> <li>▪ MRP (MFI)</li> <li>▪ Qwest</li> <li>▪ General Mills</li> <li>▪ Mpls. Found</li> <li>▪ Cargill</li> <li>▪ ICE Found</li> <li>▪ Friends of Ed Found.</li> </ul> |

<sup>1</sup> Some organizations listed separately under "metro", "Greater MN" and "statewide" because of geographic focus of multiple programs

Programs supported by these organizations address a broad range of educational elements (1/2)



NOT EXHAUSTIVE

| Education element |  |  |  |   |   |
|-------------------|--|--|--|---|---|
| Program partner   | Teachers   | School leaders   | Longitudinal data  | Students/families   | Other   |
|                   | <ul style="list-style-type: none"> <li>Teachers and tech. grants</li> </ul>  |  |  | <ul style="list-style-type: none"> <li>Academic mentors and tutors</li> </ul>   | <ul style="list-style-type: none"> <li>STEM programming</li> <li>Early ed. development</li> <li>Bullying prevention</li> </ul>  |
|                   |  | <ul style="list-style-type: none"> <li>School Leader Academies</li> </ul>      | <ul style="list-style-type: none"> <li>MDE-LDS support</li> </ul>                |   | <ul style="list-style-type: none"> <li>School recog. program</li> </ul>   |
|                   | <ul style="list-style-type: none"> <li>Teach for America</li> </ul>  |  |  | <ul style="list-style-type: none"> <li>Admission Possible</li> <li>1st Generation college scholarships</li> </ul>   | <ul style="list-style-type: none"> <li>General support for charter &amp; other schools</li> </ul>   |
|                   |  |  |  | <ul style="list-style-type: none"> <li>Improve literacy by 3rd grade</li> </ul>   | <ul style="list-style-type: none"> <li>Parent Aware - QRS</li> <li>MIF's early education</li> <li>BUILD early education</li> </ul>  |
|                   | <ul style="list-style-type: none"> <li>Teacher prep/ placement reform</li> </ul>   |  | <ul style="list-style-type: none"> <li>Teacher prep/ placement reform</li> </ul> |   | <ul style="list-style-type: none"> <li>Teacher prep/placement reform</li> </ul>   |
|                   | <ul style="list-style-type: none"> <li>Teach for America</li> <li>FIRST program in Mpls.</li> <li>MN Human Comm. prof. develop.</li> </ul> | <ul style="list-style-type: none"> <li>Mpls. Principal Academy</li> </ul>      |  | <ul style="list-style-type: none"> <li>STEM, career awareness and support</li> <li>Admission Possible</li> <li>Multiple, targeted post-secondary scholarships</li> <li>Employ. family scholarships</li> </ul> | <ul style="list-style-type: none"> <li>Student/family supports (e.g. SEARCH Inst.)</li> <li>Exotops for Education</li> <li>Cheerios Reading prog.</li> <li>Nutrition prog. &amp; funds</li> <li>Best Prep &amp; JA</li> <li>Support for MELF</li> <li>Support for charter schools</li> <li>Employee volunteers</li> </ul> |
|                   | <ul style="list-style-type: none"> <li>Take Charge of Ed.</li> <li>Book grants - schools</li> <li>Target volunteers in schools</li> </ul>  | <ul style="list-style-type: none"> <li>Pro bono leadership training</li> </ul> |  | <ul style="list-style-type: none"> <li>Field trip prog.</li> <li>MN Reading Corps</li> <li>Before/after school programming</li> <li>Arts programming</li> </ul>   | <ul style="list-style-type: none"> <li>Early education reading grants</li> <li>Achieve Minneapolis</li> </ul>   |

Programs supported by these organizations address a broad range of educational elements (2/2)



NOT EXHAUSTIVE

| Program partner | Education element   |   |   |   |  |
|-----------------|---|---|---|---|--|
|                 | Teachers  | School leaders  | Longitudinal data   | Students/families   | Other  |
|                 | <ul style="list-style-type: none"> <li>Project Lead the Way</li> <li>Engineering is Elementary</li> </ul> | <ul style="list-style-type: none"> <li>LEAD for charters and Focus on Excellence</li> </ul> |   | <ul style="list-style-type: none"> <li>Cargill scholarships</li> </ul>  |  |
|                 | <ul style="list-style-type: none"> <li>Teach For America</li> </ul>                                       |   |   | <ul style="list-style-type: none"> <li>D2010 scholarships</li> </ul>  | <ul style="list-style-type: none"> <li>Mpls. Strategic Plan implementation</li> <li>New Teacher Project study and recommendations</li> <li>Strengthen early education options</li> </ul> |
|                 | <ul style="list-style-type: none"> <li>Teach For America</li> <li>STAR (e.g. 1st Robotics)</li> </ul>     |   |   | <ul style="list-style-type: none"> <li>Medtronic Fellowships</li> <li>Medtronic Scholarships</li> <li>Science Matters</li> <li>MN Science Museum</li> </ul> | <ul style="list-style-type: none"> <li>Support for MELF</li> </ul>   |
|                 |   |   |   | <ul style="list-style-type: none"> <li>Post-secondary recruitment, prep, scholarships &amp; completion</li> </ul>   |  |
|                 |   |   | <ul style="list-style-type: none"> <li>MDE-LDS development</li> </ul> |   | <ul style="list-style-type: none"> <li>Support for MELF</li> </ul>   |
|                 |   |   |   | <ul style="list-style-type: none"> <li>Mentoring</li> <li>Admission Possible</li> <li>Project Success</li> <li>Genesys Works</li> </ul>                     | <ul style="list-style-type: none"> <li>Achieve Minneapolis</li> <li>Cristo Rey</li> <li>KIPP</li> </ul>  |
|                 |   | <ul style="list-style-type: none"> <li>Principal Leadership Academy</li> </ul>              |   | <ul style="list-style-type: none"> <li>EDGE (Empower, Dreams thru Graduation, and Employment)</li> </ul>  | <ul style="list-style-type: none"> <li>AVID</li> </ul>   |
|                 | <ul style="list-style-type: none"> <li>Teach For America</li> </ul>                                       |   |   |   |  |

# (A)(1) – Exhibit C: National Alliance for Public Charter Schools Minnesota Ranking

How ranking: STATE: Minnesota

TOTAL SCORE: 152 out of 208

RANK: 1

Back to this report

Status with Charter Laws: Minnesota

Select a state to see how its charter laws compare

Minnesota enacted the nation's first charter law in 1991. In 2009-10, there are 168 charter schools open, serving an estimated 96,404 students. The law allows a wide variety of potential authorizing entities and intermediate school boards, cooperatives, charitable nonprofit organizations that meet certain criteria, private colleges, all public postsecondary institutions, and up to three single-purpose authorizing entities just to authorize charter schools. If we had released these rankings last year, Minnesota would probably not have been at the top. Although it has long been recognized as having a good law, it should evolve: changes this year to strengthen school and authorizer accountability; proposals by charter advocates that would fix it; Minnesota's law is strong in several respects: it is cap free; it allows multiple authorizing entities; it provides adequate authorizer funding; it does not rely on requirements for both performance-based contracts and renewals, non-renewal, and low-cost processes; it provides operational autonomy; and it provides relatively equitable operational funding. However, Minnesota's law still needs improvement regarding capital funding and facilities.

How does this state compare to the model law?

| Model Law Component  | Matches | Minnesota's Charter Law   | Scoring                                 |
|--|---------|---|---|
| <b>No Caps</b>   |         | Minnesota law does not place any caps on charter school growth.   | Rating:<br>Weight: 3<br>Total Score: 30 |
| 1A. No limits are placed on the number of public charter schools or students (and no geographic limits).   | Yes     |   |   |
| 1B. If caps exist, adequate room for growth.   | NA      |   |   |
| <b>A Variety of Public Charter Schools Allowed</b>   |         | Minnesota law allows how start-ups, public school conversions, individual entities.   | Rating:<br>Weight: 1<br>Total Score: 4  |
| 3A. New start-ups.   | Yes     |   |   |
| 3B. Public school conversions.   | Yes     |   |   |
| 3C. Virtual schools.   | Yes     |   |   |
| <b>Multiple Authorizers Available</b>  |         | Minnesota law allows the following types of entities to serve as authorizers: local school boards, intermediate school boards, cooperatives, charitable nonprofit organizations that meet certain criteria, private colleges, public postsecondary institutions, and up to three single-purpose agencies that are charitable, non-advocacy entities created just to charter schools. It also provides that all entities are subject to approval by the state commissioner of education before they can authorize.                             | Rating:<br>Weight: 3<br>Total Score: 30 |
| 3A. Two or viable authorizing options for each applicant with direct application allowed to select authorizing entity.                               | Yes     |   |   |
| <b>Authorizer and Overall Program Accountability System Required</b>   |         | Minnesota law details a comprehensive authorizer approval and review process. It requires all potential authorizers to submit an application to the state commissioner of education, detailing the applicant's ability to implement the procedures and satisfy the criteria for chartering a school (including information on the authorizer's capacity and infrastructure, application criteria and process, contracting process, ongoing oversight and evaluation processes, and renewal criteria and processes).                           | Rating:<br>Weight: 3<br>Total Score: 30 |
| 4A. At least a negotiation process for local school boards to affirm their interest in chartering to the state.                                      | Yes     |   |   |
| 4B. Application process for other eligible authorizing entities.   | Yes     | Follow the approval by the state commissioner to be an authorizer. Minnesota law requires each potential authorizer that must submit an affidavit for approval by the commissioner for each individual school an authorizer agrees to charter. It requires each affidavit to contain details regarding the proposed school's operations and student performance expectations, as well as the process the authorizer will use to provide ongoing oversight and to make decisions regarding the renewal or termination of the school's charter. |   |
| 4C. Authorizer submission of annual report, which summarizes the agency's authorizing activities as well as the performance of its school portfolio. | Yes     |   |   |
| 4D. A regular review process by authorizer oversight body.   | Yes     | Minnesota law requires the state commissioner to review each authorizer's performance at least every two years and allows the state commissioner to subject the authorizer to corrective actions as needed, including the termination of contracts with schools it has authorized. As part of that review, the law requires the state commissioner of education to conduct an annual operational wellness process for providing formal written evaluation of their school's compliance before renewal of a charter contract.                  |   |
| 4E. Authorizer oversight body with authority to sanction authorizers, including withdrawal of authorizer right to approve schools.                   | Yes     | Minnesota law requires all authorizers to submit an application by June   |   |

|   |      |  |                              |
|---|------|--|------------------------------|
| 6F. Periodic formal evaluation of overall state charter school program and outcomes.  | Some | 30, 2013, and be approved in order to continue as authorizers.<br><br>There is no requirement in law for any type of periodic formal evaluation of the overall state program. Instead, the legislature can commission such a report as needed (with such reports commissioned in 2003 and 2004).   |                              |
| <b>Adequate Authorizer Funding</b>  |      |  | Rating:                      |
| 6A. Adequate funding from authorizing fees for charter schools.   | Yes  | Minnesota law allows authorizers to annually assess a charter school fee based on a percentage of the basic formula aid received (times the schools adjusted marginal cost pupil index). It also specifies a maximum amount per school as a factor of that basic formula amount.<br><br>A statutory phase-in formula allows up to 0.5% per pupil for fiscal year 2010 (but not more than 1.5 times the basic formula aid); up to 1% for 2011 (but not more than 2.0); up to 1.5% for 2012 (but not more than 3.0); and up to 1.5% for 2013 and later (but not more than 4.0). With the base amount currently being \$5,124, this formula means that once fully phased in, the maximum amount any school could be assessed would be \$20,496 (as adjusted by any increase in the basic formula aid amount). | Weight: 3<br>Total Score: 0  |
| 6B. Guaranteed funding from authorizing fees (or from sources not subject to annual legislative appropriations).  | Yes  |  |                              |
| 6C. Requirement to publicly report detailed authorizer expenditures.  | Yes  | Minnesota law requires authorizers to annually submit a statement of expenditures related to authorizing activities to the state commissioner and its charter schools.   |                              |
| 6D. Separate contract for any services purchased from an authorizer by a school.  | Yes  | Statute states that the granting or renewal of a charter by an authorizer cannot be contingent on the school being required to contract, lease, or purchase services from the authorizer. It also provides that any potential contract, lease, or purchase of services by a charter school from an authorizer must be disclosed to the state commissioner, accepted through an open bidding process, and be a separate contract from the charter contract. There are also further requirements in law if the contract is for management or financial services.   |                              |
| 6E. Prohibition on authorizers requiring schools to purchase services from them.  | Yes  |  |                              |
| <b>Management Charter Application, Review, and Rechartering Processes</b>   |      |  | Rating:                      |
| 6A. Application elements for all schools.   | Yes  |  | Weight: 4                    |
| 6B. Additional application elements specific to conversion schools.   | Yes  | When their affidavit is sent to the state commissioner for each proposed charter school, Minnesota law requires authorizers to detail information related to the application and review process that the authorizer will use to make decisions regarding the granting of charters, as well as their application requirements (covering elements listed in statute) and an evaluation plan for the proposed schools including criteria for evaluating educational, organizational, and fiscal plans. It requires the state commissioner to approve such affidavits, and then review the application of such processes as part of the authorizer review process. The law contains specific additional requirements for conversion schools and for charter schools starting on the programs.                  | Total Score: 0               |
| 6C. Additional application elements specific to virtual schools.  | Yes  |  |                              |
| 6D. Additional application elements specific when using educational service providers.  | No   |  |                              |
| 6E. Additional application elements specific to replicators.  | No   | While there are no general procedures in statute for all authorizers to follow, the law requires each authorizer to detail such timelines in their application and affidavits and have them approved by the state commissioner. Statute requires that traditional school district authorizers must act on chartering decisions at public meetings.   |                              |
| 6F. Authorizer-issued request for proposals (including application requirements and approval criteria).   | Yes  |  |                              |
| 6G. Thorough evaluation of each application (including an in-person interview and a public meeting).  | No   |  |                              |
| 6H. All charter approval or denial decisions made in a public meeting, with authorizers stating reasons for denial in writing.  | Some |  |                              |
| <b>Performance-Based Charter Contracts Required</b>   |      |  | Rating:                      |
| 7A. Being created as a separate document from the application and accepted by the governing board of the charter school and the authorizer.   | Yes  | For statute, a written contract is required as signed by the authorizer and the charter school's board of directors with details including purposes and operations of the school, specific outcomes students are to achieve, the process and criteria the authorizer intends to use to monitor and evaluate the local and student performance of the charter school, and the plan for the orderly closing of a school, if a charter is terminated.<br><br>Minnesota law requires that initial contract may be for up to three years.   | Weight: 4<br>Total Score: 10 |
| 7B. Defining the roles, powers, and responsibilities for the school and its authorizer.   | Yes  |  |                              |
| 7C. Defining academic and operational performance expectations by which the school will be judged, based on a performance framework that includes measures and metrics for, at a minimum, student academic proficiency and growth, school/center space, attendance, recidivism/prevalence, postsecondary readiness (high schools), financial performance, and board stewardship (including compliance). | Some | A virtual charter school must follow the same statutory provisions, including approval by the state commissioner, as all other public school districts wanting to operate an online program or school. Thus, such charter schools must go through two sets of approvals, one for being a charter school and one for operating an online program or an online school.   |                              |
| 7D. Providing an initial term of five operating years (or a longer term with periodic high-stakes reviews).   | No   |  |                              |

|   |             |  |  |
|---|-------------|--|--|
| <p>PE. Including requirements addressing the unique environments of virtual schools, if applicable.</p>   | <p>Yes</p>  |  | <p>Rating:</p>                                   |
| <p><b>Statewide Charter School Monitoring and Data Collection Processes</b></p>   |             |  |  |
| <p>8A. The collection and analysis of student outcome data at least annually by authorizers (consistent with performance framework outlined in the contract).</p>   | <p>No</p>   | <p>Student outcome data on the state assessments is collected by the state department of education for all school districts (including charter districts). Authorizers are therefore not required to collect data as it is publicly available. Minnesota law requires authorizers to detail for state commissioner approval their process for ongoing oversight of the school consistent with the contract expectations, which must include the criteria, processes, and procedures that the authorizer will use for ongoing oversight of operations, financial, and academic performance.</p>   | <p>Weight: 4<br/>Total Score: 0</p>              |
| <p>8B. Financial accountability for charter schools (e.g., Generally Accepted Accounting Principles, independent annual audit required for authorizer).</p>   | <p>Yes</p>  | <p>While the law does not require authorizers to produce and publish annual state of performance reports aligned with the performance framework set forth in the charter as provided in the model law, statute requires charter schools to publish a fully detailed annual report covering enrollment, student attrition, governance, staffing, finances, academic performance, operational performance, innovative practices, and future plans. It requires this report to be distributed to the state commissioner, authorizer, school employees and parents, as well as posted on the schools' websites. Minnesota law also provides that charter schools are subject to the same financial audit procedures and requirements as all districts, with annual audit results submitted to the state commissioner and their authorizer.</p> |  |
| <p>8C. Authorizer authority to conduct or require oversight activities.</p>   | <p>Yes</p>  |  |  |
| <p>8D. Annual school performance reports produced and made public by state authorizer.</p>  | <p>Some</p> |  |  |
| <p>8E. Authorizer notification to their schools of serious problems with opportunities to remedy such problems.</p>   | <p>No</p>   |  |  |
| <p>8F. Authorizer authority to take appropriate corrective actions or revoke charters short of revocation.</p>  | <p>No</p>   | <p>Statute details causes and processes for nonrenewal or termination, but does not specifically require authorizers to notify their schools of concerns (until renewal time), nor does it give them the ability to impose corrective actions short of revocation. However, the law gives the state commissioner the authority to reduce state aid if a school fails to correct a violation of law.</p>  |  |
| <p><b>Clear Processes for Renewal, Nonrenewal, and Revocation Decisions</b></p>   |             |  |  |
| <p>9A. Authorizer must issue school performance renewal reports to schools whose charter will expire the following year.</p>  | <p>Yes</p>  | <p>Minnesota law requires authorizers to provide a formal written evaluation of each school's performance before renewal of its contract. Statute does not require a formal renewal application, but instead requires authorizers to detail for state commissioner approval their process for making decisions regarding the renewal or termination of a school's charter based on evidence that demonstrate the academic, organizational, and financial competency of the school, including its success in increasing student achievement and meeting the goals of the charter school agreement. It also requires such items to be detailed in the actual charter school contract, including the performance evaluation that is a prerequisite for renewing a charter contract.</p>   | <p>Rating:<br/>Weight: 4<br/>Total Score: 12</p> |
| <p>9B. Schools seeking renewal must apply for it.</p>   | <p>No</p>   | <p>Minnesota law provides that charter renewals may be made for up to five years.</p>  |  |
| <p>9C. Authorizers must issue renewal application guidance that provides an opportunity for schools to augment their performance record and discuss improvements and future plans.</p>  | <p>Some</p> | <p>Minnesota law requires the authorizer to provide timely notification of potential revocation to the schools board of directors in writing, including the grounds for the proposed action. It allows the school to request an informal hearing.</p>  |  |
| <p>9D. Clear criteria for renewal and nonrenewal/revocations.</p>   | <p>Yes</p>  | <p>Minnesota law requires each charter contract to have detailed provisions regarding what would happen if the school closed (including student notification and transfer, and financial issues). There are also specific provisions in statute regarding the transfer of records and the disposition of property and assets.</p>  |  |
| <p>9E. Authorizers must ground renewal decisions based on evidence regarding the school's performance over the term of the charter contract (in accordance with the performance framework set forth in the charter contract).</p> | <p>Yes</p>  |  |  |
| <p>9F. Authorizer authority to vary length of charter renewal contract terms based on performance or other issues.</p>  | <p>Yes</p>  |  |  |
| <p>9G. Authorizers must provide charter schools with timely notification of potential revocation or non-renewal (including reasons) and reasonable time to respond.</p>   | <p>Yes</p>  |  |  |
| <p>9H. Authorizers must provide charter schools with due process for nonrenewal and revocation decisions (e.g., public hearing, submission of evidence).</p>  | <p>Yes</p>  |  |  |
| <p>9I. All charter renewal, non-renewal, and revocation decisions made in a public meeting, with authorizers stating reasons for non-renewals and revocations in writing.</p>   | <p>Yes</p>  |  |  |
| <p>9J. Authorizers must have school closure protocols to ensure timely parent notification, orderly student and record transitions, and property and asset disposition.</p>   | <p>Yes</p>  |  |  |
| <p><b>Professional Service Providers Allowed</b></p>  |             |  |  |
| <p>10A. All types of educational service providers to operate all or parts of charter schools.</p>  | <p>Yes</p>  | <p>Minnesota law specifies that charters may contract with outside parties to manage all or some aspects of the school and requires that a member of the charter school board is prohibited from being affiliated with any for-profit or non-</p>  | <p>Rating:<br/>Weight: 2</p>                     |

|   |     |  |   |   |
|---|-----|--|---|---|
| 108. A performance contract between the independent public charter school board and the patron provider is required.  | Yes | protections with which the school might contract with directly or indirectly (e.g., cannot serve on the board, be an employee or agent). It provides that any violation mandates a contract voidable at the option of the state commissioner and that any board member who violates this prohibition is individually liable to the charter school for any damages caused by the violation. | Total Score: 0  |   |
| 109. Existing and potential conflicts of interest between the two parties are required to be disclosed and explained in application.  | Yes | Minnesota law also requires that charter schools' annual audits include a copy of all charter school agreements for corporate management services.   |   |   |
| <p><b> fiscally and legally autonomous schools with independent public charter school boards</b></p> <p>110. Fiscally and legally autonomous schools (e.g., schools have a authority to receive and disburse funds, enter into contracts, and sue and be sued in their own names).</p>  |     | Minnesota law provides that charter schools are fiscally and legally autonomous schools with independent school boards, and are to be considered an LEA. Statute includes conflict of interest provisions regarding employees, agents, and board members of administrators serving on any charter school's board of directors.   | Rating:<br>Weight: 3<br>Total Score: 12   |   |
| <p>111. Special governing boards independent of the authorizer and created specifically to govern their charter school(s).</p>  |     | Yes  |   |   |
| <p><b>Clear Student Recruitment, Enrollment and Lottery Procedures</b></p> <p>12A. Open enrollment to any student in the state.</p>   |     | Minnesota law requires charter schools to be open to all in the state. Minnesota law requires a random selection lottery process to be used if interest exceeds capacity.  | Rating:<br>Weight: 1<br>Total Score: 3  |   |
| <p>12B. Lottery requirements.</p>   |     | Yes  | Minnesota law provides that enrollment preferences must be given to siblings of enrolled pupils (and any foster children of enrolled pupils' parents).  |   |
| <p>12C. Required enrollment preferences for priority-enrolled students with low income, prior-year students within chartered schools, and siblings of enrolled students enrolled at a charter school.</p>   |     | Some   | Effective for 2019-21, Minnesota law allows charter schools to give preference for children of the school's teachers, but not for board members (and no maximum percentage is stated).  |   |
| <p>12D. Optional enrollment preferences for children of a school's founders, governing board members, and full-time employees, not exceeding 10% of the school's total student population.</p>  |     | Some   |   |   |
| <p><b>Automatic Exemptions from Many State and District Laws and Regulations</b></p> <p>13A. Exemptions from all laws, except those covering health, safety, civil rights, student accountability, employee criminal history checks, open meetings, freedom of information, and generally accepted accounting principles.</p>   |     | Yes  | Minnesota law provides that charter schools are exempt from all statutes and rules applicable to traditional public schools or districts unless a statute or rule is made specifically applicable to a charter school or is included in the charter school law.   |   |
| <p>13B. Exemption from state teacher certification requirements.</p>  |     | No   | Minnesota law does not exempt charter schools from state teaching license requirements.   |   |
| <p><b>Automatic Collective Bargaining Exemption</b></p> <p>14A. Charter schools authorized by non-local board authorities are exempt from participation in district collective bargaining agreements.</p>   |     | Yes  | Minnesota law provides that a charter school's teachers are not employees, and may organize for collective bargaining similar to teachers in other districts. It also provides that bargaining units at a school authorized by a traditional school district must negotiate as if it were still within the charter school governing body or remain part of the school district unit if certain conditions are approved by the state.  | Rating:<br>Weight: 0<br>Total Score: 12 |
| <p>14B. Charter schools authorized by local boards are exempt from participation in district collective bargaining agreements.</p>  |     | Yes  |   |   |
| <p><b>Multi-School Charter Contracts and/or Multi-Charter Contract Boards Allowed</b></p> <p>15A. Oversee multiple schools linked under a single contract with independent fiscal and academic accountability for each school.</p>  |     | Some   | Minnesota law allows authorizers to permit a school which meets certain criteria (including improved academic performance and growth) to expand operation to additional sites (as approved by the state commissioner following the submission of a supplemental affidavit). These additional sites however, are considered additional "campuses" of a given school, not separate schools. Each charter school must have its own charter board, with such board only allowed to file one charter contract. | Rating:<br>Weight: 1<br>Total Score: 1  |
| <p>15B. Void multiple charter contracts with independent fiscal and academic accountability for each school.</p>  |     | No   |   |   |
| <p><b>Extra-Curricular and Extracurricular Activities Eligibility and Access</b></p> <p>16A. Laws or regulations explicitly state that charter school students and employees are eligible to participate in all extracurricular leagues, competitions, awards, scholastics, and recognition programs available to non-charter public school students and employees.</p> |     | No   | Minnesota law is silent about charter eligibility and access. Although charter schools are LEAs with all the rights and responsibilities associated with other district LEAs, silence on these provisions results in a level of uncertainty. Statute is silent in that there is no specific statutory language guaranteeing these rights to charter schools.  | Rating:<br>Weight: 1<br>Total Score: 1  |
| <p>16B. Laws or regulations explicitly allow charter school students in schools not providing extra-</p>  |     | No   |   |   |

|  |      |   |         |                                     |
|--|------|---|---------|-------------------------------------|
| <p>curricular and instructional activities to have access to those activities at non-charter public schools for a fee by a mutual agreement.</p>     |      |   |         |                                     |
| <p><b>Clear Identification of Special Education Responsibilities</b></p>   |      |   |         |                                     |
| 17A. Clarity regarding which entity is the local education agency (LEA) responsible for providing special education services.                        | Yes  | <p>Minnesota law provides that charter schools and the LEAs for special education services and any such funds flow directly to them. In addition, it provides that charter schools may bill a student's resident school district for any additional funds needed to cover excess costs over and above the state and federal funds allocated for that student.</p>   | Rating: | <p>Weight: 2<br/>Total Score: 2</p> |
| 17B. Clarity regarding funding for low-income, high-cost services for charter schools (in the same amount and/or in a manner similar to other LEAs). | Yes  |   |         |                                     |
| <p><b>Equitable Operational Funding and Equal Access to All State and Federal Categories Funding</b></p>   |      |   |         |                                     |
| 18A. Equitable operational funding statutory claim.  | Some | <p>Minnesota law provides that charter schools receive from the state an amount equal to average state per-pupil operational revenues for state aid (which flows from the state to the school). In addition, it provides that charters receive from the state a percentage of the operating levy of the local level (which is enforced by district). It also provides that charter schools and LEAs have equal access to all applicable categorical funding.</p> <p>Minnesota law's funding formula provides dollars for transportation to charter schools and gives charter schools the option of providing transportation (and keeping the transportation funds) or requesting the traditional district to provide transportation (and then paying those funds to that district).</p> | Rating: | <p>Weight: 3<br/>Total Score: 3</p> |
| 18B. Equal access to all applicable categorical federal and state funding, and clear guidance on the pass-through of such funds.                     | Yes  |   |         |                                     |
| 18C. Funding for transportation similar to school districts.   | Yes  |   |         |                                     |
| <p><b>Equitable Access to Capital Funding and Facilities</b></p>   |      |   |         |                                     |
| 19A. A per-pupil formula, allowance which annually reflects school average district capital costs.   | Some | <p>Minnesota law prohibits charter schools from using any state funds to purchase land or buildings (although charter schools may do so with non-state funds). It allows charter schools to lease space from a public or private owner or from a private nonprofit, nongovernmental, nonprofit, and with approval of the state department of education from either secular or religious owners.</p> <p>Minnesota law provides lease set to charter schools in the amount of 20% of lease costs (up to \$1,200 per pupil). This amount, however, does not have a mechanism to increase over time (and it is a separate legislative appropriation).</p>   | Rating: | <p>Weight: 3<br/>Total Score: 2</p> |
| 19B. A state grant program for charter school facilities.  | No   |   |         |                                     |
| 19C. A state loan program for charter school facilities.   | No   | <p>Minnesota law specifies that charter schools that own their own facilities may not receive state aid. However, it allows charter schools that meet certain requirements (e.g., operating a minimum number of years, have not unreserved general fund balances) may, with state commissioner approval, create an affiliated nonprofit building corporation, which may renovate or purchase an existing facility or construct a new school facility. The law allows such nonprofit building corporations to secure financing through various sources available to other nonprofits (e.g., municipal bonds, mortgages), and allow charter schools to use that lease rate for facilities owned by nonprofit building corporations.</p>   |         |                                     |
| 19D. Equal access to tax-exempt bonding authorized or a law charter schools to have their own bonding authority.                                     | Some |   |         |                                     |
| 19E. A mechanism to provide credit enhancement for public charter school facilities.   | No   |   |         |                                     |
| 19F. Equal access to existing state facilities programs available to non-charter public schools.   | No   |   |         |                                     |
| 19G. Right of first refusal to purchase or lease at or below fair market value a closed, unused, or unreserved public school facility or property.   | No   |   |         |                                     |
| 19H. Prohibition of facility-related requirements stricter than those applied to traditional public schools.   | No   |   |         |                                     |
| <p><b>Access to Relevant Employee Retirement Systems</b></p>   |      |   |         |                                     |
| 20A. Charter schools have access to relevant state retirement systems available to other public schools.   | Yes  | <p>Minnesota law provides that the employees of charter schools are considered public employees for retirement purposes and the schools and employees must contribute to the appropriate retirement system.</p>   | Rating: | <p>Weight: 2<br/>Total Score: 4</p> |
| 20B. Charter schools have the option to participate if it is not required.   | No   |   |         |                                     |
| <p><b>Equal Title &amp; Gender Equity under Law</b></p>  |      |   |         |                                     |
| <p>Equal Title &amp; Gender Equity under Law</p>   |      |   |         |                                     |

**(A)(1) – Exhibit D: *Minneapolis Public Schools 2007 Strategic Plan***

(b)(6)



Minneapolis Public Schools  
*2007-2012 Strategic Plan*

## Our Mission

To ensure that all students learn. We support their growth into knowledgeable, skilled and confident citizens capable of succeeding in their work, personal and family lives into the 21st century.

(b)(6)



# Our Values: Children First

- One Right to quality education**  
All children deserve strong, effective public schools that prepare them for post-secondary education, lifelong learning, work, and citizenship.
- Two Importance of family**  
Parents and families want the best for their children. We welcome families into our schools, encourage their partnership, and expect their participation in the education of their children.
- Three Equity**  
Every student deserves equitable access to quality academic programs and the support to be successful, regardless of race, economic status, or circumstance.
- Four Diversity**  
Every student in Minneapolis has outstanding potential, and it is our duty to help him or her realize that potential. The combination of a diverse student body and staff is our District's strength.
- Five Respect for employees**  
We respect and value all MPS employees. Effective teachers and principals are essential for academic achievement and we commit to having and supporting the highest-quality staff.
- Six Partnership for youth**  
Public and private partnerships are essential for strong schools and communities. Everyone has a role in helping future generations succeed.
- Seven Transparency and accountability**  
We commit to being effective and responsible stewards of public and private resources. We pledge transparency and accountability in our finances and operations.
- Eight Sustainability**  
Creating lasting change is our goal. We will manage our facilities, resources, people, programs, and infrastructure to maximize efficiency, build on success, and plan deliberately for the future.

# Did you know?

## Facts and Figures on Minneapolis Public Schools

| Our Schools                |           |
|----------------------------|-----------|
| Elementary Schools (K-5)   | 24        |
| Elementary Schools (K-8)   | 19        |
| Middle Schools (6-8)       | 7         |
| Senior High Schools (9-12) | 7         |
| Special Education Schools  | 9         |
| Alternative Schools        | 4         |
| Contract Alternatives      | 17        |
| Charter Schools            | 4         |
| <b>Total</b>               | <b>91</b> |

| Our Staff                           |       |
|-------------------------------------|-------|
| Total Staff                         | 6,255 |
| Administrators                      | 119   |
| Principals and Assistant Principals | 135   |
| Teachers                            | 3,302 |
| Educational Assistants              | 1,415 |
| Clerical and Student Support        | 355   |
| Food Service                        | 177   |
| Transportation                      | 255   |
| Janitor Engineers                   | 355   |
| Trades                              | 142   |
| Staff of Color                      | 23%   |

| Our K-12 Students          |        |        |
|----------------------------|--------|--------|
| Total Enrollment           | 34,570 | 100.0% |
| White-Americans            | 10,299 | 29.8%  |
| Students of Color          | 24,271 | 70.2%  |
| —African-American          | 13,696 | 39.6%  |
| —Hispanic-American         | 5,905  | 17.1%  |
| —Asian-American            | 3,105  | 9.0%   |
| —American-Indian           | 1,565  | 4.5%   |
| Special Education*         | 5,489  | 15.9%  |
| English Language Learners* | 8,020  | 23.2%  |
| Free/Reduced Lunch*        | 22,678 | 65.6%  |

| 2007-18 Budget                                 |               |
|--|---------------|
| General Operating Fund                         | \$435,823,204 |
| Food Service Fund                              | 14,473,191    |
| Re-employment Fund                             | 2,200,000     |
| Community Services Fund                        | 18,859,046    |
| Capital Project/<br>Building Construction Fund | 30,575,596    |
| Debt Service Fund                              | 74,730,058    |
| Funded Grant Projects                          | 77,792,656    |

\* Included in the total student enrollment

# From the Superintendent

The words beyond this page are some of the most important in the history of Minneapolis Public Schools. They are the result of nine months of intense listening to the voices of Minneapolis families, teachers, principals and others with a concern for our children's future. They are grounded in the best practices of school districts around the country, and they represent an unwavering commitment to bold ideals and bold ideas.

Our vision – to make every child college ready by 2012 – is ambitious. But the strategies and action steps outlined in this plan make it doable. In the face of an unacceptable achievement gap, the looming budget shortfall and federal mandates, it will require the support of everyone who has a stake in our children's future – parents, teachers, businesses, law makers, charitable organizations, Minneapolis residents, even our students.

I am proud of this strategic plan. I am even prouder of the breadth of involvement in its creation. I promise to keep you apprized of our progress, and sincerely hope that you will play a part in its success.

*Superintendent William D. Green, J.D., Ph.D.*

## Table of Contents

|   |    |
|---|----|
| Our Mission   | 2  |
| Our Values: Children First                                    | 3  |
| Did you know? Facts and Figures on Minneapolis Public Schools | 4  |
| From the Superintendent                                       | 5  |
| About the Minneapolis Public Schools Strategic Plan           | 6  |
| Strategic Plan Overview                                       | 7  |
| Action Steps  | 13 |
| Achieving the Vision  | 17 |

# About the Minneapolis Public Schools Strategic Plan

In late 2006, the Minneapolis Public Schools' (MPS) District Administration and Board of Education decided that it was time to develop a new strategic plan that would set the direction and priorities for the District for the next five years. The Board called in external help from two sources: The Itasca Project, an alliance of Twin Cities business and civic leaders, and McKinsey and Company, Inc., a global management consulting firm. McKinsey staff donated their time to lead the process, starting in May 2007. They worked closely with a team of District staff and scores of key stakeholders. They also drew heavily upon one of Minneapolis' greatest strengths – the insights and support of MPS families who want their children to succeed.

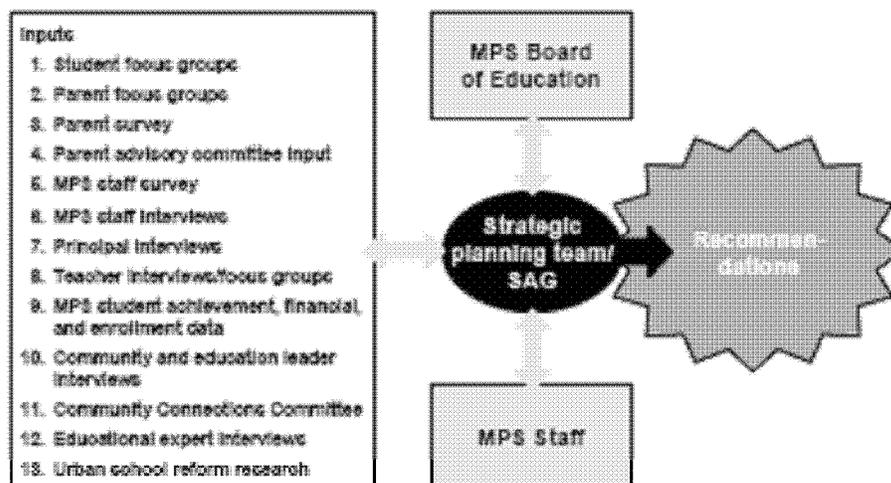
## Our four-step process

The work described in this document was created in four phases.

**Step One Plan and launch (May 2007)**  
MPS announced the process, formed the planning team, and mapped out phases.

**Step Two Establish a common fact base (June-July 2007)**  
Team members collected information from a wide variety of stakeholders. They used the District's data to analyze current and projected financial, student achievement, and student enrollment performance and trends. Then they researched what works – and what does not work – in school districts across the country.

**Step Three Develop and refine options for change (August-October 2007)**  
The team gathered insights from multiple groups to develop recommendations:



A Strategic Advisory Group (SAG) was created that included parents, community leaders, business executives, government leaders, MPS teachers and principals, and others. The SAG provided input on the solutions that the team then refined and tested with more stakeholders. Throughout this phase, the District Administration and Board of Education contributed substantial time and expertise, reviewing data and contributing ideas informally and during multiple all-day retreats.

#### Step Four

#### Decide on core strategies (November-December 2007)

The MPS Board of Education set the District's new strategic direction and core strategies when it approved the proposed recommendations on December 11, 2007.

Detailed implementation planning occurred in January and February 2008.

Additional design and planning work is underway in several key areas, for example:

- Program and Operations planning to ensure consistently high-quality choices for all families while most effectively and efficiently using our resources (buildings, transportation, etc.).
- English Language Learner academic achievement strategy.
- Framework for Eliminating Institutional Racism.
- Accountability system design and financial reporting redesign.
- Marketing and enrollment strategy.

## Strategic Plan Overview

### The Vision: Make Every Child College Ready

The Minneapolis Public Schools' Board of Education seeks to achieve two goals by 2012: raise every student's achievement, and close the racial and income achievement gaps. But the District is aiming higher than simply graduating students. Instead, we've committed to an ambitious vision: "Every Child College Ready."

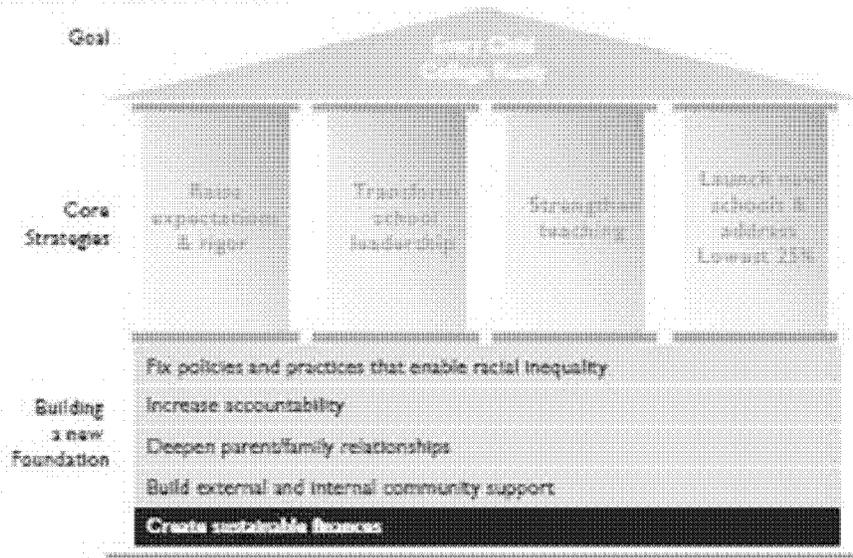
### The Measurable Outcomes by 2012

- 80 percent of all MPS students will score "proficient" or higher on MCA-II Math and Reading tests.
- 80 percent of all MPS students will achieve scores on a college entrance exam that predict success in college.
- Race and income achievement gaps will be reduced by 75 percent.
- English Language Learning students will have achieved academic English language proficiency within seven years.

## The Strategies

MPS will achieve its vision by increasing equity, raising expectations, strengthening relationships and focusing resources.

### Every Child College Ready



Nine recommendations within these three strategies are outlined as follows:

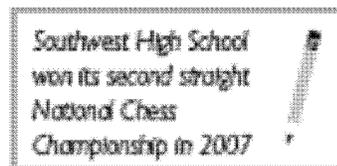
- Raise expectations and academic rigor for all students, aligning pre-K–12 programs with the college readiness goal.
- Identify and correct practices and policies that perpetuate the achievement gap and institutional racism in all forms.
- Develop highly effective principal corps and ensure they have the capacity to establish and lead outstanding instructional teams.
- Develop high-performing teacher corps and provide professional development and support to get excellent results for all students.
- Set clear expectations for all staff at every level – reward success, support and develop, but remove low performers when required.
- Transform relationships and partner with families.
- Build widespread internal and external support and partnerships to get results.
- Restructure the lowest-performing 25 percent of schools, increasing the flexibility and autonomy for the lowest and highest performing.
- Create and sustain a positive financial position.

**1.1 Raise expectations and academic rigor for all students, aligning pre-K–12 programs with the college readiness goal.**

- Raise expectations of all students.
- Increase rigor in curriculum and instruction and align with standards and post-secondary expectations, with extra focus on early literacy (reading by 3rd grade) and numeracy (Algebra in 8th grade).
- Set expectations for what habits and behaviors students need to succeed.
- Increase access to advanced academic programs to make sure those programs reflect the MPS student body.
- Increase kindergarten readiness of all Minneapolis 5-year-olds.
- Redesign the middle and high school academic program.
- Develop a comprehensive strategy to address English Language Learner-specific needs.
- Continue the transformation of Special Education instruction and programming.
- Address barriers to learning and ensure students achieve at least 95 percent attendance.

**1.2 Identify and correct practices and policies that perpetuate the achievement gap and institutional racism in all forms.**

- Create a *Framework for Eliminating Institutional Racism* and integrate it into all aspects of the Strategic Plan and decision making.
- Develop pro-equity/anti-racism leadership at all levels of the District.
- Create understanding among all staff of institutionalized barriers to achievement by students of color and increase cultural competence.
- Revise academic policies and practices as needed to promote access and high achievement by students of color.
- Actively engage parents and the community in mutual learning to raise academic achievement.
- Develop strategies for recruiting and retaining staff from under-represented racial and ethnic groups.



- **Develop highly effective principal corps and ensure they have the capacity to establish and lead outstanding instructional teams.**
  - Change the role of principals and how their time is allocated from building management to instructional leadership (e.g., pilot ways to reallocate administrative tasks, such as to the new role of School Administrative Manager).
  - Refocus professional development to assessing rigor and fostering instructional effectiveness in the classroom, especially in literacy, math, ELL, special education, and the integration of culturally appropriate strategies.
  - Allow principals more input into choosing their own teams and hold them accountable.
  - Evaluate and remove underperforming principals.
  - Expand the pipeline of high-quality, diverse principal talent.

- **Develop high-performing teacher corps and provide professional development and support to get excellent results for all students.**
  - Reallocate most professional development resources to individualized and job-embedded coaching.
  - Strengthen teacher-led professional learning communities in which teachers use student data, best-practice sharing, observation, and coaching to improve instruction.
  - Integrate cultural competence and family engagement strategies into professional development.
  - Deepen teacher content expertise through professional development or changing licensure requirements in key areas (e.g., middle school math).
  - Improve school and classroom climates for learning and increase positive behavior.
  - Strengthen instructional strategies for key groups (e.g., ELL, Special Education students).
  - Selectively reduce class size (e.g., in lowest-performing 25 percent of schools).
  - Free up teacher time to focus on highest-value activities.
  - Expand pipeline of high-quality, diverse talent and revise posting and hiring requirements (e.g., instructional skills, continuous learner mindset, cultural competence, technology, licensure).
  - Evaluate and remove underperforming teachers.
  - Revise the performance management system to align evaluation and the pay-for-performance system with achievement goals.

**1.3 Set clear expectations for all staff at every level – reward success, support and develop, but remove low performers when required.**

- Clarify goals and expectations for every role.
- Design and implement an overall accountability system, including:
  - Simple scorecards with targets, aligned at every level.
  - Departmental plans and service-level agreements.
  - Individual performance evaluations tied to District goals and results.
  - Program evaluation with cost-benefit analysis.
- Review performance often, including multiple perspectives.
- Publish District and individual school scorecards annually.
- Eliminate barriers to retaining top performers.
- Attach rewards and consequences to performance.

**1.4 Transform relationships and partner with families.**

- Ensure MPS staff are culturally competent and can work well with families of all backgrounds.
- Create collaborative partnerships between parents, teachers, and principals to address student needs.
- Increase family connectedness at school level and strengthen the role of family liaisons.
- Support families to help students achieve, including launching a Parent Academy and network of support for communities of color and new families.
- Develop the trust of parents through transparent operations.
- Deepen relationships through good experiences when it matters most (e.g. via improving Welcome Center processes, creating an "Ombud/Parent Helpline," customer service training).

**1.5 Build widespread internal and external support and partnerships to get results.**

- Develop a comprehensive communications plan to build internal and external support.
- Engage local communities and neighborhoods.
- Increase collaboration with Hennepin County and the City of Minneapolis.
- Seek technical assistance and new or ongoing funding in target areas from the State of Minnesota.
- Forge tighter links to higher education institutions.
- Leverage business, non-profit and philanthropic financial and people resources.
- Formalize commitments wherever possible, potentially forming a "Minneapolis Compact for Kids."

 Restructure the lowest-performing 25 percent of schools, increasing the flexibility and autonomy for the lowest and highest performing.

- Identify and address the lowest-performing 25 percent of MPS schools over the next five years, via new approaches and greater flexibility.
- Establish an “Office of New Schools” to initiate new approaches.
- Create a portfolio of new school models, potentially including but not limited to enhanced fresh-starts, self-governed schools, “Pilot”-type schools, and contracted schools.
- Establish clear accountability and performance targets for new schools in line with standards.
- Provide greater autonomy to the highest-performing schools (in addition to the targeted lowest-performing 25 percent).
- Collaborate with other high-quality local school providers (e.g., other districts, non-MPS charters, private and parochial schools).

 Create and sustain a positive financial position.

- Aggressively address the forecasted 2008–2009 budget deficit and align the budget with the priorities of the Strategic Plan.
- Shift to two-year budget planning, ensuring each year’s decisions consider impact over a two-year period.
- Develop a long-range Master Facilities Plan in concert with the academic program.
- Explore opportunities to sell District services (e.g., food service, online curriculum).
- Improve core Finance processes and reporting.
- Increase transparency.

Six MPS teachers  
have won the \$25,000  
Millen Family Foundation  
National Educator Award  
since 2000, including  
Patrick Henry’s Sharon  
Ornelas in 2007



# Action Steps

To achieve our vision outlined in the three strategies above, each of their nine recommendations is supported by action steps detailing what will be done, who will do it, and when. A selection of these action steps is outlined below. To view the entire plan in progress, go to the MPS Web site at [www.mpls.k12.mn.us](http://www.mpls.k12.mn.us).

## **1.1** Raise expectations and academic rigor for all students aligning pre-K-12 programs with the college readiness goal.

*Primary accountability: Office of Academic Affairs*

| Action steps include:   | Implementation timing |
|---|-----------------------|
| • Communicate high expectations across the District, starting from the top                      | 2008–09               |
| • Seek funding to expand Early Childhood program by 50%, focusing on ELL 4-year-olds            | 2008–09               |
| • Implement new math curriculum and improve elementary and middle school math instruction       | 2008–09               |
| • Adopt “Balanced Literacy” approach and tools  | 2009–10               |
| • Increase rigor in middle and high schools and access to advanced academics (IB, AP, CIS, CTE) | 2008–11               |
| • Develop comprehensive strategy for ELL instruction  | 2008–09               |

## **1.2** Identify and correct practices and policies that perpetuate the achievement gap and institutional racism in all forms.

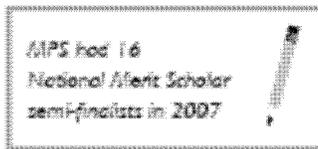
*Primary accountability: Superintendent; District Equity Leadership Team*

| Action steps include:  | Implementation timing |
|--|-----------------------|
| • Create a Framework for Eliminating Institutional Racism and engage community | Spring 2008           |
| • Review District policies, procedures and practices for potential bias        | Spring 2008           |
| • Incorporate cultural competence into all performance evaluation tools        | 2008                  |
| • Increase initiatives to recruit diverse staff                                | 2008–09               |

**Develop highly effective principal corps and ensure they have the capacity to establish and lead outstanding instructional teams.**

*Primary accountability: Office of Academic Affairs*

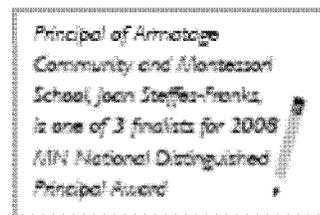
| Action steps include:   | Implementation timing |
|---|-----------------------|
| • Launch MPS Principals' Academy for aspiring principals                    | Summer 2008           |
| • Develop principals to assess rigor and foster instructional effectiveness | Fall 2008             |
| • Pilot School Administrative Manager role                                  | Fall 2008             |
| • Refine new principal performance evaluation system                        | Ongoing               |



**Develop high-performing teacher corps and provide professional development and supports to get excellent results for all students.**

*Primary accountability: Office of Academic Affairs*

| Action steps include:  | Implementation timing |
|--|-----------------------|
| • Continue to roll out Principles of Learning and cultural competence training                         | 2008–09               |
| • Expand secondary and elementary coaches  | 2008–09               |
| • Better engage classroom support staff in core professional development                               | 2008–09               |
| • Conduct teacher time audit and identify opportunities to reduce non-instruction-related tasks        | 2008–09               |
| • Expand Positive Behavior, Interventions & Support (PBIS) implementation, and strengthen school plans | 2008–09               |
| • Revise teacher hiring and posting requirements   | 2008–09               |



**5. Set clear expectations for all staff at every level – reward success, support and develop, but remove low performers when required.**

*Primary accountability: Chief of Staff; Strategic Planning; Human Resources; Research*

| Action steps include:   | Implementation timing |
|---|-----------------------|
| • Design and implement overall accountability system                      | 2008                  |
| • Revise District and school-level scorecards                             | 2008                  |
| • Develop system for collecting 360-degree feedback                       | 2008–09               |
| • Develop departmental goals, plan, metrics, and service-level agreements | 2008–09               |
| • Co-develop and pilot a new teacher evaluation system                    | 2008–09               |
| • Align rewards and consequences with performance                         | 2008–10               |

**6. Transform relationships and partner with families.**

*Primary accountability: Office of Community and Family Engagement*

| Action steps include:  | Implementation timing |
|--|-----------------------|
| • Establish vision, clear expectations, and strategies for engaging families across District       | Spring 2008           |
| • Provide school-based family liaisons with training in developing School Family Involvement plans | 2008–09               |
| • Design and pilot a Parent Academy  | Spring–Summer 2008    |
| • Create Ombud/Parent Helpline   | 2008                  |

**7. Build widespread internal and external support and partnerships to get results.**

*Primary accountability: MPS Superintendent; Communications; Strategic Planning*

| Action steps include:  | Implementation timing |
|--|-----------------------|
| • Develop a culturally aware communications plan that considers unique needs of different groups           | Spring 2008           |
| • Pilot new models, e.g., school-based “study circles”   | Spring 2008           |
| • Engage in Board-to-Board dialogue with City Council and County Commissioners on key joint priorities     | Spring 2008           |
| • Partner with philanthropic community   | Ongoing               |
| • Identify companies and/or business organizations to donate expertise in key functions, e.g., Finance, HR | Spring 2008           |

**10 Restructure the lowest-performing 25 percent of schools, increasing the flexibility and autonomy for the lowest and highest performing.**

*Primary accountability: Office of New Schools; Office of Academic Affairs*

| Action steps include:   | Implementation timing |
|---|-----------------------|
| • Establish Office of New Schools and staff with mix of internal and external talent to foster entrepreneurship | Spring 2008           |
| • Develop criteria for selecting schools to be restructured, and identify first group of schools for 2009–10    | Spring 2008           |
| • Define potential portfolio of approaches, structures, and degrees of autonomy                                 | Spring 2008           |
| • Form advisory board   | Spring 2008           |

**11 Create and sustain a positive financial position.**

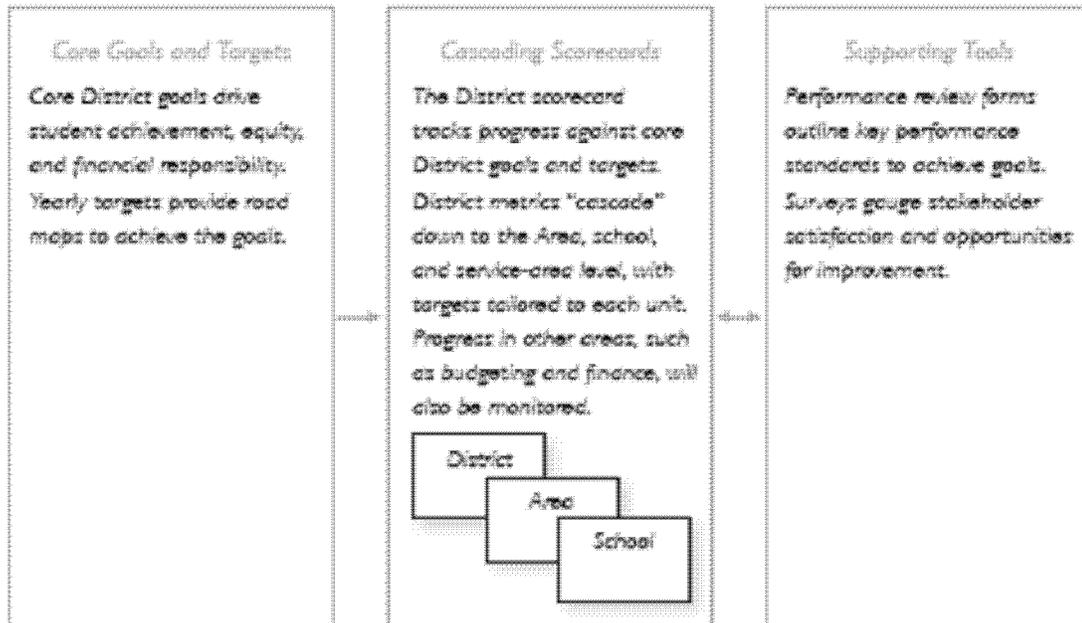
*Primary accountability: Finance Department; Operations Department*

| Action steps include:   | Implementation timing |
|---|-----------------------|
| • Balance 2008–09 budget and align with Strategic Plan  | Underway              |
| • Develop joint Academic Program–Operations plan to optimize quality programs, facilities, and transportation | Spring–Summer 2008    |
| • Complete current Facilities Reuse Process   | Spring 2008           |
| • Develop overall budget process that focuses on results and increases transparency of spending choices       | 2008–09               |
| • Create a more user-friendly financial reporting infrastructure  | 2008–09               |

In addition to the nine core recommendations, to upgrade our organizational effectiveness we will be conducting capabilities diagnostics in each department, resolving key gaps, and providing targeted professional development to our leaders.

# Achieving the Vision

MPS is developing a set of performance management tools to monitor progress against the Strategic Plan's 2012 vision, strategies, and action steps. The tools begin with core goals and yearly targets that get MPS closer to its ultimate goals, and include: scorecards for the District, each geographic area, and ultimately for each school; performance reviews; and stakeholder satisfaction surveys. The complete District scorecard and targets are available at [www.mpls.k12.mn.us](http://www.mpls.k12.mn.us).



| Measure  | Baseline (2007) | 2008 Target (2007) | 2009 Target (2007) | 2010 Target (2007) | 2011 Target (2007) | 2012 Target (2007) |
|--|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>Core Student Achievement goals</b>  |                 |                    |                    |                    |                    |                    |
| • MCA-III/TELL proficiency (3-8, 10/11 grades)                                 |                 |                    |                    |                    |                    |                    |
| – Math   | 40%             | 48%                | 54%                | 64%                | 71%                | 80%                |
| – Reading  | 48%             | 54%                | 61%                | 67%                | 74%                | 80%                |
| • 3RD State Graduation requirements  |                 |                    |                    |                    |                    |                    |
| – NBSIGRAD Writing (9th grade)   | 73%             | 74%                | 76%                | 77%                | 79%                | 80%                |
| – MCA-III Reading (10th grade)   | 61%             | 65%                | 69%                | 73%                | 76%                | 80%                |
| – MCA-III/TELL Math (11th grade)   | 21%             | 33%                | 45%                | 57%                | 69%                | 80%                |
| • ACT/PLAN (10th grade-index of 4 subjects)                                    | 29%             | 39%                | 49%                | 59%                | 69%                | 80%                |
| • % of ELL students proficient on TEAE within 7 yrs                            | tbd             | tbd                | tbd                | tbd                | tbd                | tbd                |
| <b>Example: Closing the Achievement Gap goal – MCA-III Reading Proficiency</b> |                 |                    |                    |                    |                    |                    |
| • African-American students  | 31%             | 40%                | 49%                | 58%                | 67%                | 76%                |
| • Hispanic students  | 35%             | 44%                | 53%                | 62%                | 71%                | 80%                |
| • American-Indian students   | 33%             | 42%                | 51%                | 60%                | 69%                | 78%                |
| • Asian-American students  | 43%             | 50%                | 58%                | 65%                | 73%                | 80%                |
| • Caucasian students   | 83%             | 84%                | 85%                | 87%                | 89%                | 90%                |
| • English Language Learners  | 23%             | 31%                | 40%                | 49%                | 58%                | 67%                |
| • Special Education students   | 24%             | 33%                | 42%                | 51%                | 60%                | 69%                |
| • Free/Reduced lunch-eligible  | 32%             | 41%                | 50%                | 59%                | 68%                | 77%                |

# Thanks!

Thanks to the many people who helped develop our vision – parents, students, staff, the Strategic Advisory Group, community leaders, government officials, business leaders, the Itasca Project, McKinsey & Company, Inc., philanthropic partners and interested citizens.

## Board of Education

Lydia Lee, Chair  
Pam Costain  
Peggy Flanagan  
Sharon Henry-Blythe  
Tom Madden  
Chris Stewart  
T. Williams

William D. Green, J.D., Ph.D., Superintendent

## Further information

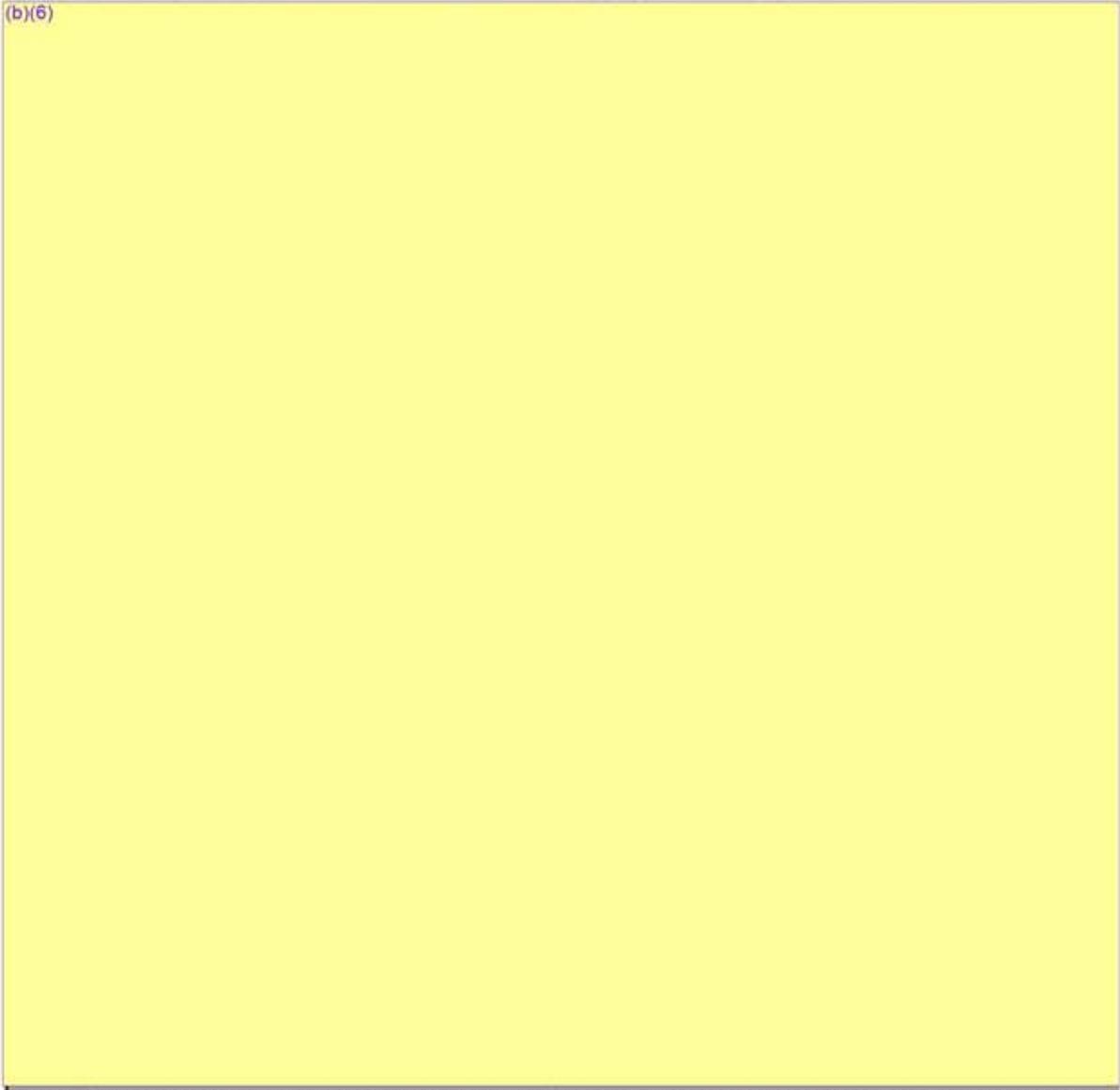
For further information, please go to Strategic Planning at [www.mpls.k12.mn.us](http://www.mpls.k12.mn.us).

Our vision – to make every child college ready by 2012  
– is ambitious. The strategies and action steps outlined  
in this plan make it doable.

(b)(6)



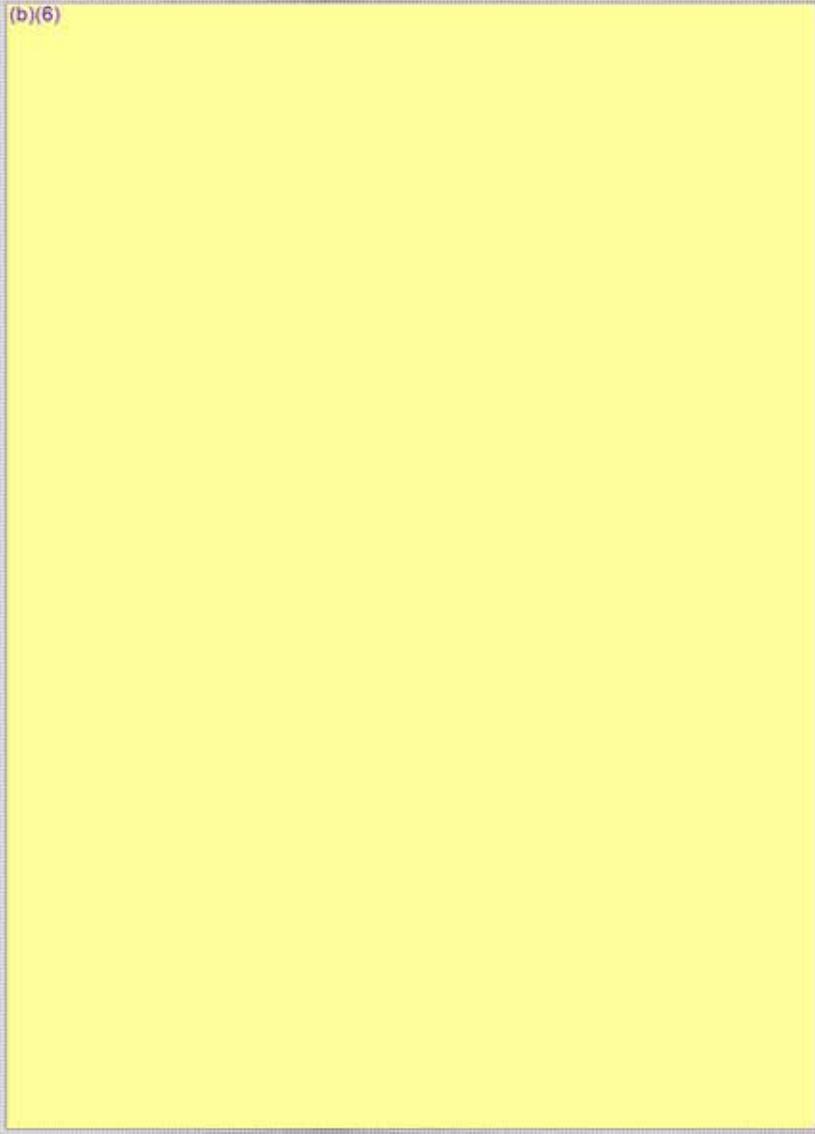
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[www.mpls.k12.mn.us](http://www.mpls.k12.mn.us)



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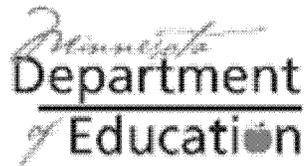


“We’re setting a course for student success in the 21st century.”

– Members of the Governor’s Education Council

## TABLE OF CONTENTS

|   |    |
|---|----|
| Introductory Letter from the Governor's Education Council             | 4  |
| The Vision: Governor's Vision for the Education of Minnesotans        | 5  |
| A Case for Change   | 7  |
| Executive Summary   | 9  |
| <i>Spotlight on Success: Defano High School</i>                       | 13 |
| Indicators of Success: Core Proficiency                               | 15 |
| <i>Spotlight on Success: Jefferson High School in Alexandria</i>      | 16 |
| Indicators of Success: College Readiness and Rigorous Course-Taking   | 18 |
| <i>Spotlight on Success: Anoka's STEP Program</i>                     | 25 |
| Indicators of Success: Graduation Rates                               | 26 |
| <i>Spotlight on Success: Lincoln High School in Thief River Falls</i> | 30 |
| Indicators of Success: College Success                                | 32 |
| <i>Spotlight on Success: Irondale High School in Mounds View</i>      | 40 |
| Formula for Establishing Benchmark and 10-year Goals for Indicators   | 42 |
| Minnesota's Ongoing Efforts   | 44 |
| Governor's Education Council  | 48 |



April 2007

To the Public, Stakeholders, and Minnesota Legislature:

Since 2005, Governor Pawlenty's Education Council has explored innovative initiatives to improve student achievement in Minnesota.

As a part of that process, with the help of a grant from the National Governors Association, we have developed academic success and systemic improvement indicators, which we believe set a course for student success in an increasingly competitive 21st century.

These indicators and benchmarks are built around one simple fact: In order to prepare our students for success in the rapidly changing 21st century, we need a strong and seamless system of education that will help students pursue and prepare for both post-secondary and workforce opportunities.

After all, more than two-thirds of new jobs created by 2010 will require some education beyond high school, such as technical training or an associate's or bachelor's degree. And earning potential increases dramatically the more education young people receive. (The typical bachelor's degree recipient can expect to earn 73 percent more over a 40-year working life than a high school graduate; those with an associate's degree will earn 25 percent more.) We also know that significant job growth will occur in the STEM disciplines – representing science, technology, engineering and math. Minnesota is already leading the way in its promotion of STEM.

As the governor has often pointed out, we can be proud of the success of Minnesota's system of education, which is, in many ways, nation-leading. But if our students are to succeed in a hyper-competitive 21st century, nation-leading is no longer good enough. We need to take Minnesota students from nation-leading to world-competing.

We can take a major step in achieving that goal by preparing more students to pursue post-secondary opportunities and increasing rigor and relevance in the classroom. The indicators contained in this report chart a course for Minnesota's education goals and provide a framework for measuring our progress towards creating 21st century opportunities for Minnesota's children. This report will be published annually to track Minnesota's progress.

Ultimately, it is our sincere hope that Minnesota legislators and policy-makers use this report to set a course for accomplishing this vision.

Sincerely,

Governor's Education Council

# The Vision

Taking Minnesota Students from Nation-Leading to World-Competing

## Governor's Vision for the Education of Minnesotans:

Minnesota's investment in education will help all students achieve an education that will enable them to develop a strong work ethic, gain competitive employment, pursue life-long learning, become engaged citizens for the 21st century and enhance their quality of life.

To achieve this vision, all students shall:

- Engage in learning and progress to on-time graduation and advanced education
- Meet rigorous academic standards, which prepare them to compete in a global economy
- Participate in out-of-school experiences to expand academic and physical skills, explore careers and contribute to society
- Complete early career/post-secondary planning with parents and adult mentors
- Enroll in and complete a post-secondary education program that improves the student's earning capacity and quality of life
- Attain post-secondary education in a secondary setting

To achieve this vision, all high schools shall:

- Ensure student achievement at globally competitive levels
- Ensure more rigorous and relevant course-taking for all students
- Create a personalized learning environment for each student with the support of parents and other adult mentors
- Ensure students use multiple pathways to post-secondary training or college to achieve a minimum K-14 education
- Support out-of-school opportunities for students to extend learning and career exploration
- Ensure high-quality teacher and principal leadership
- Report academic student achievement and progress benchmarks to the public

To achieve this vision, higher education shall:

- Improve success of all students, particularly students from groups underrepresented in higher education
- Increase student learning and improve skill levels of students so they can compete effectively in the global marketplace
- Create a responsive system that produces graduates at all levels who meet the demands of the economy
- Contribute to a state economy that is competitive in the global market through research and workforce development
- Provide access, affordability and choice for all students

# A Case for Change

Taking Minnesota Students from Nation-Leading to World-Competing

## Minnesota's Job Market is Changing

More than two-thirds of new jobs created by 2010 will require some education beyond high school – such as technical training or an associate's or bachelor's degree (Source: Achieve, Inc.) Specifically, new job growth in the professional and high-tech industries will demand an extra 10,500 college graduates per year.

At the same time, the number of college graduates retiring from the Minnesota workforce will grow from 9,000 to 25,000 per year. Not only do we need to fill this pipeline, but we need to ensure we have workers with the necessary skills. Economic forecasts project a 20-33 percent increase in scientific and technical occupations in Minnesota in ten years. This statistic has led Minnesota to focus on the STEM disciplines – science, technology, engineering, and math.

## Earning Potential Increases with Education

Earning potential increases dramatically with increased education. The typical bachelor's degree recipient can expect to earn 73 percent more over a 40-year working life than a high school graduate; those with an associate's degree will earn 25 percent more.

| Education           | Average Annual Earnings | Average Lifetime Earnings |
|---------------------|-------------------------|---------------------------|
| High school dropout | \$22,000                | \$1.1 million             |
| High school diploma | \$31,000                | \$1.4 million             |
| Associate's degree  | \$36,000                | \$1.8 million             |
| Bachelor's degree   | \$50,000                | \$2.5 million             |

Source: College Board, *Education Pays*, 2004 as cited by Achieve, Inc.

### Minnesota Students Need Rigor in STEM Subjects

Minnesota is behind the national average in the percentage of eighth-graders taking Algebra (2005). Only 32 percent of Minnesota eighth-graders took algebra compared to 41 percent nationally and 56 percent in top states.

(Source: [www.noes.ed.gov/nationsreportcard/index/](http://www.noes.ed.gov/nationsreportcard/index/) as cited by American Diploma Project Network)

When looking at the number of eighth-graders taking Algebra from 1992-2005, Minnesota's percentage increased by only 9 points, as compared to a 22 point increase nationally.

(Source: American Diploma Project Network)

Substantially fewer students of color are prepared to take college algebra and college biology.

It is not only the college-bound who need more math. Increasingly, jobs that pay a living wage and allow for career advancement require strong mathematics and problem-solving.

### Minnesota graduates struggle with math and science.

36 percent of students entering public higher education institutions for the class of 2002 took at least one remediation course within two years of high school graduation.

(Source: MNDUCU and the University of Minnesota, *Getting Prepared: A 2005 Report on Recent High School Graduates Who Took Developmental/ Remedial Courses*, August 2005.)

56 percent of all developmental credits taken by the class of 2002 were in mathematics.

(Source: MNDUCU and the University of Minnesota, *Getting Prepared: A 2005 Report on Recent High School Graduates Who Took Developmental/ Remedial Courses*, August 2005.)

8

“Education made Minnesota what it is today, and education will make us what we will be tomorrow.”

Governor Tim Pawlenty,  
2006 State of the State Address

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# Taking Minnesota Students from Nation-Leading to World-Competing

## EXECUTIVE SUMMARY

Minnesota is working to take its students from nation-leading to world-competing. As we strive to improve our system of education from pre-kindergarten through post-secondary, we must set clear goals and indicators of success.

Minnesota is one of 10 states to receive a National Governors Association Honor States Grant Award. The receipt of this award required that Minnesota develop statewide goals and benchmark targets for P-16 student achievement. The Governor's Education Council was formed in October of 2005 and tasked with this goal. We are now the first state in the nation to complete this task and move forward with a set of systemic education improvement indicators.

This report contains the indicators of academic success and systemic improvement developed by the Governor's Education Council, a group made up of leaders from education, higher education and business.

These indicators are intended to serve as a compass for charting education policy in the decade to come. Equally important, they reveal the vital necessity and urgency with which Minnesota's students need to prepare for a 21st century workforce.

Throughout this report, five Minnesota high schools are highlighted. These schools are pioneering innovative and exciting ways to improve rigor, connect students to post-secondary options, and prepare for a 21st century workforce.

## Taking Minnesota Students from Nation-Leading to World-Competing

Four indicators and corresponding goals guide measurements of Minnesota's academic success and chart policy for systemic improvement.

1

### CORE PROFICIENCY

Every student graduating from the K-12 system should meet a core proficiency level so that they can enter the workforce or post-secondary institutions.

- Primary Indicator(s):

MCA II State Test in math and reading administered to students in grades three - eight, nine, 10 and 11.

Our MCA II tests are aligned to workforce and postsecondary academic expectations.

2

### COLLEGE READINESS & RIGOROUS COURSE-TAKING

In order for our state to compete globally, all students must have the opportunity to take a rigorous high school curriculum.

- Primary Indicators:

ACT Participation - 100 percent of students take the ACT prior to high school graduation.

ACT Scores - 100 percent of students achieve a score defined as "college ready" by ACT for all four indicators (mathematics, English, biology and social sciences).

Supporting indicators:

ACT EPAS Program - 100 percent of students will demonstrate they are on track in their preparation for high school rigor and college/career preparation.

College Courses in High School - 100 percent of students participate in Advanced Placement (AP) or International Baccalaureate (IB) in science, math and other core subject areas.

College Credit - 100 percent of the college credit exams taken receive scores or passing grades which result in dual college and high school credit.

## Taking Minnesota Students from Nation-Leading to World-Competing

3

### GRADUATION RATES

In order to ensure all students are successfully completing high school and to identify strategies to keep students in school, it is necessary to measure the graduation rates of students.

- Primary Indicator:

Graduation Rate - 100 percent of students will graduate from high school using the national model adopted by all 50 states.

4

### COLLEGE SUCCESS INDICATORS

Because it is becoming more important to have some post-secondary education, it is desirable to measure the participation and persistence of students entering post-secondary institutions.

- Primary Indicators:

Participation/Enrollment - The number of students that enroll in a post-secondary institution within one year of high school graduation.

Remediation - The number of students taking developmental courses in college.

Retention - The number of first-time, full-time students that return to the same institution for a second year.

Graduation - The number of students who graduate from college within three - six years.

STEM Graduation - The number of students who graduate with AA/Bachelor degrees in the STEM disciplines.

# Spotlight on Success

Taking Minnesota Students from Nation-Leading to World-Competing

## Delano High School: Promoting College Options in High School

Delano High School highlights how the "relevance" and "rigor" aspects of secondary education can be enhanced to improve student learning and connect students with the future workforce. Delano applied to the Minnesota Department of Education to become a "Tier II" school and participate in a systemic high school redesign pilot project.

Delano High School was also recognized this year as a National Model School by the International Center for Leadership in Education, one of 24 schools selected nationwide. A part of this process was for the school to demonstrate "stretch learning opportunities" for students.

Delano students have an array of options within their school to earn post-secondary credit and connect with possible career paths.

One option is the "College in the Schools" program where students have the opportunity to earn over 50 college credits without ever leaving campus from several local colleges, including the University of Minnesota, St. Cloud State University, and Southwest Minnesota State University at Marshall.

For middle level learners, Delano has collaborated with Rasmussen College to establish college classes. Students in this program can earn a high school diploma as well as an associate of arts degree at the same time.

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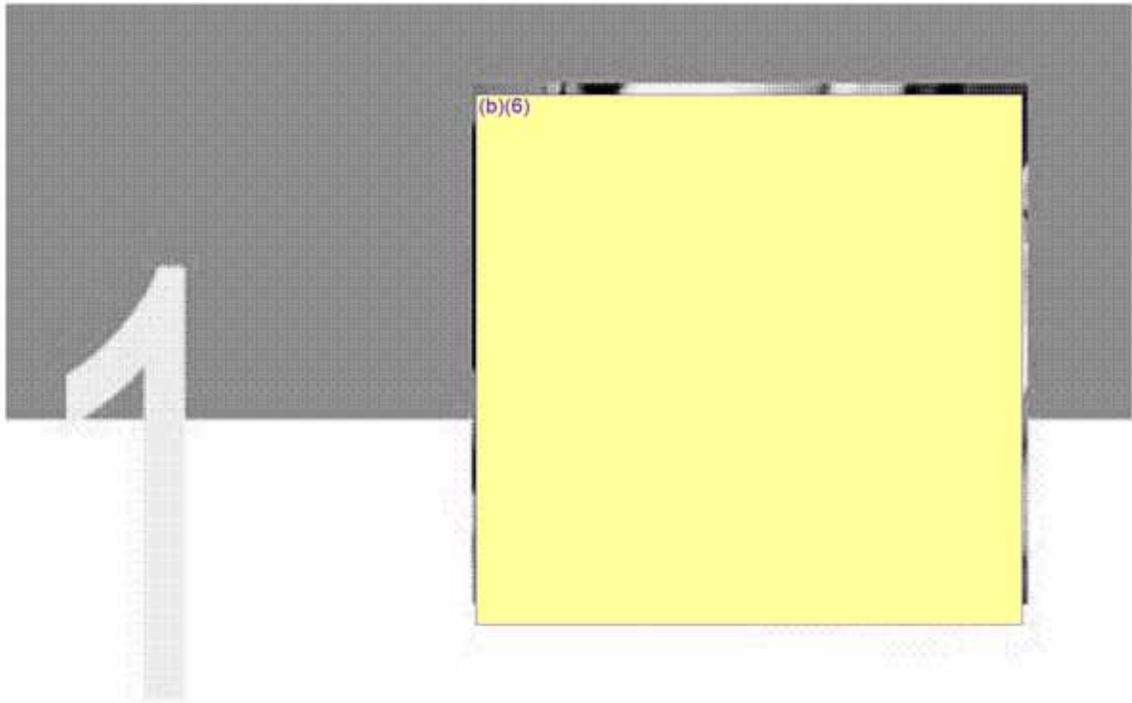
The "Delano Way" is a mantra this school embraces in its collaborative management model. The Delano Way encourages students to

- show up,
- show up on time,
- work hard, and
- believe that failure is not an option.

This mantra is evident in the way Delano has embraced rigorous course offerings and innovative changes to better connect students. To ensure that every student succeeds, Delano created a School Within a School for at-risk students. Students completing this program have achieved a 100 percent graduation rate thus far.

"We are excited to serve and meet the needs of every learner at Delano High School. Whether you are a National Merit Scholar, or student who is perceived at risk, we work to create a rigorous educational opportunity for each child. At Delano High School, we have something for everyone!"

- Delano Principal Dr. W. Bruce Locklear



## CORE PROFICIENCY

All students graduating from the K-12 system should meet a core proficiency level so that they can enter the workforce or post-secondary institutions.

**Ten-year goal:** All students are proficient by 2014 in mathematics and reading; 2018 in science.

The primary indicator for core proficiency is the MCA II state test in grades three - eight, nine, 10, and 11 in subject areas of math and reading.

Current benchmark indicators are mathematics proficiency and reading proficiency. The tables on page 15 list the actual 2006 data for each benchmark along with goals through 2014.

# Core Proficiency

Taking Minnesota Students from Nation-Leading to World-Competing

## Mathematics Proficiency for All Students

|    | Actual 2006 | 2008 Goal | 2010 Goal | 2012 Goal | 2014 Goal |
|----|-------------|-----------|-----------|-----------|-----------|
| 3  | 79%         | 82%       | 88%       | 94%       | 100%      |
| 4  | 70%         | 74%       | 83%       | 91%       | 100%      |
| 5  | 60%         | 66%       | 77%       | 89%       | 100%      |
| 6  | 60%         | 66%       | 77%       | 89%       | 100%      |
| 7  | 59%         | 65%       | 76%       | 88%       | 100%      |
| 8  | 58%         | 64%       | 76%       | 88%       | 100%      |
| 11 | 28%         | 38%       | 59%       | 79%       | 100%      |

## Reading Proficiency for All Students

|    | Actual 2006 | 2008 Goal | 2010 Goal | 2012 Goal | 2014 Goal |
|----|-------------|-----------|-----------|-----------|-----------|
| 3  | 72%         | 76%       | 84%       | 92%       | 100%      |
| 4  | 69%         | 74%       | 83%       | 91%       | 100%      |
| 5  | 72%         | 76%       | 84%       | 92%       | 100%      |
| 6  | 70%         | 75%       | 83%       | 92%       | 100%      |
| 7  | 66%         | 71%       | 80%       | 90%       | 100%      |
| 8  | 64%         | 69%       | 79%       | 90%       | 100%      |
| 10 | 65%         | 70%       | 80%       | 90%       | 100%      |

Source: Annual Index Targets from the August, 2006 Minnesota Department of Education report, 2006 NCLB Adequate Yearly Progress (AYP) Business Rules

# Spotlight on Success

Taking Minnesota Students from Nation-Leading to World-Competing

## Alexandria's Jefferson High School: Setting Student Goals; Linking to STEM

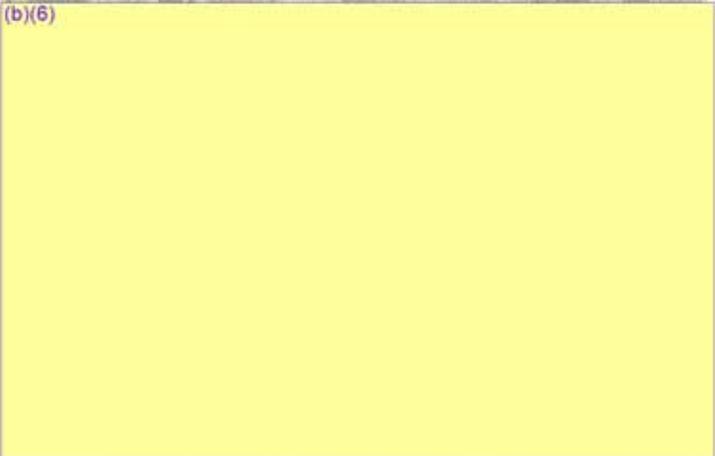
Jefferson High School in Alexandria is intentionally committed to achieving excellence and inspiring passion for learning. Through action research, Jefferson has explored how fostering a culture of personalization along with increased rigor and relevance in curriculum can impact student achievement, participation and engagement.

The school uses a customized advisory program called EXCEL to develop a personalized life plan for each student and foster adult-student mentorships. Each high school freshman meets with their advisor and parents to plan academic, personal and career goals. During high school, each student stays with the same advisor to work towards goals that are set each semester. Students are encouraged to plan for post-secondary options during weekly meetings with advisors, in addition to monitoring grades and academic progress.

Joe Hill, Jefferson High School principal stated, "Creating this personalizing experience has cultivated an enriched climate that expects and supports excellence in our students. The results have been impressive as we have reduced the number of student failures and increased post-secondary readiness."

In just one year, Jefferson saw the number of sophomore students failing first semester classes drop from 38 to 10. This relationship-focused model is improving achievement while promoting the continuation of post-secondary learning.

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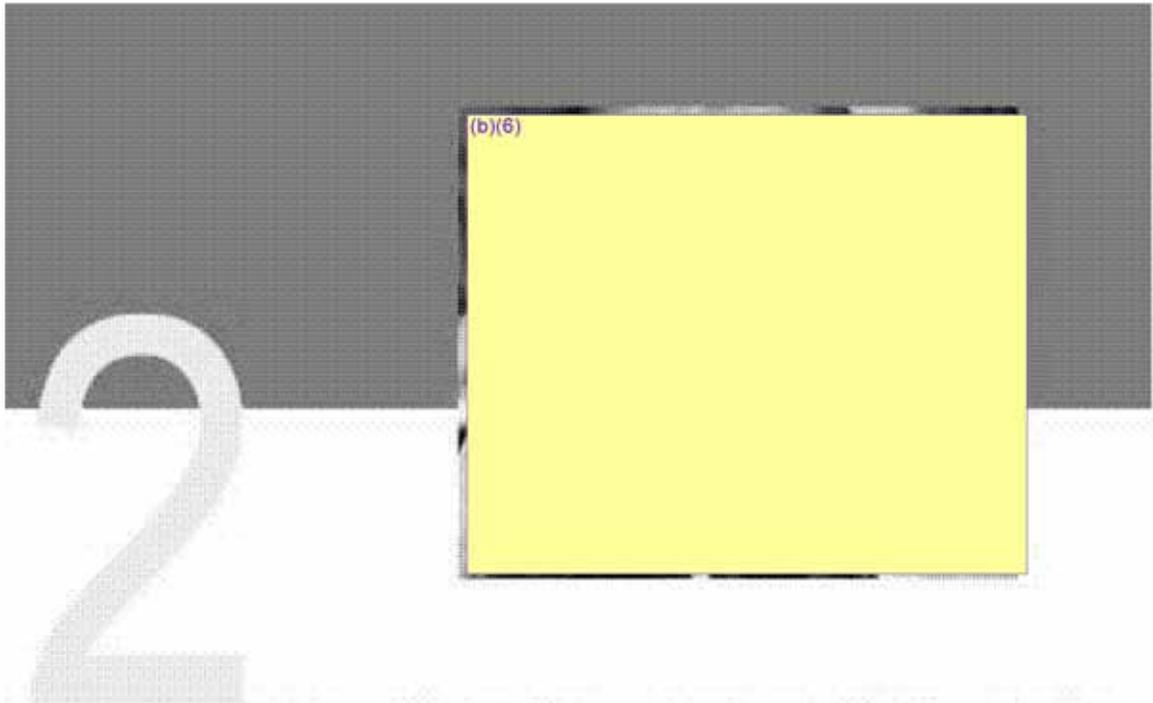
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To help create career relevance, Jefferson received a National Governors Association grant for Model Programs in Technology and Engineering Design. This grant is being used to create an Applied Physical Sciences Laboratory in partnership with the Minnesota Center for Engineering and Manufacturing Excellence and the Alexandria Technical College.

The objectives of this initiative are to increase participation in advanced physical science, math and technology courses as well as increasing the visibility of technician, technologist and engineering careers in manufacturing through exploration of alternative energy technologies.

“We are proud to endorse this partnership that allows Jefferson High School’s advanced physical science students the opportunity to learn through the study of engineering and new technologies for the emerging hydrogen economy.”

- Jefferson Principal Joe Hill



## COLLEGE READINESS and RIGOROUS COURSE- TAKING

In order for our state to compete globally, all students must have the opportunity to take a rigorous high school curriculum.

**Ten-year goal:** All students demonstrate access to a rigorous high school curriculum by 2016.

The primary indicators for college readiness and rigorous course taking are ACT participation and ACT scores.

We want 100 percent of students to take the ACT prior to high school graduation, and 100 percent of students to achieve a score defined as "college ready" by ACT for all four indicators – mathematics, English, biology, and social sciences.

Benchmark indicators are ACT participation and the percentage of ACT-tested students who are college ready. The tables on the following page list actual 2008 data for each benchmark along with goals through 2016.

# College Readiness

Taking Minnesota Students from Nation-Leading to World-Competing

## American College Testing Program (ACT) Participation

|           | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL       | 66%            | 68%          | 73%          | 83%          | 92%          | 100%         |
| Am Indian | 23%            | 27%          | 38%          | 62%          | 81%          | 100%         |
| Asian     | 59%            | 61%          | 67%          | 80%          | 90%          | 100%         |
| Black     | 29%            | 33%          | 43%          | 65%          | 82%          | 100%         |
| Hispanic  | 29%            | 33%          | 43%          | 65%          | 82%          | 100%         |
| White     | 64%            | 66%          | 71%          | 82%          | 91%          | 100%         |

## Percent of ACT-Tested Students College Ready

|           | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL       | 28%            | 32%          | 42%          | 64%          | 82%          | 100%         |
| Am Indian | 13%            | 17%          | 30%          | 57%          | 78%          | 100%         |
| Asian     | 18%            | 22%          | 34%          | 59%          | 80%          | 100%         |
| Black     | 5%             | 10%          | 24%          | 53%          | 76%          | 100%         |
| Hispanic  | 16%            | 20%          | 33%          | 56%          | 79%          | 100%         |
| White     | 29%            | 33%          | 43%          | 65%          | 82%          | 100%         |

Source Data to Determine Progress: ACT Reports:

- Minnesota ACT-Tested Students Likely to Be Ready for College-Level Work – Students Meeting All ACT Benchmark Scores (English Composition, Algebra, Social Sciences, Biology)

## Taking Minnesota Students from Nation-Leading to World-Competing

The first supporting indicator for college readiness and rigorous course-taking is student readiness in grades 8 and 10. We want 100% of students to demonstrate they are on track in their preparation for high school rigor and college and career preparation. Benchmark indicators are the percentage of students who test ready on the ACT EXPLORE and PLAN tests in grades eight and 10. The tables below list actual 2006 data for each benchmark along with goals through 2016.

### Percent of EXPLORE-Tested Student Readiness in Grade Eight

|           | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL       | 16%            | 20%          | 33%          | 58%          | 79%          | 100%         |
| Am Indian | 6%             | 11%          | 25%          | 53%          | 77%          | 100%         |
| Asian     | 11%            | 15%          | 29%          | 56%          | 78%          | 100%         |
| Black     | 2%             | 7%           | 21%          | 51%          | 76%          | 100%         |
| Hispanic  | 4%             | 9%           | 23%          | 52%          | 76%          | 100%         |
| White     | 19%            | 23%          | 35%          | 60%          | 80%          | 100%         |

Source Data to Determine Progress: ACT Reports:

\* Grade 8 - EXPLORE: Minnesota EXPLORE-Tested Students Likely to Be Ready for College-Level Work – Students Meeting All EXPLORE Benchmark Scores (English Composition, Algebra, Social Sciences, Biology)

### Percent of PLAN-Tested Student Readiness in Grade 10

|           | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL       | 23%            | 27%          | 38%          | 62%          | 81%          | 100%         |
| Am Indian | 7%             | 12%          | 25%          | 54%          | 77%          | 100%         |
| Asian     | 18%            | 22%          | 34%          | 59%          | 80%          | 100%         |
| Black     | 3%             | 8%           | 22%          | 52%          | 76%          | 100%         |
| Hispanic  | 6%             | 11%          | 25%          | 53%          | 77%          | 100%         |
| White     | 27%            | 31%          | 41%          | 64%          | 82%          | 100%         |

\* Grade 10 - PLAN: Minnesota PLAN-Tested Students Likely to Be Ready for College-Level Work – Students Meeting All PLAN Benchmark Scores (English Composition, Algebra, Social Sciences, Biology)

### Taking Minnesota Students from Nation-Leading to World-Competing

The second supporting indicator for college readiness and rigorous course-taking is participation in college courses during high school. We want 100 percent of students to participate in Advanced Placement (AP) or International Baccalaureate (IB) courses in science, math, and other core subject areas.

The benchmark indicator is the percentage of students participating in college courses during high school. The table below lists actual 2006 data for each benchmark along with goals through 2016.

**Percent of Students Participating in College Courses in High School<sup>1</sup>**

|               | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|---------------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL           | 38%            | 41%          | 50%          | 69%          | 85%          | 100%         |
| Am Indian     | 8%             | 13%          | 26%          | 54%          | 77%          | 100%         |
| Asian         | 53%            | 55%          | 62%          | 77%          | 88%          | 100%         |
| Black         | 12%            | 16%          | 29%          | 56%          | 78%          | 100%         |
| Hispanic      | 19%            | 23%          | 35%          | 60%          | 80%          | 100%         |
| White         | 39%            | 42%          | 51%          | 70%          | 85%          | 100%         |
| Other         | n=479          |              |              |              |              |              |
| No Response** | n=1031         |              |              |              |              |              |

<sup>1</sup>Number of test-takers/11th grade students in Minnesota that year

\*\* Percent cannot be calculated; student information incomplete

Source: Data to Determine Progress: District-reported data

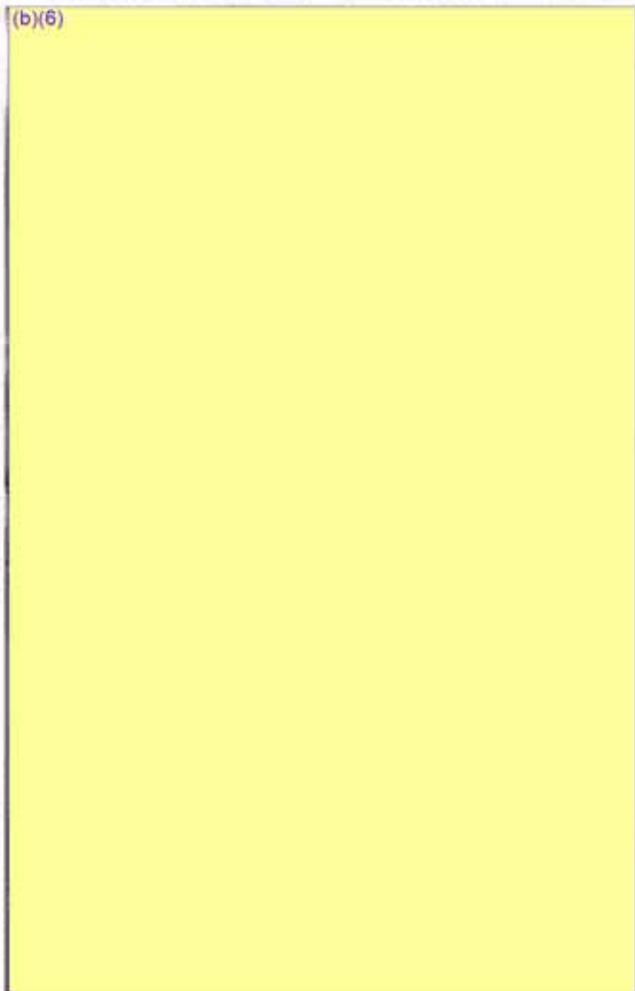
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Taking Minnesota Students from Nation-Leading to World-Competing

The third supporting indicator for college readiness and rigorous course-taking is college credit earned by high school students. We want 100 percent of college credit exams taken to result in courses or passing grades which earn dual high school and college credit.

The benchmark indicator, that we can currently measure, is the percent of AP exams taken that result in dual college and high school credit. The table below lists actual 2006 data for each benchmark along with goals through 2016.

Percent of AP Exams Taken that Result in Dual College and High School Credit

|                | 2006<br>actual | 2008<br>goal | 2010<br>goal | 2012<br>goal | 2014<br>goal | 2016<br>goal |
|----------------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL            | 65%            | 67%          | 72%          | 83%          | 91%          | 100%         |
| Am Indian      | 52%            | 54%          | 62%          | 76%          | 88%          | 100%         |
| Asian          | 56%            | 58%          | 65%          | 78%          | 89%          | 100%         |
| Black          | 37%            | 40%          | 50%          | 69%          | 84%          | 100%         |
| Hispanic       | 55%            | 57%          | 64%          | 78%          | 89%          | 100%         |
| White          | 67%            | 69%          | 74%          | 84%          | 92%          | 100%         |
| Other          | 65%            | 67%          | 72%          | 83%          | 91%          | 100%         |
| No<br>Response | 67%            | 69%          | 74%          | 84%          | 92%          | 100%         |

Source: Data to Determine Progress: District-reported data

# Spotlight on Success

Taking Minnesota Students from Nation-Leading to World-Competing

## Anoka STEP Program: Connecting Students With Technical Careers

Anoka-Hennepin's Secondary Technical Education Program (STEP) provides a career-focused high school experience in a college setting.

Students explore hands-on careers in a school connected to the Anoka-Hennepin Technical College. Students from the five Anoka-Hennepin high schools participate, as do others who choose to open enroll from surrounding districts. Students receive dual high school and college credit for their coursework and gain preparation for highly skilled technical careers.

STEP was formed as a collaborative effort of the Anoka-Hennepin School District, Anoka Technical College and business and community partners.

STEP opened in 2002. Follow-up data indicate greater student grade point average gains and a greater number of college credits earned while in high school as compared to other high school students within the Anoka-Hennepin school district. Moreover, the percentage of STEP students intending to pursue post-secondary education was higher.

The STEP model works to connect students to the relevance of their education through hands-on education and promotes post-secondary education. We know that post-secondary education is increasingly important in a rapidly changing 21st century, and STEP has demonstrated an effective method of engaging students to achieve this goal.

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“**S**TEP students find the coursework challenging and can earn college credit while in high school.”

- Ginny Karbowski  
Director of STEP

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## GRADUATION RATES

In order to ensure all students are successfully completing high school and to identify strategies to keep students in school, it is necessary to measure the graduation rates of students.

**Ten year goal:** All students will graduate from high school by 2016.

The primary indicator for this goal is the statewide high school graduation rate. We want 100 percent of students to graduate from high school as measured by the National Governors Association (NGA) model, a compact agreed to by all 50 states.

The tables on the following page list actual 2008 data for two measures of high school graduation: the NGA rate, and a rate used from the National Center for Educational Statistics.

# Graduation Rates

Taking Minnesota Students from Nation-Leading to World-Competing

## Calculation of the Percent of Minnesota Students Graduating Using the 50-State Compact NGA Model

|           | 2005<br>Actual | 2005<br>Goal | 2010<br>Goal | 2012<br>Goal | 2014<br>Goal | 2015<br>Goal |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|
| ALL       | 73%            | 74%          | 78%          | 87%          | 93%          | 100%         |
| Am Indian | 40%            | 43%          | 52%          | 70%          | 85%          | 100%         |
| Asian     | 68%            | 70%          | 74%          | 84%          | 92%          | 100%         |
| Black     | 38%            | 41%          | 50%          | 69%          | 85%          | 100%         |
| Hispanic  | 39%            | 42%          | 51%          | 70%          | 85%          | 100%         |
| White     | 80%            | 81%          | 84%          | 90%          | 95%          | 100%         |

Source Data to Determine Progress: NGA Calculation (MDE)

The National Governors Association (NGA) rate is a four-year, on-time graduation rate agreed to by all 50 states. The cohort is larger than the AYP rate used in previous years because in addition to grads and drops, it considers continuing and unknown students; these two additional groups add approximately 15,894 more students. For 2005, the cohort of students was determined by counting first time ninth-graders in 2002 plus transfers into the group minus transfers out over the next four years for a total of 75,856. This rate only counts students who graduate in four

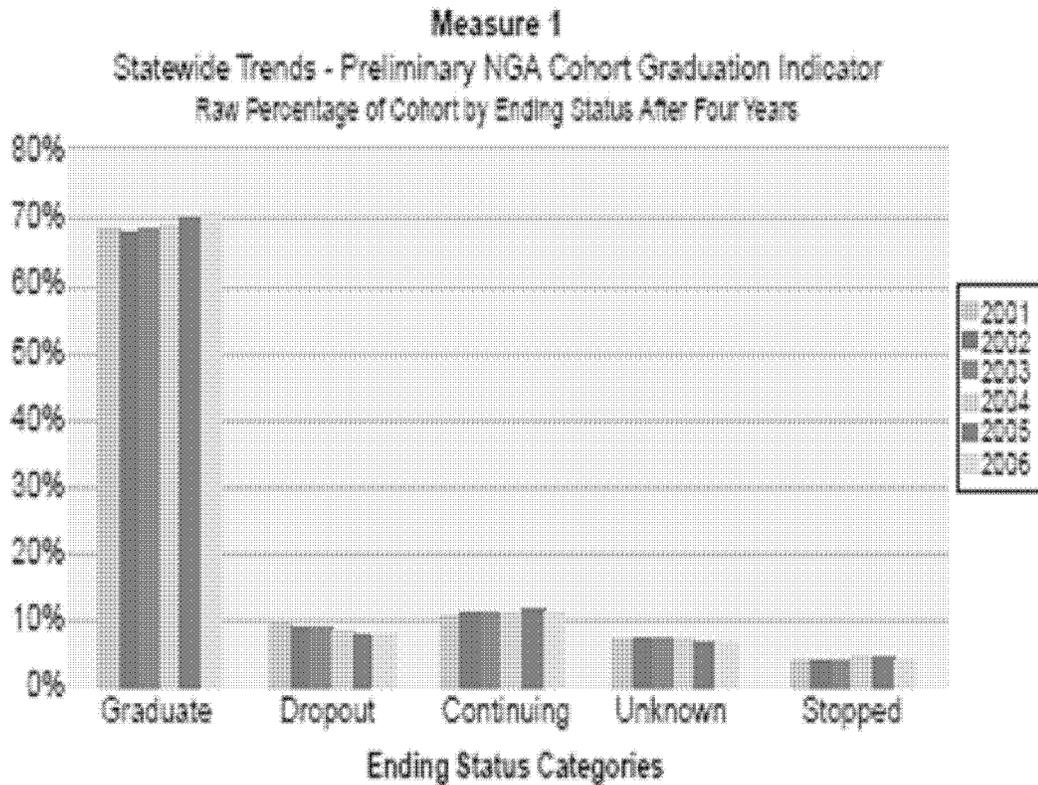
years, for a total of 55,015 graduates. The number of four-year graduates (55,015) is divided by the total number of students in the cohort (75,856). Because this cohort includes ALL students in the group, even those who are continuing and those whose status is unknown, the cohort group is larger. Additionally, because this rate only includes on-time graduates, the number of graduates is lower. The 2005 NGA grad rate is 73% as compared to the 2005 AYP rate of 90%.

INDICATOR THREE

## Taking Minnesota Students from Nation-Leading to World-Competing

The bar graph showing the numbers of grads, drops, continuing, unknown and stopped categories over the past five years shows a slight increase in graduates and a slight decrease in the number of dropouts.

The marked difference in the AYP grad rate versus the NGA grad rate is due to the number of students being analyzed in the group and the number of students who are considered to have graduated.



### Calculation Using the AYP Model for No Child Left Behind

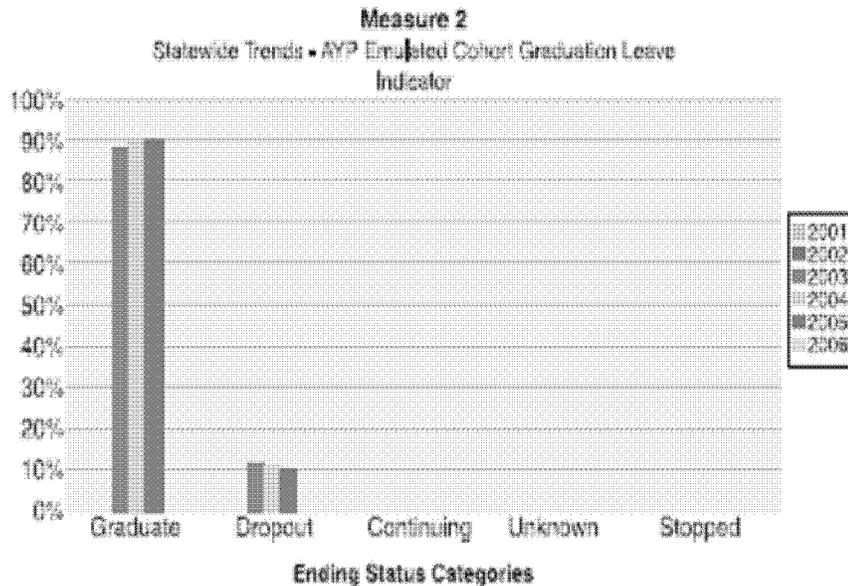
From 2003 - 2006, Minnesota used the National Center for Education Statistics (NCES) emulated cohort model to compute graduation rates for Adequate Yearly Progress (AYP) purposes.

|           | 2005 AYP* |
|-----------|-----------|
| ALL       | 90.1%     |
| Am Indian | 70.4%     |
| Asian     | 86.7%     |
| Black     | 67.7%     |
| Hispanic  | 59.9%     |
| White     | 93.6%     |

\* 2005 data is the most recent available  
 Source Data to Determine Progress: AYP Calculation (MDE)

The rate used in AYP is based on a methodology from the National Center for Education Statistics. The formal title of this rate is: Common Core of Data Graduation Leave Indicator - Emulated Cohort. This model creates a cohort group of students by identifying those who graduated in 2005 plus students who dropped out in grade 9 in 2002, grade 10 in 2003, grade 11 in 2004 and grade 12 in 2005.

In 2005, this cohort was approximately 64,861 students. The number of graduates (58,282) is then divided by the number of students in the cohort (64,861). This rate is higher than the NGA rate as it includes about 16,000 fewer students in the cohort. The approximately 16,000 students who were continuing their education and students whose status is unknown are not considered at all in this rate. The number of graduates to be counted is higher because it does not limit graduates to only those students finishing in four years. Any student graduating in 2005 is considered a valid 05 grad.



# Spotlight on Success

Taking Minnesota Students from Nation-Leading to World-Competing

## Thief River Falls: Increasing Enrollment, Engagement and Achievement

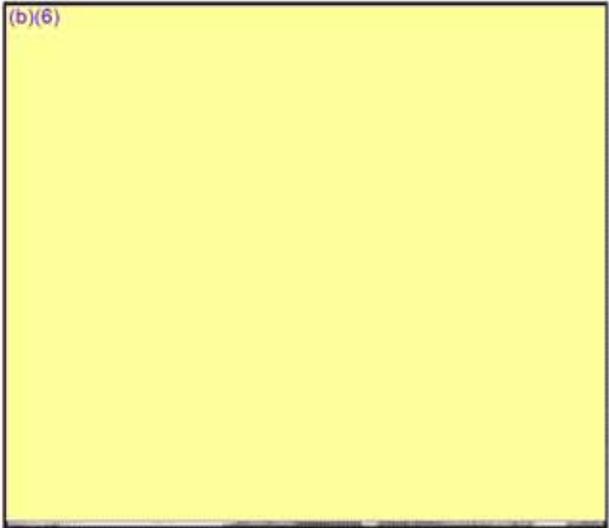
Lincoln High School in Thief River Falls received a grant to increase enrollment, engagement and achievement in STEM courses (science, technology, engineering, and math). Specifically, Lincoln is working to implement an engaging contextual math curriculum and increase math retention in grades 11 and 12.

Lincoln began by reviewing best practices, research, and data on math achievement. To encourage greater enrollment in rigorous math courses, the school implemented weighted grades in these courses. Math teachers receive more intensive on-going staff development, and a STEM day is planned for each math class.

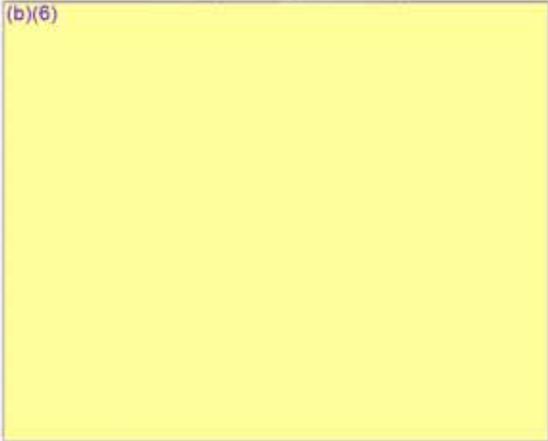
To further build math enrollment, the school will implement a College Preparatory Math program (CPM) this fall. Spanning grades six -12, this program blends traditional math with integrated math.

To ensure that all students become proficient in math, Lincoln created a Transition Point Course in partnership with Bemidji state University. Taught at the high school and at the University, this course targets seniors and provides preparation for a college placement math test. Staff for this program participates in ongoing training for differentiating instruction to better address the needs of all students.

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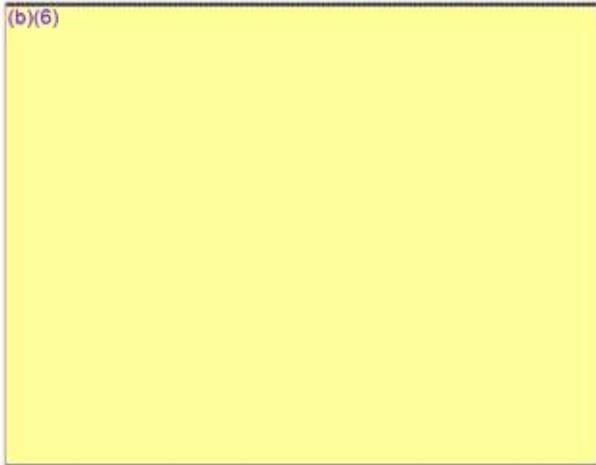


Through these initiatives, Lincoln High School is working hard to increase rigor, connect students with the vital STEM disciplines, and prepare students with the math skills necessary for post-secondary educational options.

“These math grants have given our staff the opportunity to learn about and incorporate the characteristics of powerful instruction to accommodate shifts to higher-order thinking skills and problem solving for all students.”

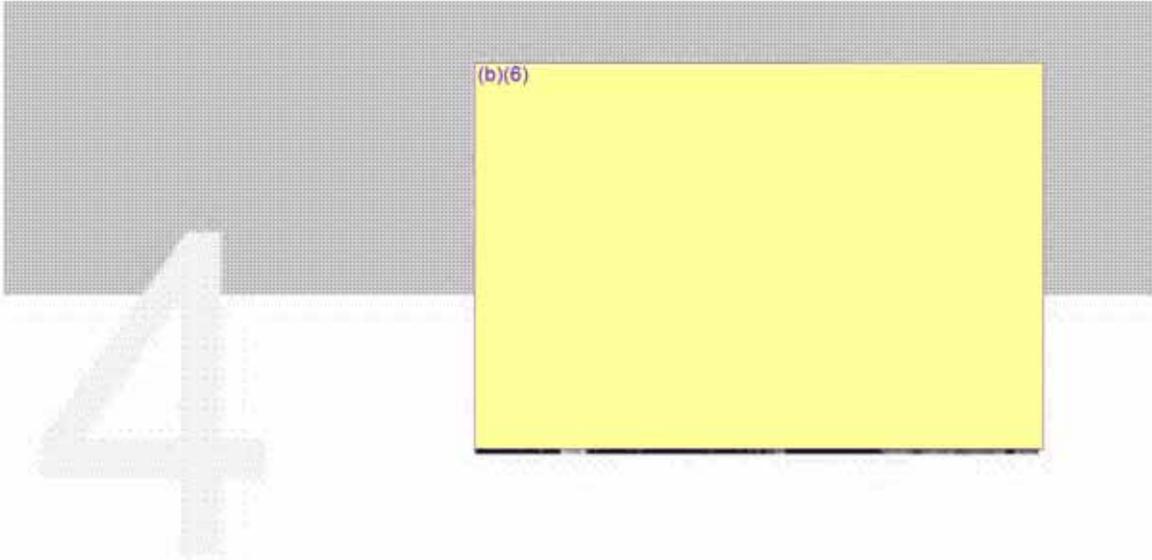
- Thief River Falls High School Principal Tom Hunt

(b)(6)



LINCOLN

— making good minds great



## COLLEGE SUCCESS

Because it is becoming more important to have some post-secondary education, it is desirable to measure the participation and persistence of students entering post-secondary institutions.

### Five primary indicators measure college success:

#### • Primary Indicator:

- 4 Participation rate: the proportion of students that enroll in a post-secondary institution in the fall following their high school graduation.
- 4 Remediation: the proportion of students who have to take at least one remedial/developmental course within two years of high school graduation.
- 4 Retention: the proportion of first-time, full-time students that return to the same institution for a second year.
- 4 Graduation: the proportion of a cohort of first-time, full-time students that matriculate within three (at two-year schools), four, or six (at four-year schools) years.
- 4 STEM completion rates: the proportion of students completing AA/BS degrees in STEM disciplines.

The tables on page 33 list baseline data for each of these indicators.

# College Success

Testing Minnesota Students from Nation-Leading to World-Competing

## Participation Rates

| 2003<br>Participation |     |
|-----------------------|-----|
| ALL                   | 65% |

### Notes

- Data for college participation broken down by race/ethnicity is only available for Minnesota high school graduates who choose to go to Minnesota post-secondary institutions. The 65 percent reported above represents all students, whether they attend a Minnesota college or go out of state.

Source Data: Post-Secondary Education Opportunity

## Remediation Rates

| 2002<br>Remediation |     |
|---------------------|-----|
| ALL                 | 36% |

### Notes

- Currently seeking similar data from the private colleges.
- Data broken down by race/ethnicity currently unavailable.

Source Data: "Getting Prepared," a report jointly prepared by the University of Minnesota and the Minnesota State Colleges and Universities.

### Retention Rates

|             | 2014<br>Baseline |
|-------------|------------------|
| U of M      | 83%              |
| MnSCU (4)   | 73%              |
| Private (4) | 84%              |
| MnSCU (2)   | 57%              |

### Notes

- Retention rates are based on the proportion of first-time, full-time students who returned for a second year at the same institution (even if they switch to part-time status).
- At two-year institutions, those who completed programs of less than one year are counted as retained.
- Data source: National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Note that data broken down by race/ethnicity will be available in the future.

Source Data: Post-Secondary Education Opportunity

### Graduation Rates (three year) at Two-year Colleges

|           | 2004<br>Baseline |
|-----------|------------------|
| All       | 36%              |
| Am Indian | 23%              |
| Asian     | 30%              |
| Black     | 25%              |
| Hispanic  | 27%              |
| White     | 42%              |

#### Notes

- The 2004 three-year graduation rate computation is based on the proportion of first-time, full-time students that entered in fall 2001 and completed a program within three years.

Source Data: IPEDS

**Graduation Rates (four year)**

|           | 2004<br>baseline |
|-----------|------------------|
| All       | 36%              |
| Am Indian | 17%              |
| Asian     | 32%              |
| Black     | 22%              |
| Hispanic  | 25%              |
| White     | 38%              |

**Notes**

- The 2004 four-year graduation rate computation is based on the proportion of first-time, full-time students that entered in fall 2000 and completed their four-year program within four years.

Source Data: IPEDS

**Graduation Rates (six year)**

|           | 2004<br>Rate (%) |
|-----------|------------------|
| All       | 57%              |
| Am Indian | 36%              |
| Asian     | 52%              |
| Black     | 43%              |
| Hispanic  | 46%              |
| White     | 59%              |

**Notes**

- The 2004 four-year graduation rate computation is based on the proportion of first-time, full-time students that entered in fall 2000 and completed their four-year program within four years.

Source Data: IPEDS

**STEM Completion Rates (AA/AS year)**

|           | 2009<br>Baseline |
|-----------|------------------|
| All       | 13%              |
| Am Indian | 6%               |
| Asian     | 26%              |
| Black     | 18%              |
| Hispanic  | 14%              |
| White     | 13%              |

**Notes**

- Caveat: Some care must be taken as STEM covers a wide umbrella of disciplines; increases in STEM can happen by increasing the number of environmental science majors, for example.

Source Data: IPEDS

**STEM Completion Rates (BA/BS)**

|           | 2004<br>Estimate |
|-----------|------------------|
| All       | 16%              |
| Am Indian | 11%              |
| Asian     | 30%              |
| Black     | 18%              |
| Hispanic  | 14%              |
| White     | 16%              |

**Notes**

- Caveat: some care must be taken as STEM covers a wide umbrella of disciplines; increases in STEM can happen by increasing the number of environmental science majors, for example.

Source Data: IPEDS

# Spotlight on Success

Taking Minnesota Students from Nation-Leading to World-Competing

## Irondale: Using Data as an Effective Tool

Irondale High School demonstrates the effective use of data as a tool to improve student learning. During the last school year, Irondale revised its ninth-grade curriculum to better emphasize reading. High school staff received training in content area reading strategies, and word meaning was taught across the curriculum. To monitor progress, ninth-graders were pre- and post-tested in a reading assessment, and staff was twice surveyed during the academic year.

By analyzing this data, Irondale learned that in-house staff development was most beneficial for its staff. The pre- and post-test reading assessment given to ninth-graders revealed an improvement of

eight percent in overall reading achievement and 17 percent in inferential and analytical reading. Efforts with this cohort of students continue, and students in ninth and tenth grades will be post-tested this spring.

Irondale also received a National Governors Association Incentive grant through MDE in 2006 to implement interactive classroom presentations, and to enhance efforts in the STEM disciplines. The goal of the grant is to increase student engagement, thereby increasing achievement of ninth graders in the areas of mathematics and science by incorporating the use of classroom response systems. Irondale has used a

software program to identify a baseline from last year, and to set targets for growth for this year.

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"I  
rondale is truly a professional learning community. Teachers are meeting regularly and using results from their assessments to drive instructional decisions. We have a lot to learn, but we're beginning to see measurable increases in achievement. Our teacher leadership model, the incentive grants from the Minnesota Department of Education, some technological tools, and a very strong high school community make Irontdale an exciting place to work and learn."

- Irontdale High School Principal  
Colleen Wambach

**IRONTDALE**

— making good minds great

# Formula for Establishing Benchmark and 10-Year Goals for Indicators Two and Three

Taking Minnesota Students from Nation-Leading to World-Competing

| Year  | Formula*   | Example School |          |          |
|-------|--|----------------|----------|----------|
|       |  | School 1       | School 2 | School 3 |
| 2006  | X%   | 38%            | 50%      | 75%      |
| 2008  | $X\% + 1/10 (\% \text{ for } 2012 - X\%)$                                  | 41%            | 53%      | 77%      |
| 2010  | $\% \text{ for } 2008 + 1/3 (\% \text{ for } 2012 - \% \text{ for } 2008)$ | 50%            | 61%      | 81%      |
| 2012* | $X\% + 1/2 (100\% - X\%)$  | 69%            | 75%      | 88%      |
| 2014  | $(100\% - \% \text{ for } 2012) / 2 + \% \text{ for } 2012$                | 85%            | 88%      | 94%      |
| 2016  | 100%   | 100%           | 100%     | 100%     |

\*Note: 2012 is set first to benchmark year

## Rationale:

### 2006

- Goals are identified: 100 percent in 10 years and half way between starting point and 100 percent by 2012.
- Strategies to meet goals identified.
- Planning begins.

### 2008

- Develop plans.
- Secure funding.
- Initiate change.
- Expect increase of 1/20 of the distance to 100 percent through awareness activities related to the goals.

### 2010

- Fully implement plans for all grades.
- Class of 2010 expected to have one to two years of implementation activities.
- Expect to make up 1/3 of distance between 2008 and 2012 goal.

## Rationale:

### 2012

- Continue full implementation of plan.
- Class of 2012 expected to have had three to four full years of implementation activities.
- Expect to be half the distance from starting point in 2006 and 2016 100 percent goal.

### 2014

- Expect to continue gains based on previous years' implementation and progress.
- Class of 2014 expected to have had six full years of implementation activities.
- Expect to be at one half the remaining distance to 2016 100 percent goal from 2012.

### 2016

- Continue full implementation of plan.
- Class of 2016 expected to have had eight full years of implementation activities.
- Expect to be at 100 percent goal.

# Ongoing Efforts

Taking Minnesota Students from Nation-Leading to World-Competing

## Increasing Rigor

- Algebra I will now be required by eighth grade and Algebra II and Chemistry or Physics will be required to graduate from high school, starting with this year's fourth-graders.
- During the 2005 legislative session, the Advanced Placement and International Baccalaureate programs were expanded with \$4.5 million in new funding. During the 2006 session, an additional \$1 million of funding was allotted to expand Advanced Placement. This has resulted in a 20 percent increase in AP tests and a twelve percent increase in IB tests taken by Minnesota students.
- When Governor Pawlenty and the Legislature eliminated the Profile of Learning, Minnesota moved away from a process-based "show-what-you-know" model toward content-based academic standards that are more rigorous and include grade-level expectations.
- Under the governor's leadership, Minnesota now has more rigorous standards in math, science and reading. In 2006, the new reading and mathematics MCA IIs were given in grades three - eight, 10 and 11.
- **2007 Legislative Proposal: Governor Pawlenty is proposing the creation of "3R" high schools with a focus on rigor, relevance, and results. Part of this proposal is to require students earn one year of post-secondary credit while in high school.**

## Preparing for a Global Economy

- The Minnesota Department of Education has launched an aggressive public information campaign, including the Website [www.mn-stem.com](http://www.mn-stem.com), to encourage Minnesota students to take Science, Technology, Engineering and Math (STEM) courses and explore going into STEM fields.
- The importance of China in the global economy was recognized by MDE and stakeholders developed a program to bring Mandarin Chinese language classes to more Minnesota schools.
- The Minnesota P-16 Partnership, composed of officials from the education community, higher education organizations and business and community leaders, is working to improve the student transition to post-secondary education.

- Minnesota's public and private universities and colleges along with the Minnesota Office of Higher Education and the Minnesota Department of Education partnered to sponsor "I Make It Happen," an initiative to help students prepare for college. To learn more, visit [www.imakeithappen.org](http://www.imakeithappen.org).
- **2007 Legislative Proposal: Governor Pawlenty is proposing \$19 million in FY 2008 and \$19 million in FY 2009 to enhance technology in schools.**

### Supporting Classroom Instruction

- Minnesota's nation-leading Q Comp program is designed to advance the teaching profession by providing structured professional development and evaluation, as well as an alternative pay schedule that compensates teachers based on performance, not just seniority.
- Minnesota is providing greater technical support to teachers for curriculum alignment.
- Minnesota created a successful pilot program for teacher mentoring; the governor's 2007 proposal would expand this program statewide.
- **2007 Legislative Proposal: Governor Pawlenty is proposing to create math and science academies to provide quality professional development for teachers.**

### Measuring Progress

- Minnesota parents, educators and taxpayers can track the Adequate Yearly Progress of their schools by using the STAR rating system. This system continues to allow us to identify schools that are struggling so that steps can be taken to try to improve student achievement.
- The Governor's Education Council, which meets on a regular basis, promotes a minimum level of K-14 education for all students. The council is made up of leaders from the workforce and business community, higher education organizations and government agencies.
- **2007 Legislative Proposal: Governor Pawlenty is proposing a diagnostic program that will better track student academic progress.**

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(b)(6)

## Taking Minnesota Students from Nation-Leading to World-Competing

### GOVERNOR'S EDUCATION COUNCIL

Robert H. Bruininks, President  
University of Minnesota

Susan Heegaard, Director  
Minnesota Office of Higher Education

Karen Klinzing, Assistant Commissioner  
Minnesota Department of Education

David Laird, Jr., President and CEO  
Minnesota Private College Council

Representative Carlos Mariani-Rosa, Executive Director  
Minnesota Minority Education Partnership, Inc.

James McCormick, Chancellor  
Minnesota State Colleges and Universities

Dan McElroy, Commissioner  
Minnesota Department of Employment & Economic Development

Claire Noble, Director  
MDE Government Relations

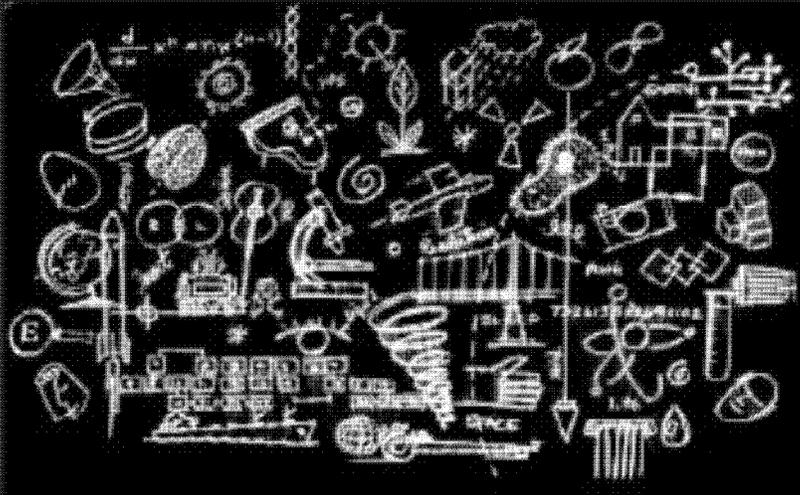
Valerie Pace, Director of Government Relations  
IBM

Kate Rubin, President  
Minnesota High Tech Association

Pete Sadowski, Vice President  
Antares Pharma, Inc.

Alice Seagren, Commissioner  
Minnesota Department of Education

Charlie Weaver, Executive Director  
Minnesota Business Partnership



*Minnesota*  
**Department**  
*of Education*

<http://education.state.mn.us>

Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4206

651-582-8200

*Taking Minnesota Students from Nation-Leading to World-Competing*

**Minnesota College- and Career-Ready System Indicators and Benchmarks<sup>1</sup>**

| Indicator           |  | Grade/Group | 2006                | 2007                | 2008                | 2009                | 2010              | 2012              | 2014              | 2016              |
|---------------------|--|-------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|
|                     |  |             | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) |
| Core<br>Proficiency | Math Proficiency<br>for All Students       | 3           | 79                  | 80                  | 79                  |                     | 88                | 94                | 100               |                   |
|                     |  | 4           | 70                  | 71                  | 70                  |                     | 83                | 91                | 100               |                   |
|                     |  | 5           | 60                  | 63                  | 65                  |                     | 77                | 89                | 100               |                   |
|                     | (MCA II tests)                             | 6           | 60                  | 63                  | 63                  |                     | 77                | 89                | 100               |                   |
|                     |  | 7           | 59                  | 61                  | 60                  |                     | 76                | 88                | 100               |                   |
|                     |  | 8           | 58                  | 59                  | 57                  |                     | 76                | 88                | 100               |                   |
|                     |  | 11          | 28                  | 32                  | 34                  |                     | 59                | 79                | 100               |                   |
|                     | Reading<br>Proficiency for All<br>Students | 3           | 72                  | 80                  | 79                  |                     | 84                | 92                | 100               |                   |
|                     |  | 4           | 69                  | 72                  | 72                  |                     | 83                | 91                | 100               |                   |
|                     |  | 5           | 72                  | 73                  | 74                  |                     | 84                | 92                | 100               |                   |
|                     |  | 6           | 66                  | 67                  | 70                  |                     | 83                | 92                | 100               |                   |

<sup>1</sup> All figures have been rounded to the nearest percent.

| Indicator   |  | Grade/Group | 2006                | 2007                | 2008                | 2009                | 2010              | 2012              | 2014              | 2016              |
|---|--|-------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|
|   |  |             | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) |
|   | (MCA II tests)   | 7           | 64                  | 63                  | 65                  |                     | 80                | 90                | 100               |                   |
|   |  | 8           | 65                  | 63                  | 66                  |                     | 79                | 90                | 100               |                   |
|   |  | 10          | 65                  | 62                  | 72                  |                     | 80                | 90                | 100               |                   |
| College<br>Readiness<br>and Rigorous<br>Course-<br>Taking | ACT Participation<br>(% of MN<br>graduates who took<br>the ACT) <sup>2</sup> | ALL         | 75                  | 77                  | 79                  |                     | 73                | 83                | 92                | 100               |
|   |  | Am. Indian  | 34                  | 37                  | 33                  |                     | 38                | 62                | 81                | 100               |
|   |  | Asian       | 69                  | 68                  | 69                  |                     | 67                | 80                | 90                | 100               |
|   |  | Black       | 47                  | 45                  | 51                  |                     | 43                | 65                | 82                | 100               |
|   |  | Hispanic    | 43                  | 47                  | 53                  |                     | 43                | 65                | 82                | 100               |
|   |  | White       | 69                  | 67                  | 72                  |                     | 71                | 82                | 91                | 100               |
|   | % of MN ACT-<br>Tested Students<br>College-Ready                             | ALL         | 28                  | 31                  | 32                  |                     | 42                | 64                | 82                | 100               |
|   |  | Am Indian   | 13                  | 11                  | 18                  |                     | 30                | 57                | 78                | 100               |
|   |  | Asian       | 18                  | 19                  | 19                  |                     | 34                | 59                | 80                | 100               |
|   |  | Black       | 5                   | 5                   | 5                   |                     | 24                | 53                | 76                | 100               |
|   |  | Hispanic    | 16                  | 17                  | 16                  |                     | 33                | 58                | 79                | 100               |

<sup>2</sup> Calculated using four-year adjusted cohort graduation rates published for 2006-2008.

| Indicator | Grade/Group   | 2006                | 2007                | 2008                | 2009                | 2010              | 2012              | 2014              | 2016              |     |
|-----------|---|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-----|
|           |   | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) |     |
|           | White   | 29                  | 33                  | 34                  |                     | 43                | 65                | 82                | 100               |     |
|           | % of EXPLORE-Tested Students Likely to be College-Ready (Gr. 8) | ALL                 | 16                  | 18                  | 18                  |                   | 33                | 58                | 79                | 100 |
|           |   | Am Indian           | 6                   | 5                   |                     |                   | 25                | 53                | 77                | 100 |
|           |   | Asian               | 11                  | 15                  |                     |                   | 29                | 56                | 78                | 100 |
|           |   | Black               | 2                   | 3                   |                     |                   | 21                | 51                | 76                | 100 |
|           |   | Hispanic            | 4                   | 3                   |                     |                   | 23                | 52                | 76                | 100 |
|           |   | White               | 19                  | 21                  |                     |                   | 35                | 60                | 80                | 100 |
|           | % of PLAN-Tested Students Likely to be College-Ready (Gr. 10)   | ALL                 | 23                  | 23                  | 22                  |                   | 38                | 62                | 81                | 100 |
|           |   | Am Indian           | 7                   | 22                  |                     |                   | 25                | 54                | 77                | 100 |
|           |   | Asian               | 18                  | 5                   |                     |                   | 34                | 59                | 80                | 100 |
|           |   | Black               | 3                   | 17                  |                     |                   | 22                | 52                | 76                | 100 |
|           |   | Hispanic            | 6                   | 3                   |                     |                   | 25                | 53                | 77                | 100 |
|           |   | White               | 27                  | 6                   |                     |                   | 41                | 64                | 82                | 100 |
|           | % of Students Participating in College Courses in HS            | ALL                 | 38                  | 26                  |                     |                   | 50                | 69                | 85                | 100 |
|           |   | Am Indian           |                     | 8                   |                     |                   | 26                | 54                | 77                | 100 |
|           |   | Asian               |                     | 53                  |                     |                   | 62                | 77                | 88                | 100 |

| Indicator   |   | Grade/Group | 2006<br>Actual<br>(percent) | 2007<br>Actual<br>(percent) | 2008<br>Actual<br>(percent) | 2009<br>Actual<br>(percent) | 2010<br>Goal<br>(percent) | 2012<br>Goal<br>(percent) | 2014<br>Goal<br>(percent) | 2016<br>Goal<br>(percent) |
|---|---|-------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| College<br>Readiness<br>and Rigorous<br>Course-<br>Taking | Other: n=479<br>No Response:n=1031  | Black       |                             | 12                          |                             |                             | 29                        | 56                        | 78                        | 100                       |
|   |   | Hispanic    |                             | 19                          |                             |                             | 35                        | 60                        | 80                        | 100                       |
|   |   | White       |                             | 39                          |                             |                             | 51                        | 70                        | 85                        | 100                       |
|   | % of AP Exams<br>Taken that Result<br>in Dual College<br>and H.S. Credit                | ALL         |                             | 65                          |                             |                             | 72                        | 83                        | 91                        | 100                       |
|   |   | Am Indian   |                             | 52                          |                             |                             | 62                        | 76                        | 88                        | 100                       |
|   |   | Asian       |                             | 56                          |                             |                             | 65                        | 78                        | 89                        | 100                       |
|   |   | Black       |                             | 37                          |                             |                             | 50                        | 69                        | 84                        | 100                       |
|   |   | Hispanic    |                             | 55                          |                             |                             | 64                        | 78                        | 89                        | 100                       |
|   |   | White       |                             | 67                          |                             |                             | 74                        | 84                        | 92                        | 100                       |
|   |   | Other       |                             | 65                          |                             |                             | 72                        | 83                        | 91                        | 100                       |
|   |   | No Response |                             | 67                          |                             |                             | 74                        | 84                        | 92                        | 100                       |
| High School<br>Graduation<br>Rates                        | % of MN students<br>Graduating Using<br>Four-Year<br>Adjusted Cohort<br>Graduation Rate | ALL         | 73                          | 73                          | 73                          | 74                          | 78                        | 87                        | 93                        | 100                       |
|   |   | Am Indian   | 40                          | 41                          | 41                          | 43                          | 52                        | 70                        | 85                        | 100                       |
|   |   | Asian       | 68                          | 66                          | 65                          | 70                          | 74                        | 84                        | 92                        | 100                       |
|   |   | Black       | 39                          | 40                          | 41                          | 41                          | 50                        | 69                        | 85                        | 100                       |
|   |   | Hispanic    | 39                          | 41                          | 40                          | 42                          | 51                        | 70                        | 85                        | 100                       |

| Indicator          |   | Grade/Group | 2006<br>Actual<br>(percent) | 2007<br>Actual<br>(percent) | 2008<br>Actual<br>(percent) | 2009<br>Actual<br>(percent) | 2010<br>Goal<br>(percent) | 2012<br>Goal<br>(percent) | 2014<br>Goal<br>(percent) | 2016<br>Goal<br>(percent) |
|--------------------|---|-------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                    |   | White       | 81                          | 81                          | 81                          | 81                          | 84                        | 90                        | 95                        | 100                       |
| College<br>Success | Participation rate <sup>3</sup>   | ALL         | 68                          |                             | 70                          |                             |                           |                           |                           |                           |
|                    | Remediation rate <sup>4</sup>   | ALL         | 38<br>2005 class            |                             |                             |                             |                           |                           |                           |                           |
|                    | Retention rate <sup>5</sup><br>a.) 4-yr. institutions<br>b.) 2-yr. institutions | ALL         | a.) 79<br>b.) 57            | a.) 81<br>b.) 58            |                             |                             |                           |                           |                           |                           |
|                    | Graduation rates<br>a.) 4-yr. institutions<br>(6-yr. rate) <sup>6</sup>         | ALL         | a.) 58                      | a.) 58                      |                             |                             |                           |                           |                           |                           |

<sup>3</sup> Participation rate: Percentage of MN high school graduates who enroll in postsecondary institution in the year following graduation.

<sup>4</sup> Remediation rate: Percentage of MN high school graduates enrolled in a MN public higher education institution within two years of graduation who took one or more developmental courses.

<sup>5</sup> Retention rate: Percentage of first-time, full-time undergraduates who start at one institution in the fall term and return to the same institution in the fall term of their second year.

<sup>6</sup> Graduation rate: Percentage of first-time, full-time degree-seeking students who complete a bachelor's degree within six years at the same institution they began their studies.

| Indicator  | Grade/Group | 2006                | 2007                | 2008                | 2009                | 2010              | 2012              | 2014              | 2016              |
|--|-------------|---------------------|---------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|
|  |             | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Actual<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) | Goal<br>(percent) |
| b.)2-yr. institutions<br>(3-yr. rate) <sup>7</sup> |             | b.) 32              | b.) 30              |                     |                     |                   |                   |                   |                   |
| STEM completion<br>rates                           | ALL         |                     |                     |                     |                     |                   |                   |                   |                   |

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<sup>7</sup> Graduation rate: Percentage of students completing a certificate, diploma or associate degree within three years at the same institution they began their studies (does not include transfer students).

**(A)(1) – Exhibit F: *Minnesota’s Power Indicators***

| <b>Minnesota’s 10-Year College- and Career-Ready Goals</b> |      |      |      |      |      |      |      |      |      |
|--|------|------|------|------|------|------|------|------|------|
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2016 | 2018 | 2019 |
| CCR Coursework   |      |      |      |      |      |      |      |      | 100  |
| College Credit in High School                              | 35   | 38   | 41   | 45   | 49   | 53   | 71   | 90   | 100  |
| CCR Score on Anchor Assessment                             |      |      |      |      |      |      |      |      | 100  |
| Graduation Rate  | 74   | 76   | 78   | 80.5 | 83   | 85.7 | 90   | 95   | 100  |
| Enrollment in Postsecondary                                | 68   | 69.6 | 71.2 | 72.8 | 74.4 | 76.1 | 84   | 92   | 100  |
| Enrollment in Development Course                           | 38   | 35   | 31   | 27   | 23   | 19   | 13   | 7    | 0    |

**(A)(1) – Exhibit G: Sample detail from 114-page mid-December LEA Race to the Top presentation and discussion**

**Strategy Overview (Improving effectiveness based on performance – 1/8)**



**Strategy to address (D)(2):**  
Commission a teacher- and principal-led “recommended” state rubric for teacher and principal evaluation

- Details:**
- Create a **task force by February 2010 to develop a recommended teacher & principal evaluation rubric** for use with Q Comp; task force should complete its recommended evaluation by August 2010; group should involve:
    - **At least 50% teachers, 10% principals, with superintendent involvement**
    - **Representation** by urban, suburban and rural districts
    - Participation from both **internal & external stakeholders** (e.g., teachers, principals, higher ed, LEAs, unions, education orgs, business, parents)
    - Relevant evaluation rubric for **all subjects and grade levels**
    - Representation by districts **currently conducting evaluations**
  - Rubric must **meet RTTT & enhanced Q Comp requirements** (e.g., multiple measures, multiple evaluators or evaluation teams, incorporation of student growth)
  - **Participating LEAs can determine for themselves** whether they want to a) adopt the recommended evaluation rubric in evaluating their teachers and principals, or b) create their own evaluation rubric within the enhanced RTTT Q Comp requirements, as they do today

Not for distribution.

- State will...**
- Participate in and provide financial support to ensure timely creation of task force and rubric
  - Partner with stakeholders to develop the task force
  - Ensure recommended evaluation rubric meets Q Comp and RTTT guidelines
  - Ensure transparency of development process

- Participating LEAs will...**
- Participate as needed or desired in the task force
  - Provide feedback on the development of the rubric
  - Decide collaboratively with their local unions whether they would like to use the recommended evaluation rubric or create their own

## Strategy Overview (Improving effectiveness based on performance – 2/8)



### Strategy to address (D)(2):

Ensure more consistent, supportive and rigorous teacher and principal evaluation by enhancing Q Comp for participating LEAs

#### Details:

- LEAs participating in RTTT will adopt enhanced Q Comp implementation:
  - Require **Principals** to be on Q Comp
  - Require a set amount of **training of evaluators** (e.g., a minimum number of hours or certification process for evaluators)
  - **Strengthen and tailor PD** given based on evaluation rating/identified need
  - Evaluation outcomes should result in one of **5 evaluation 'ratings'** (e.g., highly effective, very effective, effective, needs improvement, ineffective – as opposed to the 3 outcomes usually used today)
  - Require referral to **Peer Assistance and Review** of any teacher or principal receiving an 'ineffective' rating (*note that the full PAR description, including for already effective teachers looking to improve is described later*)
  - In order to ensure **only effective teachers are granted tenure** in the first place, clarify that **per §122A.40 subd 5**, evaluation outcomes completed for Q Comp should be used as a basis for determination of whether to grant tenure to teachers after their probationary period
  - Ensure multiple measures are utilized in evaluations, including student growth for teachers when appropriate, and schoolwide student growth for teachers and principals
- State will set up a voluntary, online **evaluator 'loan' program** for outstate or small LEAs who would like to choose more external evaluator support for evaluation teams
- Participating LEAs currently in Q Comp will be "**grand-personed in**" based on current applications, but will need to meet enhanced RTTT expectations by 2012
- All LEAs participating in RTTT should have an approved Q Comp application following the next round of local contract negotiations (i.e. June 2012)

#### State will...

- Outline Q Comp requirements specific to participation in RTTT
- Provide technical support to LEAs in developing or enhancing proposals
- Provide evaluator training resources (e.g., best practices on inter-rater reliability, potential training vendors, curricula, etc.)
- Set up a voluntary evaluator "loan" program for LEAs to have evaluators from other LEAs come to perform evaluations

#### Participating LEAs will...

- Commit to voting on Q Comp adoption in a timely manner to ensure opportunity for adoption by June 2012
- Meet enhanced Q Comp guidelines required for participation Race To The Top by June 2012 (or before if desired)
- Participate in voluntary evaluator "loan" program if desired

Not for distribution.

## Strategy Overview (Improving effectiveness based on performance – 3/8)



### Strategy to address (D)(2):

Ensure participating LEAs participate in an enhanced version of Q Comp and annually evaluate teachers and principals

### Details:

- LEAs participating in Race To The Top agree to **meet enhanced RTTT Q Comp requirements and evaluate teachers and principals annually**
  - All participating districts should be on Q Comp following their next contract negotiation (June 2012)
  - Districts are encouraged to join Q Comp sooner (but will not be required to until June 2012)
  - For the evaluation portion of Q Comp, participating LEAs can opt to use the state's recommended evaluation rubric, or propose their own (provided it meets enhanced RTTT Q Comp guidelines)
- State will provide **technical assistance** to LEAs in developing and refining Q Comp applications upon request

Minneapolis Public Schools Copy Not for Distribution

Not for distribution.

### State will...

- Ensure adequate MDE staff and support for timely feedback and review
- Withhold Q Comp and any further RTTT monies to any participating LEA without an approved application as of July 1, 2012

### Participating LEAs will...

- Work collaboratively with local unions to develop, agree upon, and submit a Q Comp application by June 2012
- Have an approved proposal no later than July 1, 2012

## Strategy Overview (Improving effectiveness based on performance – 4/8)



### Strategy to address (D)(2):

Meaningfully strengthen and target professional development and other supports to enhance tenured teacher and principal growth

Note: overlaps with D(5), more information there

### Details:

- Enhance targeted professional development opportunities for **teachers**
  - Q Comp currently mandates **job-embedded professional development** aligned with individual growth plans
  - Provide **Peer Assistance and Review (PAR)** support services to teachers who self-select into opportunities to drive personal development (e.g., National Board Certification), or who have been identified as struggling on a particular competency area in their evaluations
- Enhance professional development opportunities for **principals**
  - Fund cost for all **principals in participating LEAs to attend MN Principals Academy** (which is founded on the research-based NISL model and takes place over the course of a full year)
  - Send all **turnaround schools' principals through customized version of MN Principals' Academy**, specifically for their cohort (develop a 'turnaround schools leadership team' model which include key skills such as cultural competence)
  - Provide **PAR** support services to principals who self-select into opportunities to drive personal development, or who have been identified as struggling on a particular competency area in their evaluations
- Expand the capacity of **MN Principals Academy** to meet needs of more principals through certification of additional trainers, and selected program enhancements (e.g., greater use of online communities, more follow-on support, etc.)
  - Involve relevant education organizations (e.g., MESPA and MASSP) and other stakeholders (e.g., teachers) in program enhancement and expansion
  - Monitor and evaluate program effectiveness
- Provide **best-practice examples** of targeted professional development online via the Educator Portal

Not for distribution.

### State will...

- Fund participation in MN Principals' Academy
- Develop & disseminate best-practice ideas for the implementation of professional development (e.g., time during the day, flexible alternatives for timing of PD, choice of PD classes, PAR, etc.)
- Support expansion of PAR

### Participating LEAs will...

- Create PDP and staff development plans linked to evaluation and professional development, as part of Q Comp application
- Evaluate and report uses of and impact of professional development activities to the state
- Send principals to the MN Principals' Academy

36

(A)(1) – Exhibit H: *Minnesota’s Standard RTTT MOA*

**Memorandum of Agreement  
State Educational Agency and Local Educational Agency  
Race to the Top Program**

**State Educational Agency: Minnesota Department of Education**

**Local Educational Agency: \_\_\_\_\_**  
***[Insert name of LEA above]***

**STATEMENT OF PURPOSE**

The purpose of this Agreement is to establish the responsibilities of the State Educational Agency (“SEA”) and Local Educational Agency (“LEA”) as required under the federal Race to the Top (“RTTT”) program. The RTTT program is part of the American Recovery and Reinvestment Act of 2009. This Agreement outlines the responsibilities and roles of a participating LEA in the implementation of an approved RTTT program. The SEA will be notified in April 2010 by the United State Department of Education (“USDE”) if the grant is awarded, and implementation will begin with the 2010-11 school year.

Minnesota Department of Education (“MDE”) requires that all LEAs in Minnesota that plan to participate in the RTTT Program sign and return this Memorandum of Agreement by January 13, 2010. MDE will not accept Agreements after the stated deadline. A signed Agreement is null and void if the SEA is not awarded RTTT grant funds.

**SCOPE OF WORK**

The Scope of Work is found in Exhibits 1, 2, 3 and 4 of the Agreement.

**PARTICIPATING LEA REQUIREMENTS**

In assisting the SEA in implementing the tasks and activities in the State’s RTTT plan, the Participating LEA sub-grantee will:

1. Implement the LEA plan as identified in Exhibits 1, 2, 3 and 4 of this Agreement;
2. Actively participate in all relevant meetings and events that are organized and sponsored by the SEA or USDE, which will include progress of the RTTT plan and other related matters;
3. Post to any website specified by the SEA or USDE, in a timely manner, all non-proprietary products and lessons developed using funds of this grant conducted by the SEA or USDE; and

4. Be responsive to the SEA or USDE requests for information including the status of the project, project implementation, outcomes or problems anticipated or encountered.

## **STATE RESPONSIBILITIES**

In assisting Participating LEA in implementing their tasks and activities described in the State's Race to the Top application, the State grantee will:

1. Work collaboratively with and support the Participating LEA in carry out the LEA plan as identified in Exhibits 1, 2, 3 and 4 of this Agreement;
2. Timely distribute the LEA's portion of the Race to the Top grant funds during the course of the project period and in accordance with the LEA plan;
3. Provide feedback on the LEA's status updates, annual reports, any interim reports, and project plans and products; and
4. Identify sources of technical assistance for the RTTT plan.

## **JOINT RESPONSIBILITIES**

1. The SEA and the Participating LEA will each appoint a key contact person for the RTTT program and will remain in frequent contact should the SEA receive grant funding from USDE;
2. SEA and Participating LEA grant personnel will work together to determine appropriate timelines for project updates and status reports throughout the entire grant period; and
3. SEA and Participating LEA grant personnel will negotiate in good faith to continue to achieve the overall goals of the State's RTTT grant, even the SEA plan or LEA plan require modifications.

## **SEA RECOURSE FOR LEA NON-PERFORMANCE**

The SEA may cancel this Agreement if the SEA finds that there has been a failure to comply with the provisions of this Agreement, that reasonable progress has not been made or that the purposes for which the funds were granted have not been or will not be fulfilled. The SEA may take action to protect the interests of the state of Minnesota, including refusal to disburse additional funds. SEA enforcement provisions are also outlined in 34 CFR section 80.43. to CFR section 80.43.

## **ASSURANCES**

The Participating LEA hereby certifies and represents that it:

1. Has the requisite power and authority to execute the MOA;
2. Is committed to implement the LEA RTTT plan;
3. Agrees to participate and implement the mandatory provisions of the RTTT plan, as outlined in Exhibit 1.
4. Will provide a Final Scope of Work to be attached to this Agreement as Exhibit 4 only if the SEA's RTTT application is approved and funded and will do so within 90 days after the grant is awarded in the form and manner prescribed by the SEA; and

5. Will comply with all the terms of the RTTT grant and all applicable Federal and State laws and regulations, including laws and regulation applicable to RTTT, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99).

## **MODIFICATIONS**

This Agreement may be amended by written agreement signed by each of the parties involved, and in consultation with USDE.

## **DURATION/TERMINATION**

This Agreement shall be canceled by the SEA or LEA at any time, with or without cause, upon thirty (30) days' written notice to the other party. In the event of such cancellation, the LEA shall be entitled to payment, determined on a pro rata basis, for work or services performed to the SEA's satisfaction.

## **SIGNATURES**

**LEA Superintendent** (or equivalent authorized signature) – required

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Signature / Date

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Print Name / Title

**Chair of School Board** – optional but strongly encouraged

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Signature / Date

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Print Name / Title

**Local Representative of Teachers** – optional but strongly encouraged

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Signature / Date

---

Print Name / Title

**Authorized State Official** – required

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Signature / Date

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Print Name / Title

**Exhibit 1. LEA RTTT PARTICIPATION WORKSHEET**

| <b>RTTT Elements of State Reform Plan</b>   | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>  | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>   | <b>Comments from LEA</b> |
|---|--|--------------------------------------|---|--------------------------|
| <b>Standards and Assessments</b>  |  |                                      |   |                          |
| B(1) Developing and adopting common standards                                     |  | Yes                                  | - Adopting Common Core Standards is mandatory for participating and non-participating LEAs.   |                          |
| B(2) Developing and implementing common, high-quality assessments                 |  | Yes                                  | - Administering common, high-quality assessments developed through state participation in a consortium is mandatory for participating and non-participating LEAs.<br>- Participating LEAs will receive additional support including additional funding to administer up to 6 interim assessments per student. |                          |
| B(3) Supporting the transition to enhanced standards and high quality assessments | - Participating LEAs will receive additional support including: additional funding to administer up to 6 interim assessments per student; Professional Development and curricular frameworks | Yes                                  | - Mandatory for participating LEA   |                          |

| <b>RTTT Elements of State Reform Plan</b>                     | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>  | <b>Comments from LEA</b> |
|---|---|--------------------------------------|--|--------------------------|
| Standards and Assessments Competitive Grant opportunity       | - Competitive grants to increase enrollment of high-poverty and minority students populations in rigorous coursework in Advanced Placement and/or International Baccalaureate programming |                                      | - Participating LEAs can indicate interest in applying or choose to apply for grant funding during RTTT implementation period. |                          |
| <b>Data Systems</b>   |   |                                      |  |                          |
| C(1). Fully implementing a statewide longitudinal data system | - Submit data necessary to comply with the America COMPETES Act in implementation of a data longitudinal system.  | Yes                                  | - Mandatory for participating and non-participating LEA; participating LEA will receive access to additional support.          |                          |

| <b>RTTT Elements of State Reform Plan</b>   | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>   | <b>Comments from LEA</b> |
|---|---|--------------------------------------|---|--------------------------|
| C(2). Accessing and using State data; C(3)(i) Use of local instructional improvement systems; C(3)(iii) Availability and accessibility of data to researchers | <ul style="list-style-type: none"> <li>- Ensure teachers and principals have access to enhanced Educator and Parent Portals; provide feedback on portal; manage user authentication of portal; and provide information and training to district staff to ensure security.</li> <li>- SEA to provide access to aggregate data for researchers approved through P-20 Governing Council</li> </ul> | Yes                                  | <ul style="list-style-type: none"> <li>- Mandatory for participating and non-participating LEA; participating LEA will receive access to additional support.</li> </ul> |                          |

| <b>RTTT Elements of State Reform Plan</b>                     | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b> | <b>Comments from LEA</b> |
|---|---|--------------------------------------|---|--------------------------|
| C(3)(ii) Professional development on use of data              | - Engage and use Data Coaches to analyze data, train educators, and build capacity; use interim assessments to drive instructional improvements; take action as appropriate in the Minnesota Early Indicator System for students; and provide teachers with information regarding online resources. | Yes                                  | - Mandatory for participating LEA                                   |                          |
| <b>Great Teachers and Leaders</b>                             |   |                                      |   |                          |
| D(1). Use of alternative pathways for teachers and principals |   |                                      | - Optional for participating LEAs                                   |                          |

| <b>RTTT Elements of State Reform Plan</b>  | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>  | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>                              | <b>Comments from LEA</b> |
|--|--|--------------------------------------|--|--------------------------|
| D(1). Develop local plans to address anticipated teacher and principal shortages |  |                                      | - Mandatory for participating LEA with current or anticipated teacher and/or principal shortages |                          |
| D(2)(i) Measure student growth   | - Utilize MN growth model to measure student growth for all applicable subject areas and develop additional metrics for other subjects as-needed   | Yes                                  | - Mandatory for participating LEA  |                          |
| D(2)(ii) Design and implement evaluation systems                                 | - Use of state-recommended or locally-developed and state-approved evaluation system.  | Yes                                  | - Mandatory for participating LEA  |                          |
| D(2)(iii) Conduct annual evaluations   | - Participate in the described enhanced state Q Comp program for RTTT by the 2012-13 school year and meet all guidelines as required by RTTT plan. | Yes                                  | - Mandatory for participating LEA  |                          |

| <b>RTTT Elements of State Reform Plan</b>  | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>  | <b>Comments from LEA</b> |
|--|---|--------------------------------------|--|--------------------------|
| <p>D(2)(iv)(a) Use evaluations to inform professional development</p> <p>D(2)(iv)(b) Use evaluations to inform compensation, promotion, and retention</p> <p>D(2)(iv)(c) Use evaluations to inform tenure and/or full certification</p> <p>D(2)(iv)(d) Use evaluations to inform removal</p> | <ul style="list-style-type: none"> <li>- Develop and participate in full spectrum Peer Assistance and Review (PAR) program</li> <li>- Participate in the state Q Comp program by the 2012-13 school year and meet all guidelines as required by RTTT plan.</li> <li>- Utilize Q Comp evaluation data in tenure decisions</li> <li>- Refer teachers who want to enhance already strong skills or who earn an “ineffective” rating to PAR program which will make next step recommendation after one year of support</li> <li>- New tiered teacher licensure system.</li> <li>- Redesign of principal preparation, licensure, and professional development</li> </ul> | <p>YES</p>                           | <ul style="list-style-type: none"> <li>- Mandatory for participating LEA. New multi-tiered licensure system required for all LEAs.</li> <li>- Participating LEAs will receive additional supporting including funding to implement Peer Assistance and Review Program (PAR), and professional development supports.</li> </ul> |                          |

| <b>RTTT Elements of State Reform Plan</b>  | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>  | <b>Comments from LEA</b> |
|--|---|--------------------------------------|--|--------------------------|
| D(2), D(3) and D(4). Report teacher and principal evaluation and student growth and achievement data to SEA  |   | Yes                                  | - Mandatory for participating and non-participating LEA  |                          |
| D(3) Ensuring equitable distribution of effective teachers and principals – D(3)(i) High-poverty and/or high-minority schools<br>D(3)(ii) Hard-to-staff subjects and specialty areas | - Competitive grant funding for LEAs to develop more flexible HR practices and equitable distribution of teachers in high-poverty and/or high-minority schools and hard-to-staff subjects and specialty areas |                                      | - Participating LEAs can indicate interest in applying or choose to apply for grant funding during RTTT implementation period after baseline data is established |                          |

| <b>RTTT Elements of State Reform Plan</b>   | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>   | <b>Comments from LEA</b> |
|---|---|--------------------------------------|---|--------------------------|
| D(5). Providing effective support to teachers and principals – D(5)(i) Quality professional development   | - Train teachers and principals on how to use student data to improve instruction   | Yes                                  | - Mandatory for participating and non-participating LEA<br>- Participating LEA will receive access to additional support. |                          |
| D(5). Providing effective support to teachers and principals – D(5)(i) Quality professional development<br>D(5)(ii) Measure effectiveness of professional development | - Teachers: Develop and participate in Peer Assistance and Review program (full spectrum program provides high-quality training for teachers self-select into opportunities to drive personal development).<br>- Support TSP induction model practices for new teachers<br>- Principals: Participate in Minnesota Principal Academy | Yes                                  | - Mandatory for participating LEA   |                          |

| <b>RTTT Elements of State Reform Plan</b>  | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b> | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b> | <b>Comments from LEA</b> |
|--|---|--------------------------------------|---|--------------------------|
| D(5). Report the effectiveness of different supports and uses of assessment data |   | Yes                                  | - Mandatory for participating LEA                                   |                          |
| <b>Turning Around the Persistently Lowest-Achieving Schools</b>                  |   |                                      |   |                          |

| <b>RTTT Elements of State Reform Plan</b>                     | <b>MN-Specific State Reform Plan Elements aligned with RTTT Elements guidance</b>   | <b>LEA Participation (yes or no)</b> | <b>State RTTT Participation Requirement (mandatory or optional)</b>  | <b>Comments from LEA</b> |
|---|---|--------------------------------------|--|--------------------------|
| E(2) Turning Around the Persistently Lowest-Achieving Schools | - E(2). Collaborate with OTAS to diagnose and implement turnaround strategies for local schools identified by the state of Minnesota and OTAS | Yes or N/A                           | - Mandatory for participating LEA with identified by the state as having persistently low performing school(s) |                          |

## **Exhibit 2. SUMMARY OF LEA RTTT WORKPLAN**

The RTTT assurances below outlines both the State and Participating LEA responsibilities in implementing the RTTT plan.

### **Assurance #1: Standards and Assessments**

#### State Responsibilities:

- Sign a Memorandum of Agreement to join the Common Core Consortium of State Standards
- Assist with the national development of and provide feedback on Common Core Standards
- Join a consortium of states working to develop assessments aligned with common standards
- Develop an implementation strategy for the adoption of the Common Core Standards in Reading/English-Language Arts and Mathematics
- Develop an RFP to solicit 1-3 vendors to develop interim assessments aligned with Common Core Standards to be implemented by LEAs
- Support participating LEAs by funding up to 6 interim assessments for each student
- Review current English Language Proficiency (ELP) standards to ensure they contain the depth and clarity to allow teachers to align ELP standards with the common core and report findings to state leadership
- Develop curricular frameworks in core subjects including Math, Science, Reading/English-Language Arts
- Develop other curricular frameworks as-needed to support adoption of common core for ELL, Special Education and Early Childhood Programs
- Develop professional development content focused on improving and enhancing classroom instruction and alignment of local curriculum with state standards (e.g., specialized teacher training for participating LEAs and turnaround schools and additional curriculum director/administrator supports)
- Develop RFP to create professional development content for digital access platform including research-based, web-based intervention strategies that align with state standards and provide recommendations for intervention techniques at the sub-strand level
- Award content development grants to teachers and Professional Learning Communities across the state who create PD and instructional content for the digital platform to encourage sharing of best practices across regions
- Issue grants to increase the number of high-poverty and ethnic minority students enrolled in Pre-Advanced Placement, Advanced Placement and/or International Baccalaureate programs in high-poverty, high-minority populations in middle and high schools in target districts throughout the state

### LEA Responsibilities:

- Make adjustments as needed to transition to common core standards
  - Augment or adjust core curriculum to align with standards
  - Participate in state-sponsored programs and activities to help translate standards into classroom practice (e.g., online/webinar training sessions and trainer-led professional development)
- Administer interim assessments up to 3x per year per student (state will support up to 6 assessments per student for participating LEAs)
- Utilize student data and assessment results to intervene and raise academic achievement
- Report interim assessment result data to the state
- Utilize curricular frameworks to support the adoption of common core standards into local curriculum and improve classroom instruction
- Participate in professional development activities related to data analysis and the implementation and adoption of common core standards
- Communicate opportunities to teachers and professional learning communities to encourage the development of user-generated PD and instructional content for the statewide digital platform
- Apply for grant funding to increase Pre-Advanced Placement, Advanced Placement and/or International Baccalaureate programming for high-poverty and minority students (*optional*)

## Assurance #2: Data Systems

### State Responsibilities:

- Combine state resources and Longitudinal Data System (LDS) grant funds to complete current LDS initiatives aligned with the America Competes Act
- Implement data-sharing agreements with other state agencies, institutions of higher education, and early childhood programs necessary to create a fully functional LDS system
- Fund and implement enhancements to the Educator portal with LDS grant money
- Create and roll out new portals for key stakeholders including parents, turnaround school communities and researchers
- Create and disseminate an annual report, based on LDS data collected on the state of education in Minnesota to inform policy makers of the successes and challenges in Minnesota's public education system
- Participate on the P-20 governance council
- Provide technical and help desk support to LEAs to assist them in correctly authorizing access to the portals
- Develop a Minnesota Early Response System (MEIRS) based on state LDS data
- Provide sample job descriptions for, fund and/or contract Data Coaches
- Provide resources to help educators make use of best practices on the use of student data to improve instruction

### LEA Responsibilities

- Submit student, teacher, and principal and course information to the state as currently required by law, through an automated process established by the state through the LDS system.
- Ensure teachers and principals have access to the enhanced Educator Portal
- Manage the user authentication process for Educator, Parent and other portals that are developed and approved by the state and utilized by local stakeholders
- Provide information and training as necessary to district staff to security and privacy protocols are adhered to when entering user information and creating user profiles
- Provide feedback on the portal to MDE (e.g., functionality, ease of navigation, usefulness, etc.)
- Engage with and use data coaches to analyze data, train educators, build capacity, etc.
- Provide data coaches access to Professional Learning Communities, teachers, principals and relevant data as needed
- Use student result information from state-sponsored interim assessments to drive instructional improvements, in concert with Professional Learning Communities (PLC) and targeted professional development programs
- Use the Minnesota Early Indicator and Response System (MEIRS) to help identify students who are off-track based on multiple measures

- Take action on “flagged” students in the MEIRS by leveraging web-based instructional strategies linked to state standards at the strand level to intervene and report the impact of those interventions
- Provide teachers and principals with information regarding online resources and instructional tools

### Assurance #3: Great Teachers and Leaders

#### State Responsibilities:

- Revise teacher and principal preparation program authorization to incorporate demonstration of candidate competency via program completion information
- Promote transparency and development of preparation programs by publishing aggregated completion data annually
- Board of Teaching will clarify components, process to gain longer-term, non-experimental authorization of high-quality alternative teacher preparation programs
- Board of School Administrators will establish, clarify components and ensure high-quality alternative pathway for principal preparation programs
- Publish annual report on teacher and principal shortage areas and provide recommended approaches to fill shortage areas
- Convene a “taskforce” to develop state-recommended evaluation rubrics for teachers and principals
- Outline Q Comp requirements specific to participation in RTTT
- Provide state-recommended evaluation rubric to LEAs and provide technical support to assist participating LEAs in developing and enhancing Q Comp proposals
- Provide evaluator training resources (e.g., best practices on inter-rater reliability, potential training vendors, curricula, etc)
- Set up voluntary evaluator “loan” program for LEAs to have evaluators from other LEAs come to perform evaluations
- Fund the Minnesota Principals’ Academy expansion
- Convene a workgroup to administer a comprehensive leadership development review of principal preparation, licensure and professional development in MN and work to implement recommendations with the Board of School Administrators
- Develop and disseminate best practice ideas for the implementation of professional development
- Support expansion of Peer Assistance & Review to all participating LEAs
- Board of Teaching will develop new rules and institute a multi-tiered licensure system for provisional, continuing and master-teacher positions
- Ensure adequate state-level support to roll out the tiered licensure (e.g., working with LEAs, teacher preparation programs, monitoring and processing licenses, etc.)
- Collect and report aggregated license information by school, grade and subject
- Provide funds directly to LEAs and/or contract with regional centers to staff Consulting Teachers (CTs) and Consulting Principals (CPs) for Peer Assistance and Review programs
- Provide centralized resources online for best practices and guidelines for setting up and using Peer Assistance and Review
- Report aggregated results of Peer Assistance and Review usage and outcomes
- Collect and report the distribution and retention of effective teachers & principals
- Collect and report the impact of financial and non-financial incentives used to ensure equitable distribution of effective teachers and leaders
- Collect data reported by teacher preparation programs and produce annual report

- Convene induction work group to development induction curriculum, workshops, and fund mentor stipends and weekly set-aside time as part of the TSP program

#### LEA Responsibilities:

- Complete annual state survey on shortage areas
- Develop local plans to address future LEA teacher and principal shortages and work with alternative pathway programs as-needed to help fill posts
- Implement the state evaluation rubric or create an evaluation rubric (and attain state approval) for the evaluation of teachers and principals
- Commit to vote on Q Comp adoption no later than June 2012
- Participate in enhanced Q Comp requirements no later than the 2012-13 school year
- Increase inter-rater reliability by participating in required evaluator training and/or utilize voluntary evaluators through state-funded “loan” program if desired
- Create PDP and staff development plans linked to evaluation and professional development, as part of the Q Comp application
- Evaluate and report uses of and impact of professional development activities to the state
- Send principals to the Minnesota Principals’ Academy
- Adhere to new licensure requirements under multi-tiered licensure system
- Ensure adequate communication to stakeholders of new tiered licensure system, process and requirements for movement between tiers, etc.
- Report to the state the number and distribution of each type of license within their LEA by school, level and subject
- Create and implement Peer Assistance and Review program utilizing state supports and partnerships with regional service cooperatives as needed
- Track and report to the state, usage and outcomes of Peer Assistance and Review
- Provide data annual to the state regarding teacher and principal effectiveness, retention rates and the impact of any incentives
- Partner with local unions to develop plans to provide financial and non-financial incentives to recruit and retain highly-effective teachers and principals to work in high-need subject areas and schools (optional)
- Support Teacher Support Partnership (TSP) model for new teachers
  - Identify master teachers who would be strong mentors and appropriately link them with new teachers
  - Designate and send mentors to induction training
  - Evaluate and report induction curriculum use and impact to the state
- Participate in all state-funded professional development supports

## **Assurance #4: Turning Around the Lowest-Achieving Schools**

### State Responsibilities:

- Identify Minnesota’s persistently lowest-performing schools and directly contact impacted LEAs on an individual basis prior to submitting RTTT to USDE
- Increase state capacity and activity in MN’s lowest-achieving schools and collaborate with LEAs to intervene in MN’s persistently lowest-achieving schools through the creation of OTAS
- Convene an advisory board that represents with expertise in turning around low-achieving schools and representative of P-20 education in Minnesota
- In collaboration with advisory board, determine OTAS leadership
- Provide administrative funding for the creation of the state-level Office of Turnaround Schools (OTAS)
- Flow funds directly to turnaround schools based on the type (as defined in RTTT application) and elements of the school intervention plan
- Provide planning grant funds to increase the number of effective operational models and sites used as turnaround agents (Site will be approved by OTAS prior to receiving grant funding)
- Work with NISL to create a principal cohort and related training program for principals and charter school directors leading turnaround schools
- Assist in the creation of professional development content and ensure capacity to provide training for turnaround schools
- Grant funding to turnaround schools to increase access and enrollment in rigorous courses and increase interest and matriculation rates to post secondary institutions
- Enforce new charter school authorizer accountability laws
- Issue competitive grants to incent the replication of successful charters through OTAS
- Approve authorizer eligibility for charters schools to be used as turnaround agents

### LEA Responsibilities:

- Institute a new governance structure for schools identified by the state for school turnaround
  - Select/Appoint an LEA-based Turnaround Officer or create an Office of School Turnarounds at the LEA level to serve as day-to-day oversight for district-based turnaround school
- Collaborate with OTAS to diagnose and implement turnaround strategies for local schools identified by the state
- Collaborate with OTAS to manage community outreach and relations
- Implement changes required to accommodate turnaround school operational requirements (e.g., operational flexibility and staff stability for teachers effectively working in turnarounds for two cycles / three school years)
- Support leadership development strategies for turnaround schools
- Support professional development strategies for turnaround schools
- Support increased academic and community supports within turnaround schools

**Exhibit 3. RTTT WORKPLAN TIMELINE [This is an overview of major elements of the state’s RTTT plan - not meant to be an exhaustive list]**

|  | 2010-11 School Year   | 2011-12 School Year  | 2012-13 School Year   | 2013-14 School Year   |
|--|---|--|---|---|
| <b>Assurance #1: Standards and Assessments</b>         |   |  |   |   |
| B(1), B(3)<br>Developing and adopting common standards | <ul style="list-style-type: none"> <li>- August 2010 MN will adopt Common Core Standards at the state-level in mathematics and English-language Arts</li> <li>- Begin the process to support implementation statewide thereafter through curricular frameworks and professional development (delivered digitally and through teacher training)</li> </ul> | <ul style="list-style-type: none"> <li>- Provide standards adoption support through curricular frameworks and professional development support (delivered digitally and through teacher training) to implement MN’s Common Core Standards across the state</li> <li>- LEAs will begin adopting new standards through curriculum adaptation in Spring 2011</li> </ul> | <ul style="list-style-type: none"> <li>- LEAs across the state will continue to adopt the common core standards, making adjustments to local curriculum and course offerings (if applicable) as needed</li> </ul> | <ul style="list-style-type: none"> <li>Finalize local adoption of Common Core Standards across the state</li> </ul> |

|  | <b>2010-11 School Year</b>   | <b>2011-12 School Year</b>   | <b>2012-13 School Year</b>   | <b>2013-14 School Year</b>   |
|--|--|--|--|--|
| B(2), B(3)<br>Developing and implementing common, high-quality assessments | <ul style="list-style-type: none"> <li>- Spring 2010 MN will join a consortium of states to develop common, high-quality assessments.</li> <li>- Additionally, the state will support the transition to enhanced standards by developing interim assessments that align with MN's adopted Common Core Standards</li> <li>- Begin development of a common, high-quality assessment system through a consortium of states</li> </ul> | <ul style="list-style-type: none"> <li>- Winter/Spring of 2011 roll-out interim assessments aligned with state-adopted Common Core Standards and support the administration of these assessments for participating LEAs</li> <li>- Continue development of common assessment system with consortium of states</li> </ul> | <ul style="list-style-type: none"> <li>- Continue development of common assessment system within a consortium of states</li> </ul> | <ul style="list-style-type: none"> <li>- Continue development of common, high quality assessments and begin implementation of summative assessments developed within a consortium of states</li> </ul> |
| <b>Assurance #2: Data Systems to Support Instruction</b>                   |  |  |  |  |

|  | <b>2010-11 School Year</b>   | <b>2011-12 School Year</b>  | <b>2012-13 School Year</b>   | <b>2013-14 School Year</b>   |
|--|--|---|--|--|
| C(1), C(2), C(3)<br>Fully implementing a statewide longitudinal data system, providing data access to stakeholders and use data to improve instruction | <ul style="list-style-type: none"> <li>- Finalize implementation of a statewide longitudinal data system</li> <li>- Finalize updates to educator portal and create additional portals for parents, turnaround school communities and researchers to allow access to relevant information for key stakeholders</li> <li>- Begin rollout of data coaching and other professional development supports for enhanced instruction to participating LEAs across the state</li> </ul> | <ul style="list-style-type: none"> <li>- Summer 2011 Launch updated educator portal to provide access to key stakeholders</li> <li>- Continue data coaching and professional development programs across the state</li> </ul> | <ul style="list-style-type: none"> <li>- Continue data coaching and professional development across the state</li> </ul> | <ul style="list-style-type: none"> <li>- Continue data coaching and professional development across the state</li> </ul> |
| <b>Assurance #3: Great Teachers and Leaders</b>  |  |   |  |  |

|   | <b>2010-11 School Year</b>   | <b>2011-12 School Year</b>   | <b>2012-13 School Year</b>   | <b>2013-14 School Year</b>   |
|---|--|--|--|--|
| D(2) Improving teacher and principal effectiveness based on performance   | <ul style="list-style-type: none"> <li>- Develop state-recommended rubric for teachers and principals under RTTT enhanced Q Comp program</li> <li>- Promulgate rules to enhance and instituted a tiered licensing system for teachers</li> <li>- Develop state recommended model for Peer Assistance and Review (PAR) program</li> <li>- Launch comprehensive leadership development review to redesign the continuum of principal preparation, licensure and professional development by the end of 2010</li> </ul> | <ul style="list-style-type: none"> <li>- (Cont) Participating LEAs join RTTT enhanced Q Comp program for principals and teachers</li> <li>- (Cont) Rollout the PAR system across participating LEAs</li> </ul> | <ul style="list-style-type: none"> <li>- Final group of Participating LEAs required to join RTTT enhanced Q Comp program for principals and teachers</li> <li>- (Cont) Rollout the PAR program to participating LEAs</li> </ul>  |  |
| D(3) Ensuring equitable distribution of effective teachers and principals |  |  | <ul style="list-style-type: none"> <li>- Summer 2013 state will assess current distribution of 'highly effective' teachers and principals based on Q Comp evaluations</li> <li>- MDE will publish guidelines for competitive grants to LEAs to for the purpose of implementing plans to ensure the equitable distribution of highly-effective teachers to high-need schools</li> </ul> | Winter 2013 MDE will award grants equitable distribution grants to LEAs across the state |

|  | <b>2010-11 School Year</b>   | <b>2011-12 School Year</b>  | <b>2012-13 School Year</b>  | <b>2013-14 School Year</b>  |
|--|--|---|---|---|
| D(4) Improving the effectiveness of teacher and principal preparation programs | <ul style="list-style-type: none"> <li>- MDE enterprise data model will support the collection of and linking of data to teachers, students and preparation programs</li> <li>- Revise program authorization for principal and teacher preparation programs</li> </ul> | <ul style="list-style-type: none"> <li>- Bush foundation begins reporting program effectiveness and implementing improvement plans</li> </ul>   | <ul style="list-style-type: none"> <li>- Broader range of effectiveness data related to prep program effectiveness comes available</li> </ul> | <ul style="list-style-type: none"> <li>- Broader range of effectiveness data related to prep program effectiveness available</li> </ul> |
| (D)(5) Providing effective support to teachers and principals                  | <ul style="list-style-type: none"> <li>- Begin expansion of MN Principals' Institute</li> <li>- Enroll Participating LEA cohort in MN Principals' Academy</li> <li>- Implement and support comprehensive induction program for new teachers (first 3 years)</li> </ul> | <ul style="list-style-type: none"> <li>- (Cont) Enroll Participating LEA cohort in MN Principals' Academy</li> <li>- (Cont) Implement and support comprehensive induction program for new teachers (first 3 years)</li> </ul> | <ul style="list-style-type: none"> <li>- (Cont) Enroll Participating LEA cohort in MN Principals' Academy</li> </ul>                          | <ul style="list-style-type: none"> <li>- (Cont) Enroll Participating LEA cohort in MN Principals' Academy</li> </ul>                    |
| <b>Assurance #4: Turning Around the Lowest-Achieving Schools</b>               |  |   |   |   |

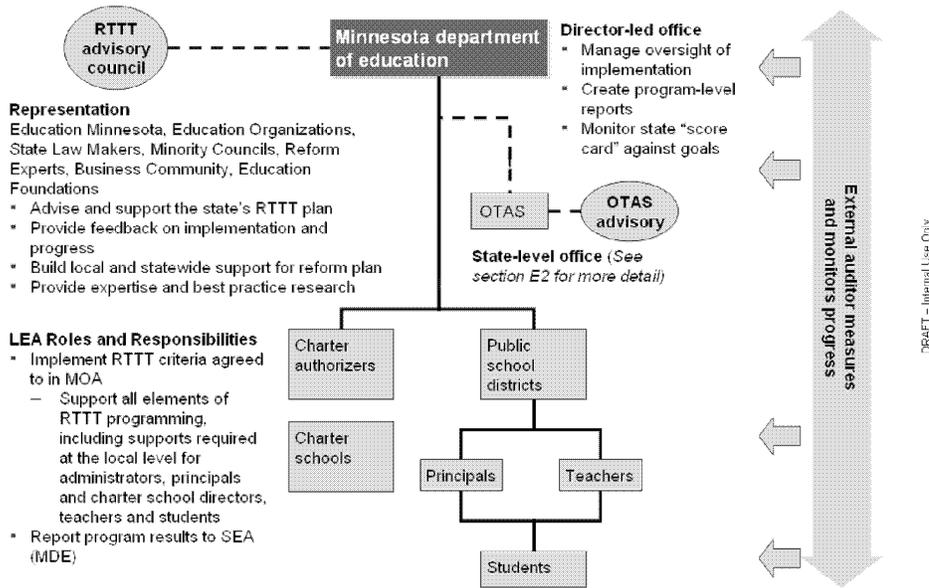
|   | <b>2010-11 School Year</b>   | <b>2011-12 School Year</b>  | <b>2012-13 School Year</b>   | <b>2013-14 School Year</b>  |
|---|--|---|--|---|
| E(2)<br>Turning around the lowest-achieving schools | <ul style="list-style-type: none"> <li>- Identify and communicate to resident LEAs, the lowest-performing schools in MN where the state will support the implantation of a school turnaround</li> <li>- Select key stakeholders to participate in advisory board for turnaround schools</li> <li>- Issue planning grants to and develop strategic plan for first cohort of turnaround schools in MN</li> </ul> | <ul style="list-style-type: none"> <li>- Issue planning grants to and develop strategic plan for second cohort of turnaround schools</li> <li>- Begin turnaround process for first cohort of schools (to be supported for three years through RTTT)</li> <li>- Implement enhanced professional development for teachers and leaders in turnaround schools including enhanced NISL and Teacher Academy for turnaround schools</li> </ul> | <ul style="list-style-type: none"> <li>- Issue planning grants to and develop strategic plan for third cohort of turnaround schools</li> <li>- Begin turnaround process for second cohort of schools (to be supported for three years through RTTT)</li> <li>- (Cont) Enhanced PD for turnaround teachers and leaders</li> </ul> | <ul style="list-style-type: none"> <li>- Begin turnaround process for third cohort of schools (to be supported for three years through RTTT)</li> <li>- (Cont) Enhanced PD for turnaround teachers and leaders</li> </ul> |

**(A)(1) – Exhibit I: *Detailed Table for (A)(1) including participating LEAs, enrollment, etc. (see end of appendix)***

**[SEE END OF APPENDIX]**

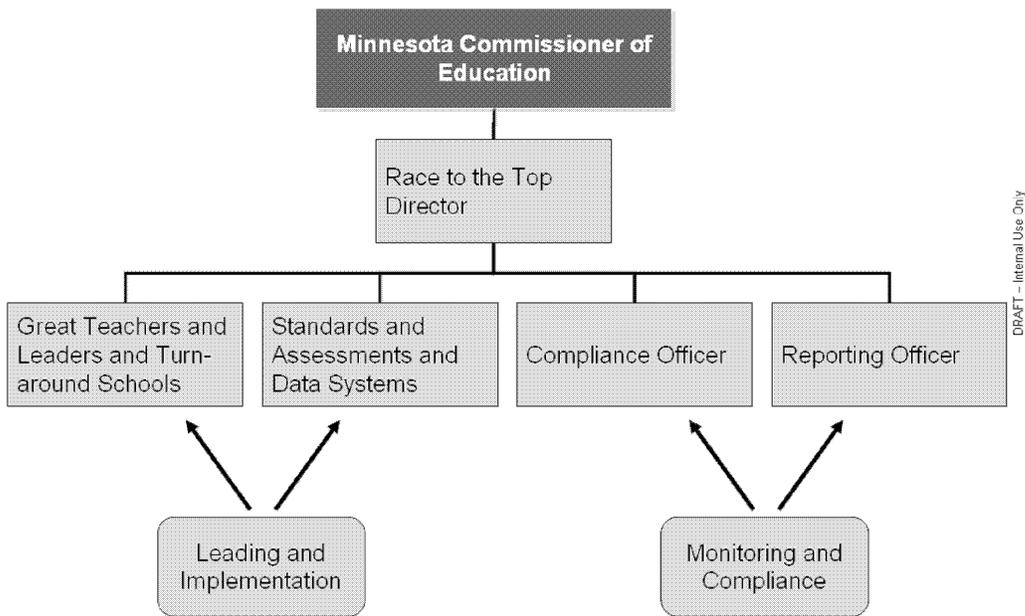
**(A)(2) – Exhibit A: RTTT Office and Organizational structure of implementation**

MN will implement its race to the top plan through a chain of command that is influenced by key stakeholders and monitored by an external auditor

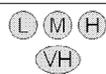


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Proposed MDE RTTT Office Structure



(A)(2) – Exhibit B: Key Program Metrics and Implementation Assessment Framework

| Implementation assessment framework for MN RTTT                                |   |  |  |
|--|---|--|--|
| Indicators of progress   | Rating  | Progress summary   |  |
| Level of implementation difficulty   |    | TBD  | <div style="border: 1px solid gray; padding: 2px; display: inline-block;"> <b>SAMPLE</b><br/>                     To be discussed and revised                 </div> |
| Quality of workplan and implementation   |   | TBD  |  |
| MDE capacity to drive progress   |  | TBD  |  |
| Requirement of union participation (impacts teacher contract, requires vote)   | Y/N   | TBD  |  |
| Stage of implementation (e.g., planning, developing, implementation, adoption) |  | TBD  |  |
| Cultural reception/ environmental impact                                       |  | TBD  |  |

WORKING DRAFT

MDE RTTT office will utilize an assessment framework to monitor project implementation and progress toward goals



| SAMPLE<br>To be discussed and revised                             | Level of implementation difficulty | Quality of scoping and planning | MDE capacity to drive implementation | Requirement of union participation | Phase of implementation | Cultural reception and environmental impact |
|---|------------------------------------|---------------------------------|--------------------------------------|------------------------------------|-------------------------|---|
| ▪ Standards implementation (overall)                              | H                                  | Y                               | G                                    | N                                  | 2                       | O   |
| ▪ State completion of 15% standards augmentation                  | M                                  | Y                               | G                                    | N                                  | 2                       | R   |
| ▪ Public engagement and standards communication                   | H                                  | G                               | G                                    | N                                  | 2                       | Y   |
| ▪ Adopt common core standards into MN Statute through legislature | M                                  | G                               | O                                    | N                                  | 2                       | G   |
| ▪ Statewide information Webinars                                  | L                                  | G                               | O                                    | N                                  | 1                       | G   |
| ▪ Teacher trainings   | M                                  | Y                               | O                                    | N                                  | 3                       | O   |
| ▪ Curriculum director and admin cohorts                           | G                                  | G                               | G                                    | N                                  | 2                       | G   |
| ▪ Curricular frame-work development                               | H                                  | Y                               | G                                    | N                                  | 2                       | G   |
| ▪ Adoption of common core by participating LEAs                   | O                                  | Y                               | Y                                    | N                                  | 1                       | R   |
| ▪ Digital teacher academies                                       | G                                  | G                               | G                                    | N                                  | 2                       | G   |

WORKING DRAFT

Key metrics within each program will gauge progress against key goals



| <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>SAMPLE</b><br/>                     To be discussed and revised                 </div> | End of SP     | End of SP     | End of SP     | End of SP     | Status        |               |                 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|
|   | 2010-11       | 2011-12       | 2012-13       | 2013-14       | ● ○ ○ ○ ○     | Actual        | Target          |
| <b>PROGRAM Details</b>  | <b>Actual</b> | <b>Target</b> | <b>Actual</b> | <b>Target</b> | <b>Actual</b> | <b>Target</b> | <b>Comments</b> |
| ▪ Teacher Training – Train the trainer (participating LEAs)   |               |               |               |               |               |               |                 |
| ▪ Percent of teachers that have attended training (participating LEAs)  | 25%           | 70%           | 100%          | 100%          | ●             |               |                 |
| ▪ Percent of teachers who access iTunesU for instructional intervention guidance (participating LEAs)   | 25%           | 40%           | 60%           | 75%           | ○             |               |                 |
| ▪ Percent of teacher who download instructional aides on a monthly basis from iTunesU (participating LEAs)  | 10%           | 25%           | 50%           | 65%           | ○             |               |                 |
| ▪ Percent of teachers reporting self-improvement in instructional ability (participating LEAs)  | 15%           | 50%           | 75%           | 75%           | ○             |               |                 |
| ▪ Percent of teachers scoring in top 2 box of job satisfaction rating on instructional time (participating LEAs)  | 10%           | 35%           | 55%           | 65%           | ○             |               |                 |
| ▪ Percent of teachers who utilize curricular frameworks to inform instruction (statewide)   | 15%           | 50%           | 90%           | 100%          | ○             |               |                 |
| ▪ Percent of teachers who report use of new standards on weekly basis in instruction (statewide)  | 25%           | 50%           | 90%           | 100%          | ○             |               |                 |

WORKING DRAFT

(A)(2) – Exhibit C: Sample outside evaluator RFP

CFMS Contract No. B19489

STATE OF MINNESOTA  
PROFESSIONAL AND TECHNICAL SERVICES CONTRACT

This contract is between the State of Minnesota, acting through its Commissioner of the Minnesota Department of Education, 1500 Highway 36 West, Roseville, MN 55113-4266 ("State") and Hezel Associates LLC, 731 James Street, Suite 300, Syracuse, NY 13203.

Recitals

1. Under Minn. Stat. § 15.061 the State is empowered to engage such assistance as deemed necessary.
2. The State is in need of an evaluator to conduct an independent, unbiased evaluation of the Quality Compensation for Teachers (Q Comp) program designed to improve teacher quality through alternative compensation in Minnesota schools. The independent evaluation will provide both formative and summative evaluation of current implementation processes as well as tools for helping measure program effectiveness in the future.
3. The Contractor represents that it is duly qualified and agrees to perform all services described in this contract to the satisfaction of the State.

Contract

1 Term of Contract

- 1.1 *Effective date:* September 8, 2008, or the date the State obtains all required signatures under Minnesota Statutes Section 16C.05, subdivision 8, whichever is later.  
The Contractor must not begin work under this contract until this contract is fully executed and the Contractor has been notified by the State's Authorized Representative to begin the work.
- 1.2 *Expiration date:* January 30, 2009, or until all obligations have been satisfactorily fulfilled, whichever occurs first.
- 1.3 *Survival of Terms.* The following clauses survive the expiration or cancellation of this contract: 8. Liability; 9. State Audits; 10. Government Data Practices and Intellectual Property; 12. Publicity and Endorsement; 13. Governing Law, Jurisdiction, and Venue; and 14. Data Disclosure.

2 Contractor's Duties

The Contractor, who is not a state employee, will:

Work with the Minnesota Department of Education (MDE) to develop an evaluation plan focused on both Minnesota Q Comp school districts' activities and MDE Q Comp support activities to:

- A. provide a picture of what is happening in Q Comp districts and at MDE SI including important background and contextual information as well as infrastructures
- B. describe the impact of Q Comp on student achievement
- C. identify the critical features of Q Comp implementation related to effective school improvement
- D. identify the essential elements needed to sustain the Q Comp program
- E. develop surveys for ongoing evaluation of program activities

The Q Comp evaluator will be expected to work collaboratively with the current Q Comp districts and their participating schools and teachers to organize, document and analyze data to gather implementation information related to Q Comp as well as provide an unbiased perspective of the effectiveness of the Q Comp program. The evaluator's analysis and discussion of results should focus on both implementation and ongoing use processes and outcomes. The final evaluation report is expected to provide implementation and evaluation at two levels:

- 1) general level for all participating districts, schools, and teachers
- 2) detailed, in-depth level case studies describing activities and outcomes for a sample of Q Comp districts

The Q Comp evaluator will be responsible for documenting how the program has evolved and providing a concrete description of how the Q Comp program can be improved and sustained to enhance the school improvement process.

Contractor will be required to travel from New York to Minnesota on at least five occasions for evaluation of the Q Comp program both at MDE and in participating districts/schools.

The following products are to be completed as part of this contract:

1. **Final Evaluation Report (to be submitted electronically to MDE by January 15, 2009)**  
*Should be a comprehensive evaluation at both the state and district implementation level and include the following report components as a minimum.*
  - A. An executive summary that outlines strengths and deficits of Q Comp's impact on:
    - i. improving student achievement
    - ii. enhancing the school improvement process
  - B. An overall summary of MDE SI administration activities to include
    - i. District Q Comp plan approval
      - a. Initial applications
      - b. Annual updates
    - ii. Technical assistance from MDE
    - iii. Annual peer review process
    - iv. Annual Q Comp conference and networking meetings
  - C. An overall summary of all Q Comp districts' implementation activities to include:
    - i. Job-embedded professional development
    - ii. Teacher observation/evaluation processes
    - iii. Career ladder advancement options
    - iv. Performance pay factors
    - v. Alternative salary schedules
  - D. A comparison of Q Comp components across different levels of implementation of school change (Q Comp as TAP, Q Comp, non-Q Comp with PLCs/teacher leaders, and non-Q Comp with no PLCs/teacher leaders) to identify differences which can be linked to increased student achievement and/or increased teacher quality which will include:
    - i. Demographic data of each comparison group
    - ii. Schoolwide goals and monitoring of those goals
    - iii. Changes in student achievement
    - iv. Professional development activities
    - v. Teacher observation/evaluation processes
    - vi. Structure of school day and calendar
    - vii. School culture and beliefs
    - viii. Teacher recruitment and retention practices
    - ix. Role of district administrators and school principals/administrators
  - E. Case studies of a sample of Q Comp districts to include:
    - i. Application process
    - ii. Initial implementation process
    - iii. Ongoing process for monitoring and adjusting program activities and goals
    - iv. Infrastructure for sustaining Q Comp program over multiple years
    - v. Summary of Q Comp strengths and deficits
  - F. A summary of outside stakeholders (i.e., legislators, parents, school boards and the business community) comprehension of Q Comp programs to include:
    - i. Awareness of legislation authorizing Q Comp program
    - ii. Understanding of purpose of performance pay
    - iii. Awareness of implementation of local Q Comp programs
  - G. Identification of critical Q Comp program elements for:
    - i. Increasing student achievement
    - ii. Effective school improvement
  - H. Recommendations for improving Q Comp program at:
    - i. MDE SI administrative support level
    - ii. District Q Comp plan implementation level
    - iii. Statewide stakeholder awareness and understanding level

2. Survey for Level of Implementation of Q Comp Program Aligned to District Plan (to be submitted electronically to MDE by January 30, 2009)  
*This should reflect quality indicators to help improve Q Comp implementation at district/school level and include the following.*
  - A. Detailed survey that gathers information related to four (4) major Q Comp components:
    - i. Job-embedded professional development
    - ii. Teacher observation/evaluation
    - iii. Career ladder/advancement options
    - iv. Performance pay options
  - B. Plan for using survey as a substitute for an annual peer review
  - C. Plan for using survey as a local district formative evaluation tool for Q Comp
  
3. Survey for MDE SI Q Comp Program (to be submitted electronically to MDE by January 30, 2009)  
*This should reflect quality indicators to help improve Q Comp administrative activities and include the following.*
  - A. Detailed survey that gathers information related to MDE SI administrative activities to include:
    - i. Annual update of program plans
    - ii. Networking meetings
    - iii. Technical support
    - iv. Peer review process
  - B. Plan for using survey annually to strengthen administrative work of Q Comp program

The following six major activities are to be completed as part of this contract:

1. Conduct preliminary consultation with MDE
2. Conduct focus groups with MDE's Q Comp support staff
3. Administer, organize and analyze comparative online surveys of school improvement implementation including Q Comp
4. Administer, organize and analyze online surveys of community/stakeholder awareness of Q Comp
5. Analyze student performance data across all 60 Q Comp districts/schools
6. Gather, organize and analyze data for comparative case studies

### 3 Time

The Contractor must comply with all the time requirements described in this contract. In the performance of this contract, time is of the essence.

### 4 Consideration and Payment

4.1 *Consideration.* The State will pay for all services performed by the Contractor under this contract as follows:

(A) *Compensation.* The Contractor will be paid \$175,477.00 to perform the duties set forth in Clause 2 in accordance with the budget set forth in Attachment A, attached hereto and incorporated into this contract.

(B) *Travel Expenses.* Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Contractor as a result of this contract will not exceed \$11,780; provided that the Contractor will be reimbursed for travel and subsistence expenses in the same manner and in no greater amount than provided in the current "Commissioner's Plan" promulgated by the commissioner of Employee Relations, which is incorporated in to this contract by reference. The Contractor will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it has received the State's prior written approval for out of state travel. Minnesota will be considered the home state for determining whether travel is out of state.

(C) *Total Obligation.* The total obligation of the State for all compensation and reimbursements to the Contractor under this contract will not exceed \$187,257.

**4.2. Payment**

(A) *Invoices.* The State will promptly pay the Contractor after the Contractor presents an itemized invoice for the services actually performed and the State's Authorized Representative accepts the invoiced services. Invoices must be submitted timely and according to the following schedule and as set forth in Attachment B, attached hereto and incorporated into this contract:

|                               |          |
|-------------------------------|----------|
| On or around November 6, 2008 | \$90,000 |
| On or around January 30, 2009 | \$97,257 |

(B) *Retainage.* Under Minnesota Statutes Section 16C.08, subdivision 5(b), no more than 90% of the amount due under this contract may be paid until the final product of this contract has been reviewed by the State's agency head. Ten percent (10%) of each invoice amount will be retained until final payment. The balance due will be paid when the State's agency head determines that the Contractor has satisfactorily fulfilled all the terms of this contract.

(C) *Federal funds.* (Where applicable, if blank this section does not apply) Payments under this contract will be made from federal funds obtained by the State through Title \_\_\_\_\_ CFDA number \_\_\_\_\_ of the \_\_\_\_\_ Act of \_\_\_\_\_. The Contractor is responsible for compliance with all federal requirements imposed on these funds and accepts full financial responsibility for any requirements imposed by the Contractor's failure to comply with federal requirements.

**5 Conditions of Payment**

All services provided by the Contractor under this contract must be performed to the State's satisfaction, as determined at the sole discretion of the State's Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Contractor will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.

**6 Authorized Representatives**

The State's Authorized Representative is Patricia K. King, [patricia.k.king@state.mn.us](mailto:patricia.k.king@state.mn.us) Phone: 651-582-8655 or his/her successor, and has the responsibility to monitor the Contractor's performance and the authority to accept the services provided under this contract. If the services are satisfactory, the State's Authorized Representative will certify acceptance on each invoice submitted for payment.

The Contractor's Authorized Representative is Richard T. Hezel, Ph. D., [richard@hezel.com](mailto:richard@hezel.com) Phone: 315-422-3512 or his/her successor. If the Contractor's Authorized Representative changes at any time during this contract, the Contractor must immediately notify the State.

**7 Assignment, Amendments, Waiver, and Contract Complete**

7.1 *Assignment.* The Contractor may neither assign nor transfer any rights or obligations under this contract without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this contract, or their successors in office.

7.2 *Amendments.* Any amendment to this contract must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original contract, or their successors in office.

7.3 *Waiver.* If the State fails to enforce any provision of this contract, that failure does not waive the provision or its right to enforce it.

7.4 *Contract Complete.* This contract contains all negotiations and agreements between the State and the Contractor. No other understanding regarding this contract, whether written or oral, may be used to bind either party.

8 **Liability**

The Contractor must indemnify, save, and hold the State, its agents, and employees harmless from any claims or causes of action, including attorney's fees incurred by the State, arising from the performance of this contract by the Contractor or the Contractor's agents or employees. This clause will not be construed to bar any legal remedies the Contractor may have for the State's failure to fulfill its obligations under this contract.

9 **State Audits**

Under Minn. Stat. § 16C.05, subd. 5, the Contractor's books, records, documents, and accounting procedures and practices relevant to this contract are subject to examination by the State and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this contract.

10 **Government Data Practices and Intellectual Property**

10.1. **Government Data Practices.** The Contractor and State must comply with the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, (or, if the State contracting party is part of the judicial branch, with the Rules of Public Access to Records of the Judicial Branch promulgated by the Minnesota Supreme Court as the same may be amended from time to time) as it applies to all data provided by the State under this contract, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Contractor under this contract. The civil remedies of Minn. Stat. § 13.08 apply to the release of the data governed by the Minnesota Government Practices Act, Minn. Stat. Ch. 13, by either the Contractor or the State.

If the Contractor receives a request to release the data referred to in this Clause, the Contractor must immediately notify the State. The State will give the Contractor instructions concerning the release of the data to the requesting party before the data is released.

10.2. **Intellectual Property Rights.**

(A) **Intellectual Property Rights.** The State owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works and Documents *created and paid for under this contract*. Works means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, and disks conceived, reduced to practice, created or originated by the Contractor, its employees, agents, and subcontractors, either individually or jointly with others in the performance of this contract. Works includes "Documents." Documents are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Contractor, its employees, agents, or subcontractors, in the performance of this contract. The Documents will be the exclusive property of the State and all such Documents must be immediately returned to the State by the Contractor upon completion or cancellation of this contract. To the extent possible, those Works eligible for copyright protection under the United States Copyright Act will be deemed to be "works made for hire." The Contractor assigns all right, title, and interest it may have in the Works and the Documents to the State. The Contractor must, at the request of the State, execute all papers and perform all other acts necessary to transfer or record the State's ownership interest in the Works and Documents.

(B) **Obligations**

- a. **Notification.** Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Contractor, including its employees and subcontractors, in the performance of this contract, the Contractor will immediately give the State's Authorized Representative written notice thereof, and must promptly furnish the Authorized Representative with complete information and/or disclosure thereon.

- b. *Representation.* The Contractor must perform all acts, and take all steps necessary to ensure that all intellectual property rights in the Works and Documents are the sole property of the State, and that neither Contractor nor its employees, agents, or subcontractors retain any interest in and to the Works and Documents. The Contractor represents and warrants that the Works and Documents do not and will not infringe upon any intellectual property rights of other persons or entities. Notwithstanding Clause 8, the Contractor will indemnify, defend, to the extent permitted by the Attorney General, and hold harmless the State, at the Contractor's expense, from any action or claim brought against the State to the extent that it is based on a claim that all or part of the Works or Documents infringe upon the intellectual property rights of others. The Contractor will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs, and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Contractor's or the State's opinion is likely to arise, the Contractor must, at the State's discretion, either procure for the State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing Works or Documents as necessary and appropriate to obviate the infringement claim. This remedy of the State will be in addition to and not exclusive of other remedies provided by law.

**11 Workers' Compensation and Other Insurance**

Contractor certifies that it is in compliance with all insurance requirements specified in the solicitation document relevant to this Contract.

Further, the Contractor certifies that it is in compliance with Minn. Stat. § 176.181, subd. 2., pertaining to workers' compensation insurance coverage. The Contractor's employees and agents will not be considered State employees. Any claims that may arise under the Minnesota Workers' Compensation Act on behalf of these employees or agents and any claims made by any third party as a consequence of any act or omission on the part of these employees or agents are in no way the State's obligation or responsibility.

**12 Publicity and Endorsement**

12.1 *Publicity.* Any publicity regarding the subject matter of this contract must identify the State as the sponsoring agency and must not be released without prior written approval from the State's Authorized Representative. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Contractor individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this contract.

12.2 *Endorsement.* The Contractor must not claim that the State endorses its products or services.

**13 Governing Law, Jurisdiction, and Venue**

Minnesota law, without regard to its choice-of-law provisions, governs this contract. Venue for all legal proceedings out of this contract, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

**14 Data Disclosure**

Under Minn. Stat. § 270C.65, Subd. 3 and other applicable law, the Contractor consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state laws which could result in action requiring the Contractor to file state tax returns, pay delinquent state tax liabilities, if any, or pay other state liabilities.

**15 Payment to Subcontractors**

(If applicable) As required by Minn. Stat. § 16A.1245, the prime contractor must pay all subcontractors, less any retainage, within 10 calendar days of the prime contractor's receipt of payment from the State for undisputed

services provided by the subcontractor(s) and must pay interest at the rate of one and one-half percent per month or any part of a month to the subcontractor(s) on any undisputed amount not paid on time to the subcontractor(s).

**16 Termination**

**16.1 *Termination by the State.*** The State or commissioner of Administration may cancel this contract at any time, with or without cause, upon 30 days' written notice to the Contractor. Upon termination, the Contractor will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.

**16.2 *Termination for Insufficient Funding.*** The State may immediately terminate this contract if it does not obtain funding from the Minnesota Legislature, or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Contractor. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Contractor will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that funds are available. The State will not be assessed any penalty if the contract is terminated because of the decision of the Minnesota Legislature, or other funding source, not to appropriate funds. The State must provide the Contractor notice of the lack of funding within a reasonable time of the State's receiving that notice.

**17 Minn. Stat. § 181.59**

The vendor will comply with the provisions of Minn. Stat. § 181.59 which require:

Every contract for or on behalf of the state of Minnesota, or any county, city, town, township, school, school district, or any other district in the state, for materials, supplies, or construction shall contain provisions by which the contractor agrees: (1) That, in the hiring of common or skilled labor for the performance of any work under any contract, or any subcontract, no contractor, material supplier, or vendor, shall, by reason of race, creed, or color, discriminate against the person or persons who are citizens of the United States or resident aliens who are qualified and available to perform the work to which the employment relates; (2) That no contractor, material supplier, or vendor, shall, in any manner, discriminate against, or intimidate, or prevent the employment of any person or persons identified in clause (1) of this section, or on being hired, prevent, or conspire to prevent, the person or persons from the performance of work under any contract on account of race, creed, or color; (3) That a violation of this section is a misdemeanor; and (4) That this contract may be canceled or terminated by the state, county, city, town, school board, or any other person authorized to grant the contracts for employment, and all money due, or to become due under the contract, may be forfeited for a second or any subsequent violation of the terms or conditions of this contract.

**18 Affirmative Action Requirements for Contracts in Excess of \$100,000 and if the Contractor has More than 40 Full-time Employees in Minnesota or its Principal Place of Business**

The State intends to carry out its responsibility for requiring affirmative action by its Contractors.

**18.1 *Covered Contracts and Contractors.*** If the Contract exceeds \$100,000 and the contractor employed more than 40 full-time employees on a single working day during the previous 12 months in Minnesota or in the state where it has its principle place of business, then the Contractor must comply with the requirements of Minn. Stat. § 363A.36 and Minn. R. Parts 5000.3400-5000.3600. A contractor covered by Minn. Stat. § 363A.36 because it employed more than 40 full-time employees in another state and does not have a certificate of compliance, must certify that it is in compliance with federal affirmative action requirements.

**18.2 *Minn. Stat. § 363A.36.*** Minn. Stat. § 363A.36 requires the Contractor to have an affirmative action plan for the employment of minority persons, women, and qualified disabled individuals approved by the Minnesota Commissioner of Human Rights ("Commissioner") as indicated by a certificate of compliance. The law addresses suspension or revocation of a certificate of compliance and contract consequences in that event. A contract awarded without a certificate of compliance may be voided.

**18.3 *Minn. R. 5000.3400-5000.3600.***

- (A) *General.* Minn. R. 5000.3400-5000.3600 implement Minn. Stat. § 363A.36. These rules include, but are not limited to, criteria for contents, approval, and implementation of affirmative action plans; procedures for issuing certificates of compliance and criteria for determining a contractor's compliance status; procedures for addressing deficiencies, sanctions, and notice and hearing; annual compliance reports; procedures for compliance review; and contract consequences for non-compliance. The specific criteria for approval or rejection of an affirmative action plan are contained in various provisions of Minn. R. 5000.3400-5000.3600 including, but not limited to, parts 5000.3420-5000.3500 and 5000.3552-5000.3559.
- (B) *Disabled Workers.* The Contractor must comply with the following affirmative action requirements for disabled workers.
  - (1) The Contractor must not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled persons without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
  - (2) The Contractor agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
  - (3) In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with Minnesota Statutes Section 363A.36, and the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
  - (4) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the commissioner of the Minnesota Department of Human Rights. Such notices must state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled employees and applicants for employment, and the rights of applicants and employees.
  - (5) The Contractor must notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the contractor is bound by the terms of Minnesota Statutes Section 363A.36, of the Minnesota Human Rights Act and is committed to take affirmative action to employ and advance in employment physically and mentally disabled persons.
- (C) *Consequences.* The consequences for the Contractor's failure to implement its affirmative action plan or make a good faith effort to do so include, but are not limited to, suspension or revocation of a certificate of compliance by the Commissioner, refusal by the Commissioner to approve subsequent plans, and termination of all or part of this contract by the Commissioner or the State.
- (D) *Certification.* The Contractor hereby certifies that it is in compliance with the requirements of Minn. Stat. § 363A.36 and Minn. R. 5000.3400-5000.3600 and is aware of the consequences for noncompliance.

19 **Foreign Outsourcing**

Contractor agrees that the disclosures and certifications made in its Location of Service Disclosure and Certification Form submitted with its proposal are true, accurate and incorporated into this contract by reference.

20 **Employee Status**

By order of the Governor's Executive Order 08-01, if this contract, including any extension options, is or could be in excess of \$50,000, Contractor certifies that it and its subcontractors:

- 1. Comply with the Immigration Reform and Control Act of 1986 (U.S.C. 1101 et. seq.) in relation to all employees performing work in the United States and do not knowingly employ persons in violation of the United States' immigration laws; and

2. By the date of the performance of services under this contract, Contractor and all its subcontractors have implemented or are in the process of implementing the *E-Verify* program for all newly hired employees in the United States who will perform work on behalf of the State of Minnesota.

Contractor shall obtain certifications of compliance with this section from all subcontractors who will participate in the performance of this contract. Subcontractor certifications shall be maintained by Contractor and made available to the state upon request. If Contractor or its subcontractors are not in compliance with 1 or 2 above or have not begun or implemented the *E-Verify* program for all newly hired employees performing work under the contract, the state reserves the right to determine what action it may take including but not limited to, cancelling the contract and/or suspending or debaring the contractor from state purchasing.

**1. STATE ENCUMBRANCE VERIFICATION**

*Individual certifies that funds have been encumbered as required by Minn. Stat. §§ 16A.15 and 16C.05.*

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

**2. CONTRACTOR: Hezel Associates LLC**

The Contractor certifies that the appropriate person(s) have executed the contract on behalf of the Contractor as required by applicable articles, bylaws, resolutions, or ordinances.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**3. STATE AGENCY: Minnesota Department of Education**

By: \_\_\_\_\_  
(with delegated authority)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**4. COMMISSIONER OF ADMINISTRATION**

*As delegated to Materials Management Division*

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Distribution:  
Agency  
Contractor  
State's Authorized Representative - Photo Copy

## Attachment A

| Tasks/Activities  | Salaries and Fringe Benefits | Consultant | Travel | Indirect | Total |
|---|------------------------------|------------|--------|----------|-------|
| 1. Preliminary consultation with MDE  |                              |            |        |          |       |
| 1.1 Schedule meeting  | 2,381                        | 3,000      | 2,100  | 358      | 7,839 |
| 1.2 Develop discussion protocol   | 3,174                        | 2,000      |        | 254      | 5,428 |
| 1.3 Analyze findings  | 1,946                        | 2,000      |        | 156      | 4,102 |
| 2. Focus groups with MDE's Q Comp support staff                                       |                              |            |        |          |       |
| 2.1 w/ MDE, identify participants   | 1,024                        |            |        | 82       | 1,106 |
| 2.2 Schedule focus groups   | 822                          | 3,200      |        | 74       | 4,195 |
| 2.3 Develop protocols   | 3,174                        | 1,000      |        | 254      | 4,428 |
| 2.4 Conduct focus groups  | 973                          |            | 2,120  | 247      | 3,340 |
| 2.5 Analyze findings  | 1,946                        | 1,000      |        | 156      | 3,101 |
| 3. Online surveys of Q Comp implementation in all 60 current Q comp districts/schools |                              |            |        |          |       |
| 3.1 Acquire contact information   | 1,024                        |            |        | 82       | 1,105 |
| 3.2 Develop messages and draw sample  | 717                          |            |        | 57       | 774   |
| 3.3 Develop survey questions  | 5,069                        | 1,000      |        | 406      | 6,474 |
| 3.4 Prepare Remark online survey  | 1,177                        |            |        | 94       | 1,271 |
| 3.5 Deploy Remark online survey   | 358                          |            |        | 29       | 387   |
| 3.6 Analyze data from survey  | 5,478                        | 1,000      |        | 438      | 6,916 |
| 4. Analysis of student performance data   |                              |            |        |          |       |
| 4.1 Contact districts for student performance data                                    | 3,174                        |            |        | 254      | 3,428 |
| 4.2 Collect data  | 3,174                        |            |        | 254      | 3,428 |
| 4.3 Analyze student performance data  | 3,738                        | 1,000      |        | 299      | 5,036 |
| 5. Online surveys of community/stakeholder awareness of Q Comp                        |                              |            |        |          |       |
| 5.1 Develop messages and draw sample  | 717                          |            |        | 57       | 774   |

|   |                   |                  |                  |                 |                   |
|---|-------------------|------------------|------------------|-----------------|-------------------|
| 5.2 Develop survey questions  |                   |                  |                  |                 |                   |
|   | 2,048             | 1,000            |                  | 184             | 3,211             |
| 5.3 Prepare Remark online survey  | 1,638             |                  |                  | 131             | 1,769             |
| 5.4 Deploy Remark online survey   | 358               |                  |                  | 29              | 387               |
| 5.5 Analyze data from survey  | 5,683             | 1,000            |                  | 455             | 7,137             |
| 6. Comparative case studies of Q Comp implementation in eight sites                       |                   |                  |                  |                 |                   |
| 6.1 Draw sample of Q Comp and comparison districts/schools                                | 2,862             |                  |                  | 213             | 2,975             |
| 6.2 Develop follow up implementation surveys  | 3,020             | 2,000            |                  | 242             | 5,262             |
| 6.3 Develop follow up focus group protocols   | 2,560             | 2,000            |                  | 205             | 4,764             |
| 6.4 Contact regional and school-level participants to schedule visits                     | 2,304             |                  |                  | 184             | 2,488             |
| 6.5 Develop interview protocols for use with district- and school-level personnel         | 2,560             | 2,000            |                  | 205             | 4,764             |
| 6.6 Develop teacher focus group protocols   | 2,560             | 2,000            |                  | 205             | 4,764             |
| 6.7 Develop classroom observation protocols   | 3,021             | 2,000            |                  | 242             | 5,262             |
| 6.8 Conduct case studies in each of eight sites   | 8,856             | 11,250           | 8,760            | 1,073           | 25,739            |
| 6.9 Analyze data gathered from case studies   | 7,168             | 4,000            |                  | 572             | 11,741            |
| 7.0 Prepare final evaluation report   | 10,445            | 2,000            | 800              | 900             | 14,144            |
| 8.1 Prepare survey for level of implementation of Q Comp program aligned to district plan | 7,322             | 4,000            |                  | 585             | 11,907            |
| 8.2 Pilot test survey (optional)  | 922               | 2,000            |                  | 74              | 2,995             |
| 9.1 Prepare survey for MDE SI Q Comp Program  | 7,322             | 4,000            |                  | 585             | 11,907            |
| 9.2 Pilot test survey (optional)  | 923               | 2,000            |                  | 74              | 2,995             |
| <b>Total</b>  | <b>\$ 109,338</b> | <b>\$ 56,450</b> | <b>\$ 11,780</b> | <b>\$ 9,689</b> | <b>\$ 187,257</b> |

CFMS Contract No.

**Attachement B  
Q Comp Evaluator Payout Schedule**

|   | Activity   | SFB  | Consult | Travel | Indirect | Sum from Parts | Payment 1<br>Nov 6, 2008 | Payment 2<br>Jan 31, 2008 |
|---|--|------|---------|--------|----------|----------------|--------------------------|---------------------------|
| 1 | Preliminary consultation with MDE  |      |         |        |          |                |                          |                           |
|   | 1.1 Schedule meeting   | 2381 | 3000    | 2100   | 358      | 7839           | 7839                     |                           |
|   | 1.2 Develop discussion protocol  | 3174 | 2000    |        | 254      | 5428           | 5428                     |                           |
|   | 1.3 Analyze findings   | 1946 | 2000    |        | 156      | 4102           | 4102                     |                           |
| 2 | Focus groups with MDE Q Comp support staff   |      |         |        |          |                |                          |                           |
|   | 2.1 Identify participants  | 1024 |         |        | 82       | 1106           | 1106                     |                           |
|   | 2.2 Schedule focus groups  | 922  | 3200    |        | 74       | 4196           | 4196                     |                           |
|   | 2.3 Develop protocols  | 3174 | 1000    |        | 254      | 4428           | 4428                     |                           |
|   | 2.4 Conduct focus groups   | 973  |         | 2120   | 247      | 3340           | 3340                     |                           |
|   | 2.5 Analyze findings   | 1946 | 1000    |        | 156      | 3102           | 3102                     |                           |
| 3 | Online surveys of Q Comp implementation in all 60 current Q comp districts/schools |      |         |        |          |                |                          |                           |
|   | 3.1 Acquire contact information  | 1024 |         |        | 82       | 1106           | 1106                     |                           |
|   | 3.2 Develop messages and draw sample   | 717  |         |        | 57       | 774            | 774                      |                           |
|   | 3.3 Develop survey questions   | 5069 | 1000    |        | 406      | 6475           | 6475                     |                           |
|   | 3.4 Prepare Remark online survey   | 1177 |         |        | 94       | 1271           | 1271                     |                           |
|   | 3.5 Deploy Remark online survey  | 358  |         |        | 29       | 387            | 387                      |                           |
|   | 3.6 Analyze data from survey   | 5478 | 1000    |        | 438      | 6916           |                          | 6916                      |
| 4 | Analysis of student performance data   |      |         |        |          |                |                          |                           |
|   | 4.1 Contact districts for student performance data                                 | 3174 |         |        | 254      | 3428           | 3428                     |                           |
|   | 4.2 Collect data   | 3174 |         |        | 254      | 3428           | 3428                     |                           |
|   | 4.3 Analyze student performance data   | 3738 | 1000    |        | 299      | 5037           |                          | 5037                      |
| 5 | Online surveys of community/stakeholder awareness of Q Comp                        |      |         |        |          |                |                          |                           |
|   | 5.1 Develop messages and draw sample   | 717  |         |        | 57       | 774            | 774                      |                           |
|   | 5.2 Develop survey questions   | 2048 | 1000    |        | 164      | 3212           | 3212                     |                           |
|   | 5.3 Prepare Remark online survey   | 1638 |         |        | 131      | 1769           | 1769                     |                           |
|   | 5.4 Deploy Remark online survey  | 358  |         |        | 29       | 387            | 387                      |                           |
|   | 5.5 Analyze data from survey   | 5683 | 1000    |        | 455      | 7138           |                          | 7138                      |
| 6 | Comparative case studies of Q Comp implementation in eight sites                   |      |         |        |          |                |                          |                           |
|   | 6.1 Draw sample of Q Comp & comparison districts/schools                           | 2662 |         |        | 213      | 2875           | 2875                     |                           |

CFMS Contract No. B19489

| Activity     |   | SFB           | Consult      | Travel       | Indirect    | Sum from Parts | Payment 1<br>Nov 6, 2008 | Payment 2<br>Jan 31, 2008 |
|--------------|---|---------------|--------------|--------------|-------------|----------------|--------------------------|---------------------------|
| 6.2          | Develop follow-up implementation surveys                                      | 3020          | 2000         |              | 242         | 5262           | 5262                     |                           |
| 6.3          | Develop follow-up focus group protocols                                       | 2560          | 2000         |              | 205         | 4765           | 4765                     |                           |
| 6.4          | Contact regional and school-level participants to schedule visits             | 2304          |              |              | 184         | 2488           | 2488                     |                           |
| 6.5          | Develop interview protocols for use with district- and school-level personnel | 2560          | 2000         |              | 205         | 4765           | 4765                     |                           |
| 6.6          | Develop teacher focus group protocols   | 2560          | 2000         |              | 205         | 4765           | 4765                     |                           |
| 6.7          | Develop classroom observation protocols                                       | 3021          | 2000         |              | 242         | 5263           | 5263                     |                           |
| 6.8          | Conduct case studies in each of eight sites                                   | 6656          | 11250        | 6760         | 1073        | 25739          | 3265                     | 22474                     |
| 6.9          | Analyze data gathered from case studies                                       | 7168          | 4000         |              | 572         | 11740          |                          | 11740                     |
| 7            | Prepare final evaluation report   | 10445         | 2000         | 800          | 900         | 14145          |                          | 14145                     |
| 8            | Survey for level of implementation of Q Comp program aligned to district plan |               |              |              |             |                |                          |                           |
| 8.1          | Prepare survey  | 7322          | 4000         |              | 585         | 11907          |                          | 11907                     |
| 8.2          | Pilot test survey   | 922           | 2000         |              | 74          | 2996           |                          | 2996                      |
| 9            | Survey for MIDE SI Q Comp Program   |               |              |              |             |                |                          |                           |
| 9.1          | Prepare survey  | 7322          | 4000         |              | 585         | 11907          |                          | 11907                     |
| 9.2          | Pilot test survey   | 923           | 2000         |              | 74          | 2997           |                          | 2997                      |
| <b>Total</b> |   | <b>109338</b> | <b>56450</b> | <b>11760</b> | <b>9689</b> | <b>187257</b>  | <b>90000</b>             | <b>97267</b>              |

(A)(2) – Exhibit D: Sample Aspirational Changes to Conceptions through RTTT

| <b>Minnesota's aspirations for a culture of collaboration and support (1/3)</b> |   |   |
|---|---|--|
|   | <b>From some pockets of conceptions such as...</b>  | <b>To consistent conceptions that illustrate evidence of support and collaboration such as...</b>  |
| <b>Standards and Assessments</b>  | <ul style="list-style-type: none"> <li>Standard and assessments as punitive benchmarks assessed at the end of the year</li> <li>State assessments as after-the-fact reports that don't drive action with current students</li> </ul>  | <ul style="list-style-type: none"> <li>Standards and assessments as enablers of classroom instruction to ensure student growth towards college and career readiness</li> <li>Real-time access to interim assessment data to enable immediate adjustments in instructional strategies</li> </ul>  |
| <b>Illustrative - to be revised and discussed</b>                               | <ul style="list-style-type: none"> <li>Common standards and assessments are a barrier to teaching a unique group of students</li> <li>Frustration and burnout on how to increase the academic performance of the state's persistently lowest-achieving students</li> </ul>  | <ul style="list-style-type: none"> <li>Common standards and assessments improve overall learning in Minnesota and can be effectively customized to teach my unique set of students</li> <li>Increased expectations for all students and empowered teachers who understand how to use results to differentiate instruction and intervene with the lowest-achieving students</li> </ul>  |
| <b>Data systems to support instruction</b>                                      | <ul style="list-style-type: none"> <li>Limited understanding of how well the current system prepares students for higher education or the workforce</li> <li>Inability to target instruction based on specific, identifiable student needs</li> <li>"Unfriendly" formatting of state data and limited understanding of how to use data to inform teachers, administrators and parents about the progress of their students</li> </ul> | <ul style="list-style-type: none"> <li>Teachers and principals who are provided real time student result information in a timely manner and are able to use data to improve how and what they teach with more individualized and targeted instruction</li> <li>User-friendly, differentiated access points that both engage and inform the multiple stakeholders in Minnesota's education system (e.g. parents, educators, researchers and policy makers)</li> </ul> |

DEAF-Review Only

## Minnesota's aspirations for a culture of collaboration and support (2/3)



|  | From some pockets of conceptions such as...  | To consistent conceptions that illustrate evidence of support and collaboration such as...  |
|--|--|---|
| Great Teachers and Leaders                 | <ul style="list-style-type: none"> <li>Discussions limited by the lack of available data about what components of teacher preparation and which programs deliver the greatest impact on instruction</li> </ul>   | <ul style="list-style-type: none"> <li>Data informs MN's education system about which elements of teacher preparation drive best practice instruction with our students</li> <li>All preparation programs are held to the same high standards</li> <li>High-quality programs are identified and utilized to relieve hard-to-staff schools and subjects</li> </ul> |
| Illustrative - to be revised and discussed | <ul style="list-style-type: none"> <li>Widespread doubt about the effectiveness of using multiple measures, including student outcomes as part of teacher evaluation and development</li> <li>Differentiating performance seen as threatening to the school environment and teaching profession</li> </ul> | <ul style="list-style-type: none"> <li>Teacher evaluations utilized to help inform a teacher's individual instructional strengths and highlight opportunities for training and development unique to each teacher</li> <li>It is possible to maintain a collegial and supportive environment while differentiating performance</li> </ul>                         |
|  | <ul style="list-style-type: none"> <li>From principal as building administrator and common belief that principals have limited availability and skill to impact their staff and school instruction practices</li> </ul>  | <ul style="list-style-type: none"> <li>Principals that share accountability for student outcomes with the staff in their schools and receive the professional development to help support teachers for instructional leadership and accurately evaluate their staff</li> </ul>  |

DRAFT—Internal Use Only

## Minnesota's aspirations for a culture of collaboration and support (3/3)



Turning Around the Lowest-Achieving Schools

Illustrative - to be revised and discussed

### From some pockets of conceptions such as...

### To consistent conceptions that illustrate evidence of support and collaboration such as...

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ A system too constrained to provide the operational and instructional changes necessary to make progress with the state's most challenged schools</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Local labor and management mutually embracing flexibility and site-empowerment to provide increased supports for the lowest-achieving schools in the state</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ Sites over-burdened with programming and misaligned resources that depress the staff's ability to affect change</li> </ul>                                    | <ul style="list-style-type: none"> <li>▪ Increased state support through the office of turnaround schools to provide best practices for turnarounds and assist LEAs in streamlining activities</li> </ul>      |
| <ul style="list-style-type: none"> <li>▪ LEA frustration and disappointment from repeated attempts and lack of ability to deliver meaningful change in the state's lowest-achieving schools</li> </ul> | <ul style="list-style-type: none"> <li>▪ Defining new expectations for success in LEAs and districts that have been persistently low-achieving</li> </ul>  |

DE&PT - Internal Use Only

(A)(2) – Exhibit E: Sample Teacher Satisfaction Survey Excerpt

**MINNESOTA**  
**RACE TO THE TOP**

|   | 0<br>Below expectations   | 1 | 2 | 3<br>Best practice implementation  | Score   | Additional comments |
|---|---|---|---|--|---|---------------------|
| <b>Evaluation Process</b>                                   | <ul style="list-style-type: none"> <li>Evaluation is not conducted by a team of qualified evaluators and my principal</li> <li>Feedback on my evaluation is inconsistent and not useful</li> <li>I am not rewarded for my success at growing students' capabilities</li> </ul>  |   |   | <ul style="list-style-type: none"> <li>My evaluations are conducted by a team of qualified evaluators and my principal</li> <li>My evaluation results help me understand my strengths and are as for improvement</li> <li>I am fairly rewarded for making progress with my students</li> </ul>   | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |                     |
| <b>Principal Supports</b>                                   | <ul style="list-style-type: none"> <li>My principal is solely a building administrator and does not provide guidance on instruction</li> <li>My principal does not respect my lesson preparation time</li> <li>My principal blames the teachers in our school for the shortcomings of our students</li> </ul>                             |   |   | <ul style="list-style-type: none"> <li>My principal has the capabilities to provide instructional leadership in my classroom</li> <li>I have protected instructional preparation time on a daily basis</li> <li>My principal takes ownership and shares in the accountability of students' success in my building</li> </ul>   | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |                     |
| <b>Professional Development – Standards And Assessments</b> | <ul style="list-style-type: none"> <li>I have not received the support to understand how to implement the new standards into my classroom curriculum</li> <li>I don't use state resources in developing my classroom lessons</li> <li>I do not have resources to provide students with help they need to succeed</li> </ul>               |   |   | <ul style="list-style-type: none"> <li>I have a strong understanding of the content and benchmarks for state academic standards for my students</li> <li>I access resources provided by the state to inform my instructional practice</li> <li>I am supported with resources and instructional tools to meet the needs of all students</li> </ul>                          | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |                     |
| <b>Data to support instruction</b>                          | <ul style="list-style-type: none"> <li>I do not feel supported to understand and use student data as a part of my instruction</li> <li>My principal does not use student data to make decisions about how she manages our school</li> <li>Parents of my students do not use results data to understand how they are performing</li> </ul> |   |   | <ul style="list-style-type: none"> <li>I have received valuable training and understand how to use data to inform my instructional practice</li> <li>My principal uses data on a regular basis to inform how she manages our school</li> <li>The parents of my students access data portals that have information on the child's performance on a regular basis</li> </ul> | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3<br><input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 |                     |

Example provided for illustrative purposes – to be revised and discussed

DRAFT – Internal Use Only

**(A)(2) – Exhibit F: Federal Fund Management**

ARRA funding is set up in the accounting system as independent appropriations, each program with its own recognizable identification number. There is no other funding source to this appropriation. The appropriation is reconciled for expenditures and revenue to the payment systems and the federal G5.

Sub-grantees are required to separately track federal funds based on compliance requirements. ARRA funding is established with unique identifying set's of tracking codes (Fin codes) associated with each ARRA program. For each program districts are required to have an annually approved application including a budget justification narrative. Budgets are built at the object code (expenditure category) level based on allowable expenses as determined by federal requirements.

All LEAs are required to request reimbursement through the SERVS financial system. SERVS Financial is an expenditure reimbursement system that is being used for Federal funds to ensure that all districts are in compliance with federal regulations. Reimbursement requests are at an object code (expenditure category) level of detail comparable to that used to report expenditures in annual expenditure and revenue reporting for school districts. Risk for expenditure type, level, and category is assessed. Based on risk assessment, certain categories for expenditures will be verified by transactional documentation to support the actual expense of funds at the LEA level. The LEA will be responsible for producing vendor receipts, payroll records, time and effort reporting that supports the use of funding source. Periodic full desk audits for a series of expenditures can also be done given district risk assessment. Also, on-site audit activity can occur where an LEA's financial records are examined by auditors and activities are reviewed for compliance. Expenditures drawn from SERVS are reconciled to independently audited UFARS expenditure reports in the Single Audit process as outlined in Federal requirements. UFARS, the Uniform financial accounting a reporting standards system, is what districts use to report year-end financial data to the Minnesota Department of Education

(A)(2) – Exhibit G: Stakeholder Engagement Detail

**Multiple stakeholders have been engaged throughout MN's RTTT strategy development process**



**Discussions (not exhaustive)**

**3 Large Group Stakeholder meetings (10/1, 10/13, 12/3)**

- 40+ stakeholders<sup>1</sup> from LEAs, Education Minnesota, Higher Education, Non-Profits, Foundations, Businesses, Education Organizations, State Policy Makers

**13 Regional meetings introducing Race To The Top and gathering input - 9 across the state, 4 Metro (week of 10/26)**

- Range of involvement (LEA leadership and personnel, local union representatives and teachers, Service Co-ops)
- 4 Metro meetings (3 general, 1 specifically with charter school providers)

**25 additional regional meetings sharing the details of Race To The Top - (week of 12/11-12/18)**

- Range of involvement (LEA leadership and personnel, local union representatives and teachers)
- Detailed explanation of RTTT plan and LEA requirements to participate

**8 webinars describing the details of Minnesota's plan, the RTTT budget, and the Memorandum of Agreement**

**Series of discussions with Minneapolis and St. Paul**

- Minneapolis District and Teacher's Union leadership
- St. Paul District and Teacher's Union leadership

**Series of discussions with Education Minnesota**

- One-on-one discussions and strategy briefing sessions with executive leadership
- Two-hour Q&A session for local union representatives hosted by Ed Minn (12/17)

**Teacher Discussion Group hosted by Education Minnesota**

**Meetings with broad range of MN legislators**

- Democrat and Republican Senators and House Representatives, including Education Committee members
- Additional small group discussions

**Local government officials**

- Mayors of St. Paul and Minneapolis

**Representatives of MN Education Organizations**

- MESPA (Elementary School Principals)
- MASPP (Secondary School Principals)
- MSBA (Schools Boards)
- MASA (Superintendents)
- AMSD (Metro School Districts)

**Broad range of additional key stakeholders**

- Communities of Color stakeholder discussions
- Mexican Consul
- Perpich Center for Arts Education
- American Indian Community
- Business Community (e.g., ITASCA & Business Partnership)
- Local Foundations
- Others

<sup>1</sup> See next page

## Large Group Stakeholder List



**LEAs**  
 St. Louis Park  
 Staples  
 Fergus Falls  
 Edina  
 Minneapolis Public Schools  
 St. Paul Public Schools

**Education Organizations**  
 Minnesota School Boards Association  
 Minnesota Association of School Administrators  
 Minnesota Elementary School Principals Association  
 Minnesota Rural Education Association  
 Minnesota Association of Secondary Principals  
 Association of Metropolitan School Districts  
 Minnesota Office of Higher Education  
 Minnesota Board of School Administrators  
 Minnesota Association of Charter Schools  
 Charter School Authorizers  
 Education Minnesota  
 Board of School Administrators  
 Humphrey Institute  
 Minnesota Parent Teacher Student Association  
 Minnesota Board of Teaching

**State Policy Makers**  
 Minnesota House of Representatives  
 Minnesota Senate  
 Governor's Office

**Higher Education**  
 University of Minnesota  
 MnSCU  
 Private Colleges

**Non-profit groups**  
 Citizens League  
 Volunteers of America  
 PACER  
 Minnesota Minority Education Partnership  
 Education Evolving  
 Council on Asian-Pacific Minnesotans  
 Council on Black Americans  
 Minnesota Indian Affairs Council  
 Chicano Latino Council

**Business community**  
 Minnesota Chamber of Commerce  
 Minnesota Business Partnership  
 Minnesota High Tech Association

**Foundations**  
 Bush Foundation  
 Minneapolis Foundation

Metrolink distribution

**(A)(2) – Exhibit H: Stakeholder Letters of Support Overview and Letters**  
*(See end of Appendix)*

[SEE END OF APPENDIX]

**(A)(3) – Exhibit A: Minnesota NAEP score progress**

NSLP = National school lunch program

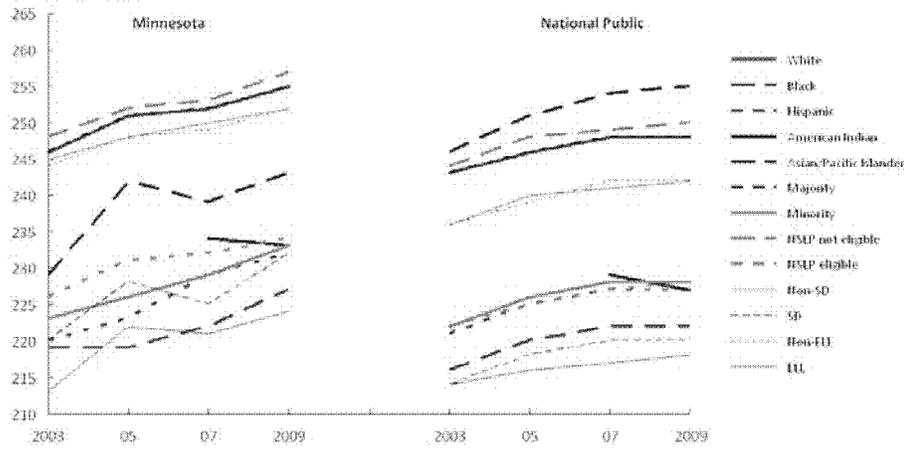
SD = Students with disability

ELL = English language learners

## NAEP Mathematics – Grade 4

Gap – Average scale score: 2003-09

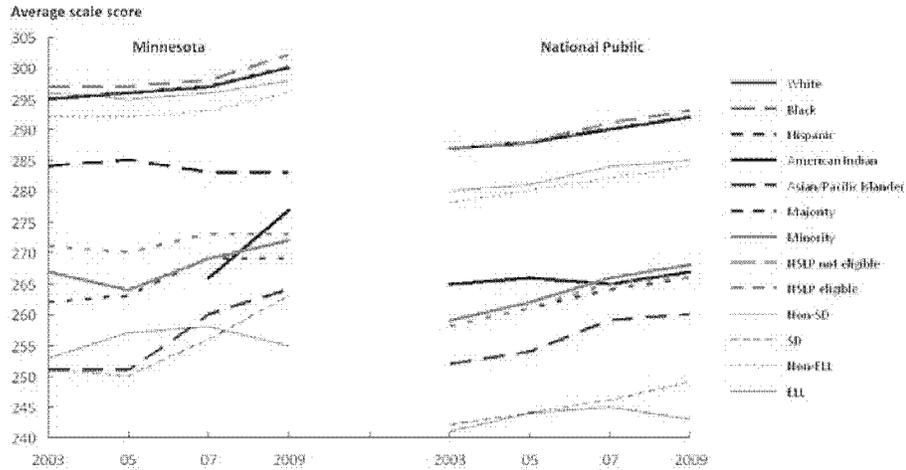
Average scale score



SOURCE: NAEP Average Scale Scores 2003-09

# NAEP Mathematics – Grade 8

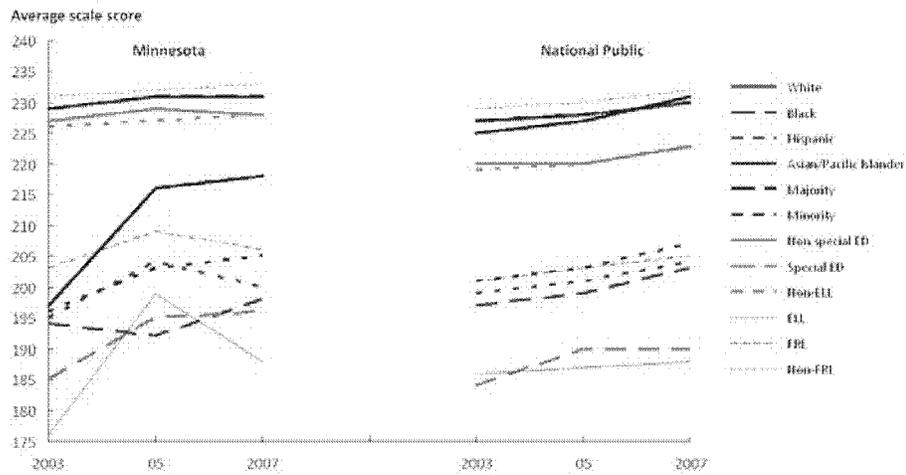
Gap – Average scale score: 2003-09



SOURCE: NAEP Average Scale Scores 2003-09

# NAEP Reading – Grade 4

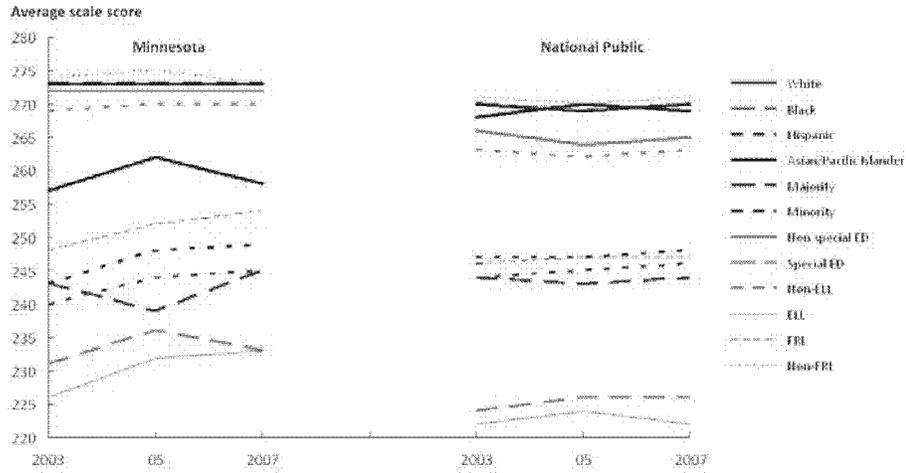
Average reading scale scores



SOURCE: NAEP Average Scale Scores 2003-09

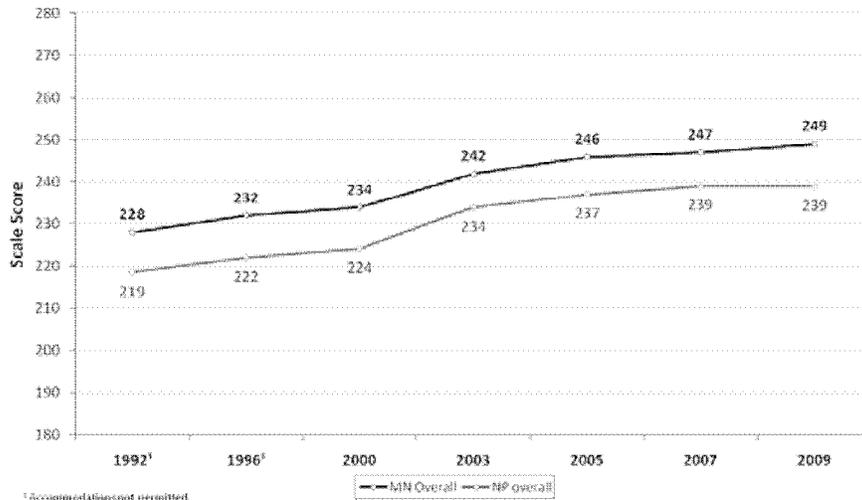
# NAEP Reading – Grade 8

Average reading scale scores



SOURCE: NAEP Average Scale Scores 2003-09

NAEP Mathematics Grade 4 – Overall  
Average Scale Score: 1992-2009

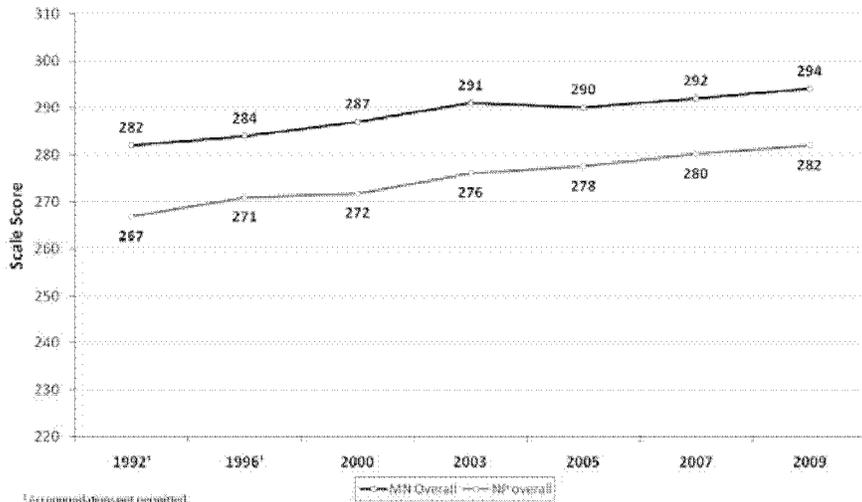


<sup>1</sup> Accommodations not permitted.

NOTE: The NAEP Mathematics scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

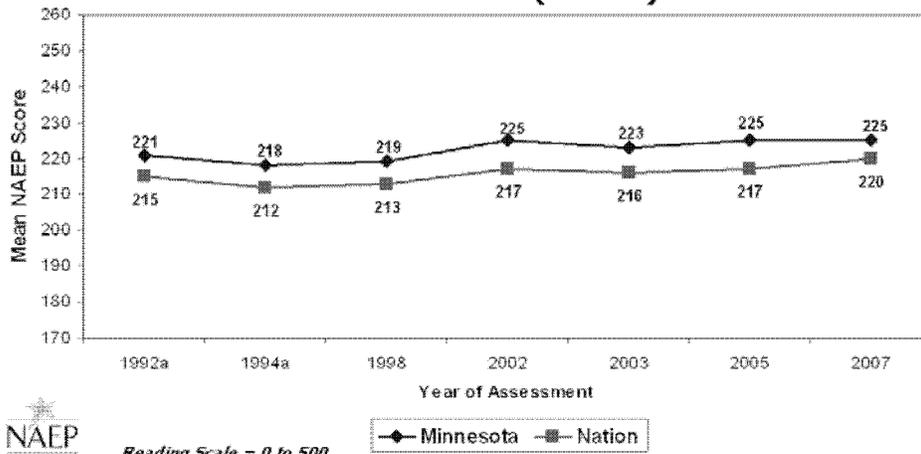
NAEP Mathematics Grade 8 — Overall  
Average Scale Score: 1992-2009



<sup>a</sup>Accommodations not permitted.  
NOTE: The NAEP Mathematics scale ranges from 0 to 500. Observed differences are not necessarily statistically significant.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

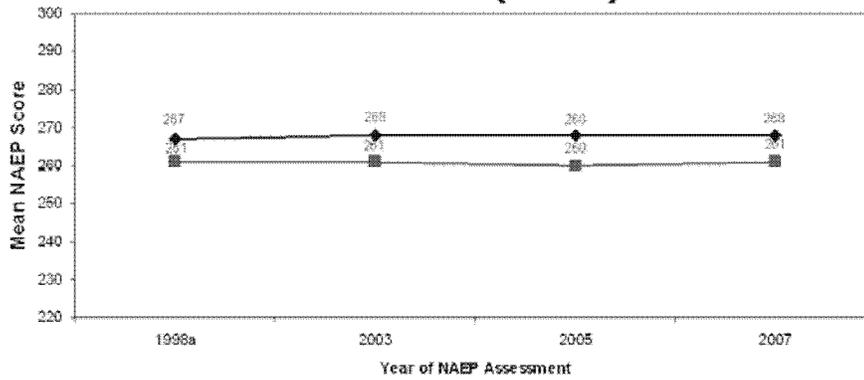


Grade 4 Reading Results  
MN vs. Nation (Public)



Reading Scale = 0 to 500  
*a = accommodations were not permitted*

## Grade 8 Reading Results MN vs. Nation (Public)



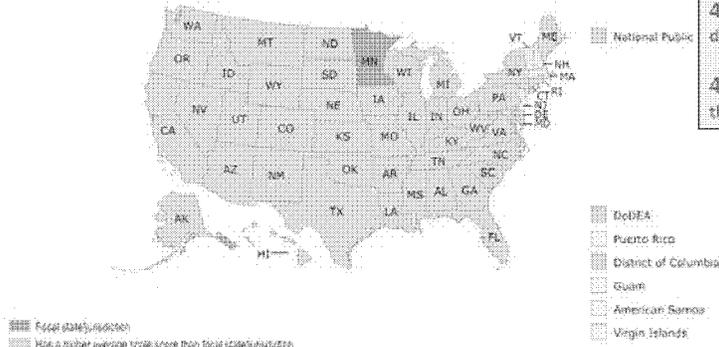
Reading Scale = 0 to 500

a = accommodations were not permitted

◆ Minnesota ■ Nation

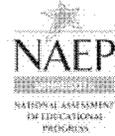
# 2009 NAEP Math grade 4

Mathematics, grade 4  
 Difference in Average scale scores Between Jurisdictions  
 for All students [TOTAL] = All students, 2009



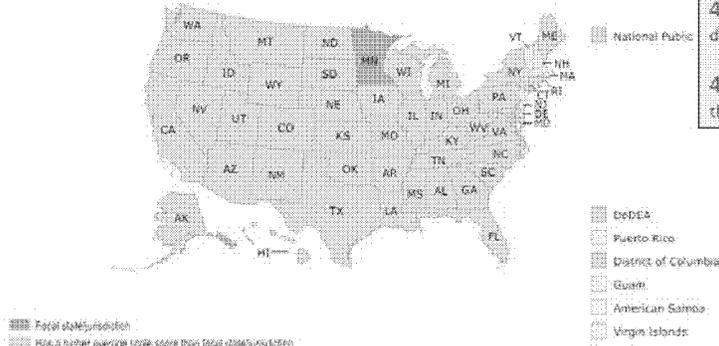
No Jurisdictions were statistically higher than MN  
 4 were not significantly different than MN  
 47 were statistically lower than MN

NOTE: DoDEA = Department of Defense Education Activity schools (domestic and overseas).  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessments.



# 2009 NAEP Math grade 4

Mathematics, grade 4  
 Difference in Average scale scores Between Jurisdictions  
 for All students [TOTAL] = All students, 2009



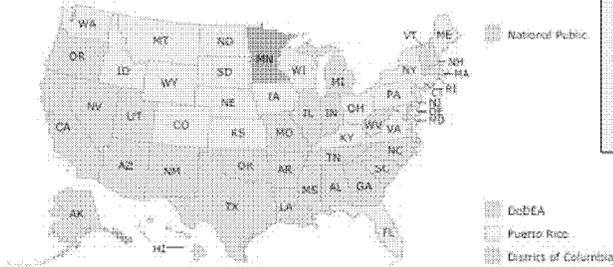
No Jurisdictions were statistically higher than MN  
 4 were not significantly different than MN  
 47 were statistically lower than MN

NOTE: DoDEA = Department of Defense Education Activity schools (domestic and overseas).  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessments.



# 2007 NAEP Reading grade 4

Reading, grade 4  
 Difference in Average scale scores Between Jurisdictions  
 for All students [TOTAL] = All students, 2007



5 Jurisdictions were statistically higher than MN  
 21 were not significantly different than MN  
 25 were statistically lower than MN

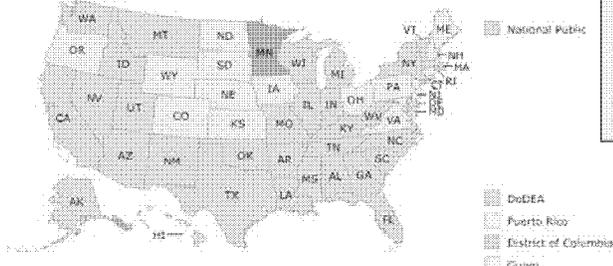
**Focal state/jurisdiction**  
 Has a higher average scale score than focal state/jurisdiction  
 Is not significantly different from the focal state/jurisdiction  
 Has a lower average scale score than the focal state/jurisdiction  
 Sample size is insufficient to perform a reliable estimate  
 Was not selected for comparison

NOTE: DoDEA - Department of Defense Education Activity schools (domestic and overseas)  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.



# 2007 NAEP Reading grade 8

Reading, grade 8  
 Difference in Average scale scores Between Jurisdictions  
 for All students [TOTAL] = All students, 2007



4 Jurisdictions were statistically higher than MN  
 16 were not significantly different than MN  
 31 were statistically lower than MN

**Focal state/jurisdiction**  
 Has a higher average scale score than focal state/jurisdiction  
 Is not significantly different from the focal state/jurisdiction  
 Has a lower average scale score than the focal state/jurisdiction  
 Sample size is insufficient to perform a reliable estimate  
 Was not selected for comparison

NOTE: DoDEA - Department of Defense Education Activity schools (domestic and overseas)  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.



**(A)(3) – Exhibit B: Letter from Michigan State University  
Distinguished Professor William Schmidt on Minnesota’s Standards,  
5/18/2007**

I have read through the Minnesota standards and am pleased to tell you I think they are quite good. They have moved in the direction of realizing the three main characteristics that are central to good standards including coherence, rigor and focus. Let me look at each one of these characteristics and give you my reaction.

**Rigor:** I think the standards make a major move in that direction. By 8<sup>th</sup> grade the focus is on algebra and geometry as it is across the world in the top achieving countries. The standards in algebra, for example, do systems of equations and are quite heavy on the concept of functions. So in effect I think that the standards have a great deal of rigor and are very consistent with other state standards that have moved in this direction. As a part of the project that we are working on at Michigan State University we developed a set of standards that are rigorous and based on the top achieving countries standards. I checked as a cross reference the Minnesota standards against these and found a great deal of overlap. In fact, at the second grade they almost map onto each other. There were some subtle differences. For example at second grade the computational work was expected to be done up to the number 1,000 in the MSU standards while the MN standards only call for computations up to 100. Another thing I wasn’t sure of is that I couldn’t find a requirement at the early grade memorizing the multiplication table. For example, our work recommends that children memorize the multiplication table in second grade up to 5 X 5. Perhaps I missed that, but I didn’t find a similar requirement. I think it is very important for children to memorize the multiplication table and that this should be a requirement.

**Focus:** I think you have narrowed the concern at each of the grade levels nicely. I am a little bit concerned, however, that there is too much detail coming through by what you call the benchmark. It is not that the benchmarks aren’t useful, but that I think they might overwhelm and confuse the teachers who don’t see these as an elaboration of the fundamental standard, but might view each as a separate standard to which a sizeable amount of time might need to be allocated. This is always a problem with standards because they need to be explicitly enough, but not so detailed as to lose the focus you are so carefully trying to achieve. In our work, instead of calling these benchmarks, we call them sub topics under a particular standard. I’m not sure I know the best way to do this but just alert you to the problem. One way to address this which we did was to try to give some indication of the grain size by indicating a proportion of the year or a number of days that might be allocated accordingly. I think this worked quite well but it was not very

acceptable to teachers. They thought this was an infringement.

**Coherence:** I can only give a general reaction since we didn't do a full blown analysis by coding the standards. It seems that the topics flow in a coherent fashion across the grades. One concern I have is your inclusion of algebra in early grades as a standard. We resisted this because teachers will view this as a separate and distinct area number. Actually the kind of work that can be done in these early grades mostly needs to be in conjunction with the arithmetic operations. In other words, incorporate some fundamental ideas of equations in conjunction with adding or subtracting, but I would recommend this simply be part of the sub topic level which would suggest this as a kind of activity that could be done in conjunction with the computations. If you leave it separate I fear it will divert attention and would not facilitate a coherent approach.

In general, I think your people have done a nice job and the standards are much better than what I see from many states. The suggestions I have made really only help focus them further. Congratulations on what I think will be good standards for Minnesota. If I can be of any further help, let me know.

William Schmidt

5/18/07

(A)(3) – Exhibit C: Minnesota TIMSS scores

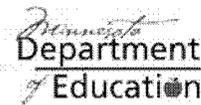
**Report on Minnesota’s 2007 TIMSS Performance**

**Report on Mathematics**

- ◆ The 2007 TIMSS U.S. mathematics performance at both grades 4 and 8 improved over 1995.
- ◆ In 1995, Minnesota’s performance at both grades 4 and 8 was not significantly different from the overall U.S. performance.
- ◆ In 2007, like the U.S. overall performance, Minnesota’s scores at both grades 4 and 8 improved from 1995 but unlike 1995, Minnesota’s 2007 performance is significantly higher than that of the U.S. at both grades 4 and 8.

[Display 1: 2007 Grade 4 and Grade 8 Mathematics Scores]

2007 TIMSS Mathematics Results



Display 1: 2007 Mathematics Scores

| Grade 4               |      | Grade 8                |      |
|-----------------------|------|------------------------|------|
| Nation                | Mean | Nation                 | Mean |
| Hong Kong SAR         | 607  | Chinese Taipei         | 598  |
| Singapore             | 599  | Korea, Rep. of         | 597  |
| Chinese Taipei        | 578  | Singapore              | 593  |
| Japan                 | 588  | Hong Kong SAR          | 572  |
| Minnesota, US         | 554  | Japan                  | 570  |
| Kazakhstan            | 549  | Minnesota, US          | 532  |
| Russian Federation    | 544  | Hungary                | 517  |
| England               | 541  | England                | 513  |
| Latvia                | 537  | Russian Federation     | 512  |
| Netherlands           | 535  | United States          | 508  |
| Lithuania             | 530  | Lithuania              | 508  |
| United States         | 529  | Czech Republic         | 504  |
| Germany               | 525  | Slovenia               | 501  |
| Denmark               | 523  | Armenia                | 499  |
| Australia             | 516  | Australia              | 496  |
| Hungary               | 510  | Sweden                 | 491  |
| Italy                 | 507  | Malta                  | 488  |
| Austria               | 505  | Scotland               | 487  |
| Sweden                | 503  | Serbia                 | 486  |
| Slovenia              | 502  | Italy                  | 480  |
| Armenia               | 500  | Malaysia               | 474  |
| Slovak Republic       | 496  | Norway                 | 469  |
| Scotland              | 494  | Cyprus                 | 465  |
| New Zealand           | 492  | Bulgaria               | 464  |
| Czech Republic        | 486  | Israel                 | 463  |
| Norway                | 473  | Ukraine                | 462  |
| Ukraine               | 469  | Romania                | 461  |
| Georgia               | 438  | Bosnia and Herzegovina | 456  |
| Iran, Islamic Rep. of | 402  | Lebanon                | 448  |
| Algeria               | 376  | Thailand               | 441  |

TIMSS  
Scale  
Average  
500

Partial List of  
participants

WORKING DRAFT

- ◆ At 4<sup>th</sup> grade, Minnesota students scored about a half of a standard deviation above the TIMSS Scale Average (500) just below the 4 top achieving countries.
- ◆ At 8<sup>th</sup> grade, Minnesota students performed about one-third of a standard deviation above the TIMSS Scale Average (500) but substantially below the top 5 achieving countries.

[Display 2: 1995 Rescaled Grade 4 and Grade 8 Mathematics Scores]

1995 TIMSS Mathematics Results

Display 2: Rescaled 1995 Mathematics Scores

Minnesota Department of Education

| Grade 4               |      | Grade 8            |       |
|-----------------------|------|--------------------|-------|
| Nation                | Mean | Nation             | Mean  |
| Singapore             | 590  | Singapore          | 609   |
| Korea, Rep. of        | 581  | Japan              | 581   |
| Japan                 | 567  | Korea, Rep. of     | 581   |
| Hong Kong SAR         | 557  | Hong Kong SAR      | 569   |
| Netherlands           | 549  | Belgium (Flemish)  | 650   |
| Czech Republic        | 541  | Czech Republic     | 548   |
| Austria               | 531  | Slovak Republic    | 534   |
| Slovenia              | 525  | Switzerland        | 534   |
| Ireland               | 523  | Slovenia           | 531   |
| Hungary               | 521  | France             | 530   |
| United States         | 518  | Austria            | 529   |
| Australia             | 517  | Netherlands        | 529   |
| Minnesota, US         | 516  | Bulgaria           | 527   |
| Italy                 | 510  | Hungary            | 527   |
| Canada                | 506  | Russian Federation | 524   |
| Israel                | 505  | Canada             | 521   |
| Latvia                | 499  | Australia          | 519   |
| Scotland              | 493  | Ireland            | 519   |
| England               | 484  | Minnesota, US      | 518.4 |
| Norway                | 476  | Belgium (French)   | 518   |
| Cyprus                | 475  | Thailand           | 516   |
| New Zealand           | 468  | Sweden             | 513   |
| Thailand              | 467  | Israel             | 513   |
| Greece                | 463  | Germany            | 502   |
| Iceland               | 453  | New Zealand        | 501   |
| Portugal              | 442  | Norway             | 498   |
| Iran, Islamic Rep. of | 387  | England            | 498   |
| Kuwait                | 351  | Denmark            | 497   |
|                       |      | Scotland           | 493.3 |
|                       |      | United States      | 492   |
|                       |      | Italy              | 491   |
|                       |      | Latvia             | 488.3 |
|                       |      | Iceland            | 484.4 |

TIMSS International Average Score 500

Partial List of participants

WORKING DRAFT

- ◆ The Minnesota 4<sup>th</sup> grade performance gain was among the largest of any of the 16 countries that participated in both the 1995 and 2007 TIMSS ( $p < .05$ ).
- ◆ This gain which was over a third of a standard deviation was more than three times the gain indicated for the U.S. as a whole.
- ◆ At 8<sup>th</sup> grade, Minnesota's 2007 gain over 1995 was substantially less than the 4<sup>th</sup> grade gain – about one tenth of a standard deviation – which was not statistically significant ( $p < .11$ ).

- ◆ A similar pattern of improvement from 1995 to 2007 for both the U.S. as a whole and Minnesota can be noted with the NAEP results.

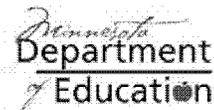
### Report on Science

- ◆ In contrast to the performance in mathematics, in science neither the U.S. nor Minnesota demonstrated significantly different performance in 2007 than in 1995.
- ◆ In 2007, Minnesota maintained its relatively high level of performance being outperformed by very few countries at either 4<sup>th</sup> or 8<sup>th</sup> grade and significantly outperforming the U.S. at grade 8.

[Display 3: 2007 Grade 4 and Grade 8 Science Scores]

### 2007 TIMSS Science Results

Display 3: 2007 Science Scores



| Grade 4               |            | Grade 8                |            |
|-----------------------|------------|------------------------|------------|
| Nation                | Mean       | Nation                 | Mean       |
| Singapore             | 587        | Singapore              | 587        |
| Chinese Taipei        | 567        | Chinese Taipei         | 581        |
| Hong Kong SAR         | 554        | Japan                  | 564        |
| <b>Minnesota, US</b>  | <b>551</b> | Korea, Rep. of         | 553        |
| Japan                 | 548        | England                | 543        |
| Russian Federation    | 546        | Hungary                | 539        |
| Latvia                | 542        | Czech Republic         | 539        |
| England               | 542        | <b>Minnesota, US</b>   | <b>539</b> |
| <b>United States</b>  | <b>539</b> | Slovenia               | 538        |
| Hungary               | 538        | Hong Kong SAR          | 530        |
| Italy                 | 535        | Russian Federation     | 520        |
| Kazakhstan            | 533        | <b>United States</b>   | <b>620</b> |
| Germany               | 528        | Lithuania              | 519        |
| Australia             | 527        | Australia              | 515        |
| Slovak Republic       | 526        | Sweden                 | 511        |
| Austria               | 526        | Scotland               | 496        |
| Sweden                | 525        | Italy                  | 495        |
| Netherlands           | 522        | Armenia                | 488        |
| Slovenia              | 518        | Norway                 | 487        |
| Denmark               | 517        | Ukraine                | 485        |
| Czech Republic        | 515        | Jordan                 | 482        |
| Lithuania             | 514        | <b>Malaysia</b>        | <b>471</b> |
| New Zealand           | 504        | Thailand               | 471        |
| Scotland              | 500        | Serbia                 | 470        |
| Armenia               | 484        | Bulgaria               | 470        |
| Norway                | 477        | Israel                 | 468        |
| Ukraine               | 474        | Bahrain                | 467        |
| Iran, Islamic Rep. of | 456        | Bosnia and Herzegovina | 466        |
| Georgia               | 418        | Romania                | 462        |
| Colombia              | 400        | Iran, Islamic Rep. of  | 459        |
| El Salvador           | 390        | Malta                  | 457        |
| Algeria               | 354        | Turkey                 | 454        |
| Kuwait                | 348        | Syrian Arab Republic   | 452        |
| Tunisia               | 318        | Cyprus                 | 452        |
| Morocco               | 297        | Tunisia                | 445        |
| Qatar                 | 294        | Indonesia              | 427        |
| Yemen                 | 197        | Oman                   | 423        |

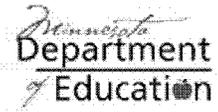
TIMSS  
Scale  
Average  
500

Partial List of participants

WORKING DRAFT

[Display 4: 1995 Rescaled Grade 4 and Grade 8 Science Scores]

2007 TIMSS Science Results



Display 4: Rescaled 1995 Science Scores

| Grade 4               |      | Grade 8            |      |
|-----------------------|------|--------------------|------|
| Nation                | Mean | Nation             | Mean |
| Korea, Rep. of        | 576  | Singapore          | 580  |
| Minnesota, US         | 553  | Czech Republic     | 555  |
| Japan                 | 553  | Japan              | 554  |
| United States         | 542  | Korea, Rep. of     | 548  |
| Australia             | 541  | Bulgaria           | 545  |
| Austria               | 538  | Minnesota, US      | 544  |
| Czech Republic        | 532  | Netherlands        | 541  |
| Netherlands           | 530  | Slovenia           | 541  |
| England               | 528  | Austria            | 538  |
| Canada                | 525  | Hungary            | 537  |
| Italy                 | 524  | England            | 533  |
| Singapore             | 523  | Belgium (Flemish)  | 533  |
| Slovenia              | 522  | Slovak Republic    | 532  |
| Ireland               | 515  | Australia          | 527  |
| Scotland              | 514  | Sweden             | 523  |
| Hong Kong SAR         | 508  | Russian Federation | 523  |
| Hungary               | 508  | Ireland            | 518  |
| New Zealand           | 505  | Germany            | 518  |
| Norway                | 504  | Norway             | 514  |
| Latvia                | 486  | Canada             | 514  |
| Israel                | 482  | United States      | 513  |
| Iceland               | 479  | New Zealand        | 511  |
| Greece                | 473  | Thailand           | 510  |
| Portugal              | 452  | Hong Kong SAR      | 510  |
| Cyprus                | 450  | Israel             | 509  |
| Thailand              | 450  | Switzerland        | 509  |
| Iran, Islamic Rep. of | 380  | Spain              | 504  |
| Kuwait                | 380  | Scotland           | 501  |
|                       |      | Italy              | 487  |
|                       |      | France             | 486  |
|                       |      | Greece             | 486  |

TIMSS  
International  
Average  
Score  
500



Partial List of  
participants

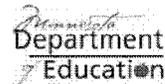
WORKING DRAFT

## Context for Mathematics and Science Scores

- ◆ In 1995 Minnesota performed relatively quite well in science but no different from the mediocre U.S. performance in mathematics.
- ◆ At that time, the conjecture as to why Minnesota's science performance was so much better than its performance in mathematics was the existence of a strong informal network in science that essentially functioned as statewide standards for what should be taught and learned.
- ◆ In 2007 after having true statewide standards in place since 1997, Minnesota continued to perform quite well in science by international standards.
- ◆ The conjecture as to why the state improved so dramatically in 4<sup>th</sup> grade mathematics is that, unlike 1995, the state has had statewide mathematics standards in place since 1997 which were revised in 2003. Therefore, all four years of the mathematics learning of Minnesota's TIMSS 2007 4<sup>th</sup> graders were most likely informed by the 2003 standards. It should also be noted that the 2007 TIMSS 4<sup>th</sup> grade test reflected similar emphases to those in the 2003 standards for 4<sup>th</sup> grade mathematics.
- ◆ The development of the 2003 standards were influenced by the international benchmarking data available through the 1995 TIMSS.
- ◆ The existence of these formal mathematics standards are conjectured to function similar to the informal science network in 1995 providing statewide coherence and focus as to what teachers teach and students learn.
- ◆ Another consequence of the formal state standards that likely lead to improved performance is that mathematics instruction time at the elementary level has increased from about 30 minutes per day in 1995 to around 60 minutes per day in 2007.
- ◆ Coincident with the introduction of statewide standards was the introduction of the state accountability assessment which tends to focus attention and bring emphasis to the content in the standards.
- ◆ One of the goals of standards and accountability assessments is to reduce the variation from one school to another in what teachers teach and emphasize and in what students learn which is what is seen in the 2007 Minnesota TIMSS results.
- ◆ At 8<sup>th</sup> grade, Minnesota teachers reported a substantial increase in the amount of time devoted to Algebra over what was reported in 1995.
- ◆ For example, in 1995 8<sup>th</sup> grade teachers reported spending only 11 percent of their instructional time on Algebra but in 2007, 8<sup>th</sup> grade teachers reported spending over four times as much instructional time on Algebra (48 percent). The TIMSS 8<sup>th</sup> grade test had a strong focus on Algebra which is what is most typically targeted for all children around the world.

- ◆ Similarly, in 2007 4<sup>th</sup> grade teachers reported devoting substantially less time to mathematics topics often covered at higher grades in other countries and more time on number – computation with whole numbers, fractions, decimals, and number patterns – which is the major focus of grade 4 mathematics internationally.
- ◆ The amount of instructional time devoted to number at 4<sup>th</sup> grade in 1995 as reported by teachers was about one-third of the school year. In 2007, the amount of time spent on number topics increased substantially to almost 60 percent.

(A)(3) – Exhibit D: *Minnesota Comprehensive Assessment II score progress*



# **Minnesota Assessments 2009**

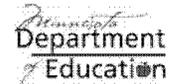
**Minnesota Comprehensive Assessments-Series II  
Mathematics Test for English Language Learners  
Minnesota Test of Academic Skills  
Test of Emerging Academic English  
Minnesota Student Oral Language Observation Matrix**

July 1, 2009

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## 2009 Results

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### ***2009 MATH AND READING MCA-II RESULTS UP SLIGHTLY***

- Math and reading MCA-II test scores increased or stayed relatively steady for most grades in 2009.
  - The biggest increase on the MCA-II was in 11th-grade math, with nearly an 8 percent increase. This can be attributed to the new more rigorous graduation requirement, which provided an additional incentive for students to perform well.
  - Fourth-grade math and sixth-grade and 10th-grade reading scores all increased by about 3 percent, while fourth-grade reading increased by about 2 percent.
  - There was also a small decrease in fifth-grade reading results.
- 

3



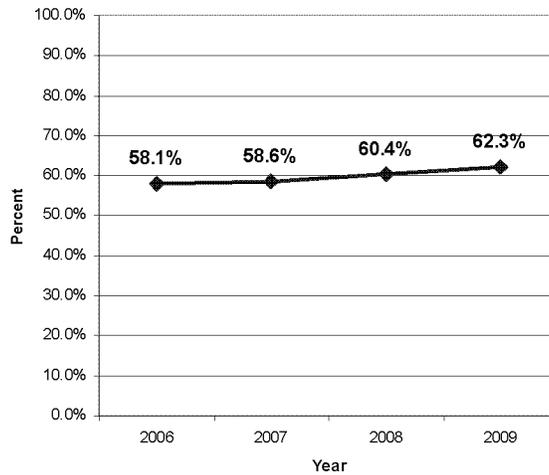
## **Mathematics Overall**

**Including  
MCA-II  
MTELL  
MTAS**

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## 2009 Mathematics (MCA-II; MTELL; MTAS)

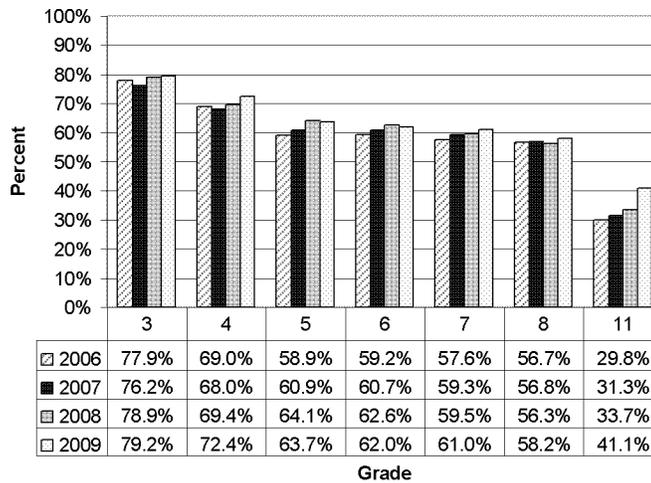
Percent of Students Proficient by Year



MTELL and MTAS were not administered until 2007. 5

## 2009 Mathematics (MCA-II; MTELL; MTAS)

Percent of Students Proficient in Each Grade



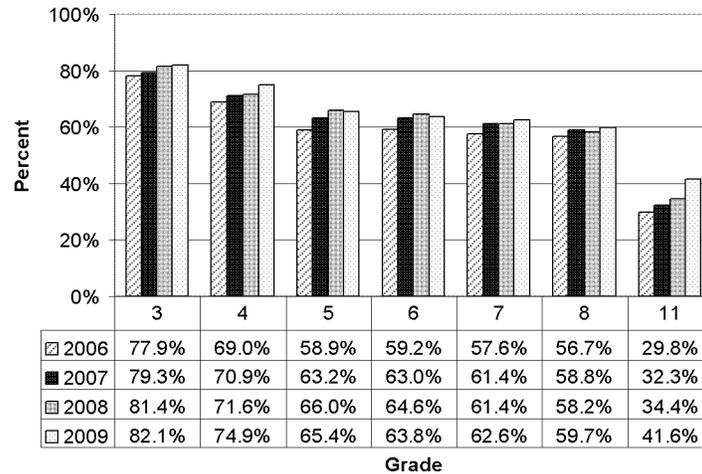
MTELL and MTAS were not administered until 2007. 6

# Mathematics MCA-II

(Minnesota Comprehensive Assessments)

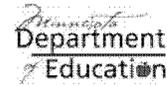
## Mathematics MCA-II

Percent of Students Proficient in Each Grade by Year

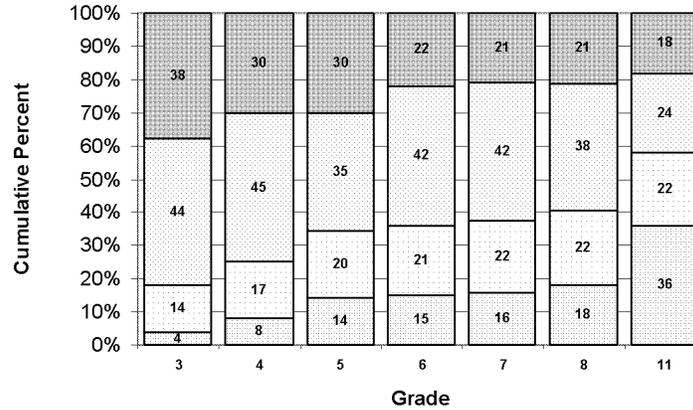


Some students took the MTELL and MTAS starting in 2007.

# 2009 Mathematics MCA-II



Percent of Students at Each Achievement Level



% may not add up to 100 because of rounding

□ Does Not Meet □ Partially Meets □ Meets □ Exceeds

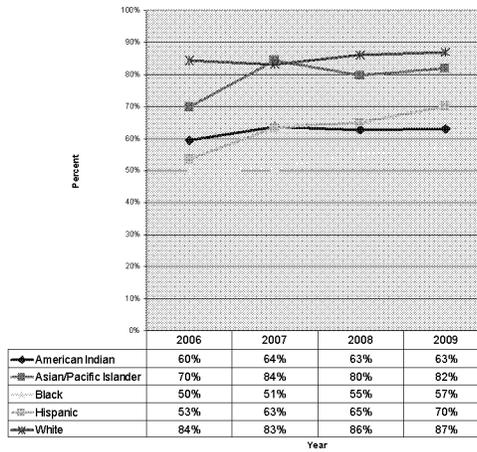
9

# Grade 3 Mathematics MCA-II



Percent of Students Proficient by Year - Ethnicity

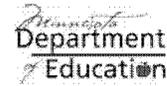
Grade 3 Mathematics MCA-II



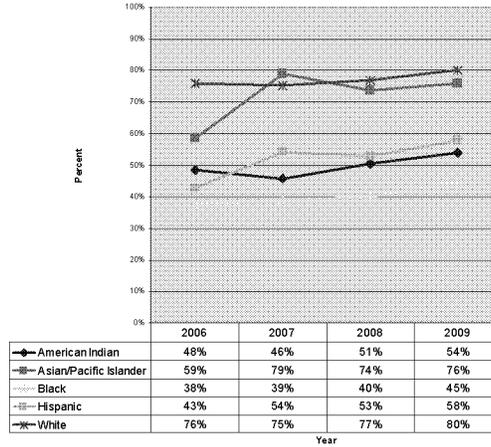
Some students took the MTELL and MTAS starting in 2007.

10

# Grade 4 Mathematics MCA-II



Percent of Students Proficient by Year - Ethnicity  
Grade 4 Mathematics MCA-II



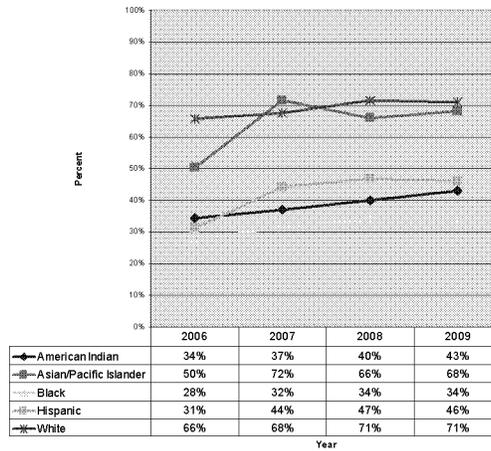
Some students took the MTELL and MTAS starting in 2007.

11

# Grade 5 Mathematics MCA-II



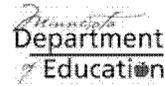
Percent of Students Proficient by Year - Ethnicity  
Grade 5 Mathematics MCA-II



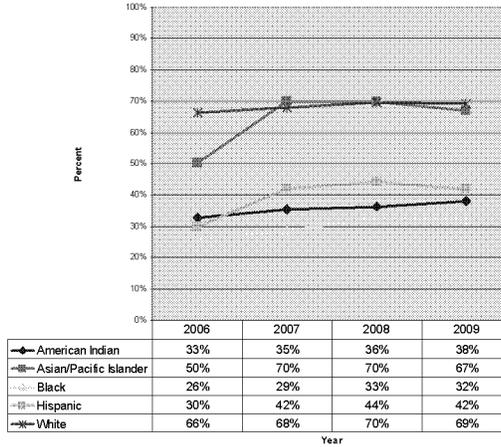
Some students took the MTELL and MTAS starting in 2007.

12

# Grade 6 Mathematics MCA-II



**Percent of Students Proficient by Year - Ethnicity**  
Grade 6 Mathematics MCA-II

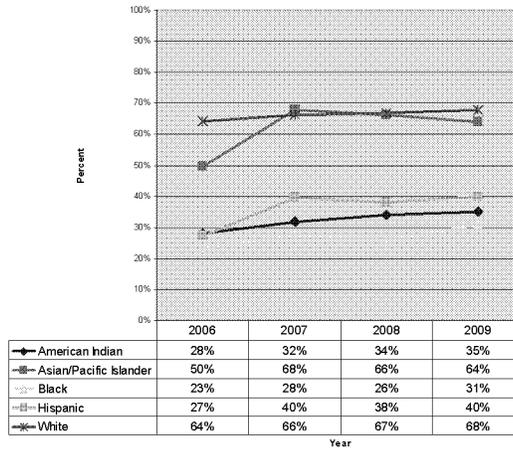


Some students took the MTELL and MTAS starting in 2007. 13

# Grade 7 Mathematics MCA-II

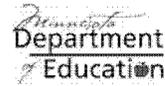


**Percent of Students Proficient by Year - Ethnicity**  
Grade 7 Mathematics MCA-II

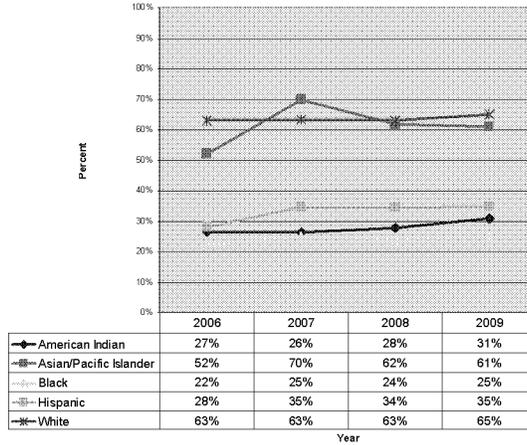


Some students took the MTELL and MTAS starting in 2007. 14

## Grade 8 Mathematics MCA-II



Percent of Students Proficient by Year - Ethnicity  
Grade 8 Mathematics MCA-II



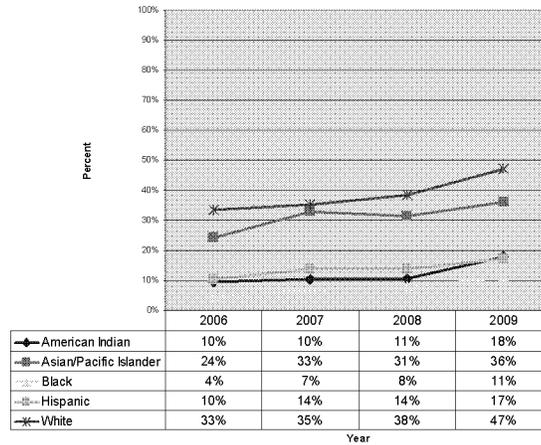
Some students took the MTELL and MTAS starting in 2007.

15

## Grade 11 Mathematics MCA-II



Percent of Students Proficient by Year - Ethnicity  
Grade 11 Mathematics MCA-II



Some students took the MTELL and MTAS starting in 2007.

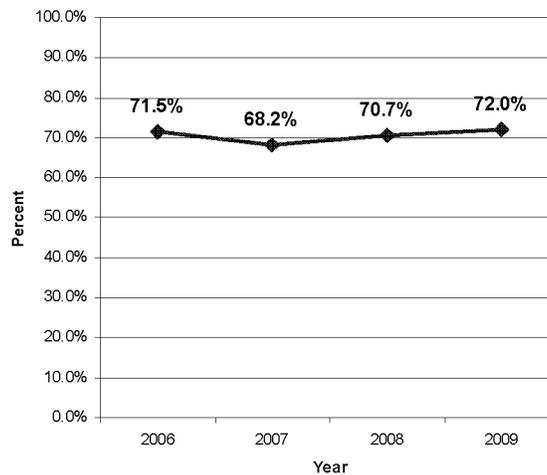
16

# Reading Overall

Including  
MCA-II  
MTAS

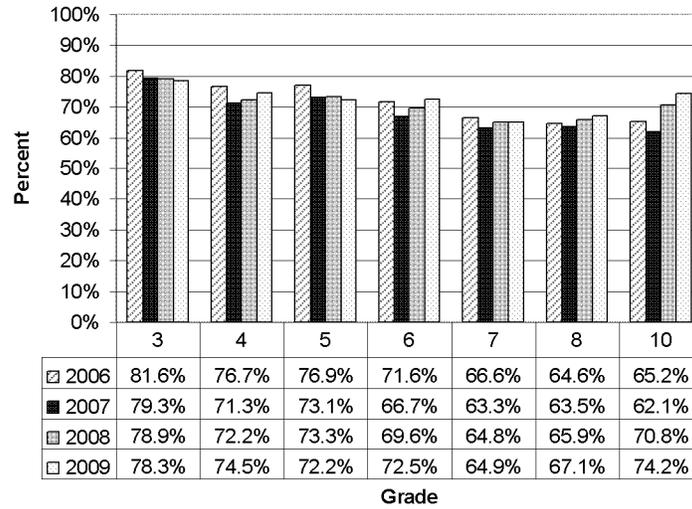
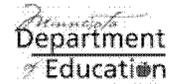
## 2009 Reading (MCA-II; MTAS)

Percent of Students Proficient by Year



Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 18

## 2009 Reading (MCA-II; MTAS)



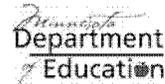
Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 19



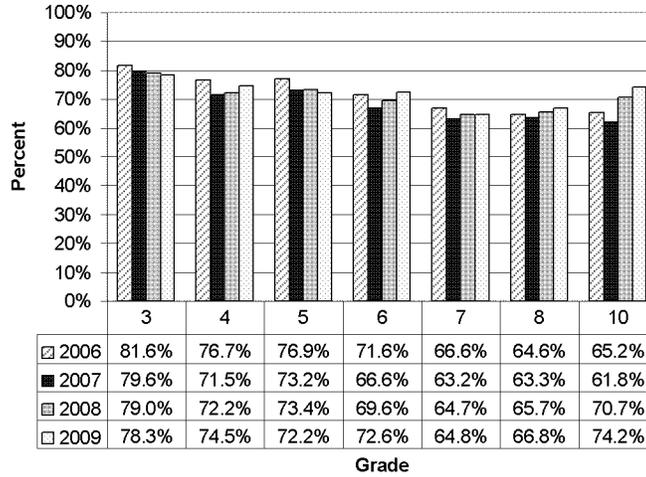
# Reading MCA-II

## (Minnesota Comprehensive Assessments)

# Reading MCA-II



Percent of Students Proficient in Each Grade by Year

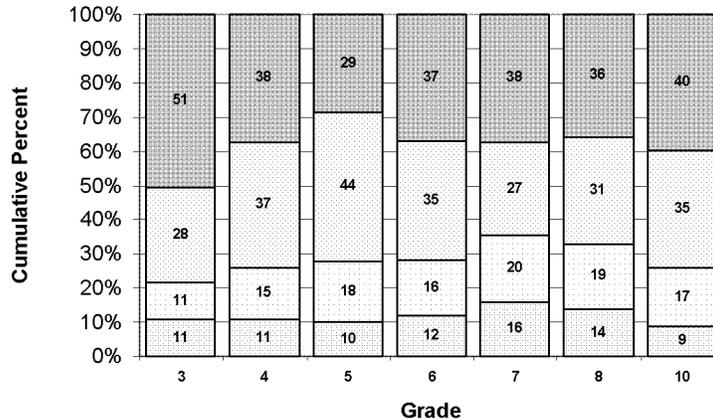


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 21

# 2009 Reading MCA-II



Percent of Students at Each Achievement Level

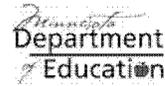


% may not add up to 100 because of rounding

Does Not Meet 
  Partially Meets 
  Meets 
  Exceeds

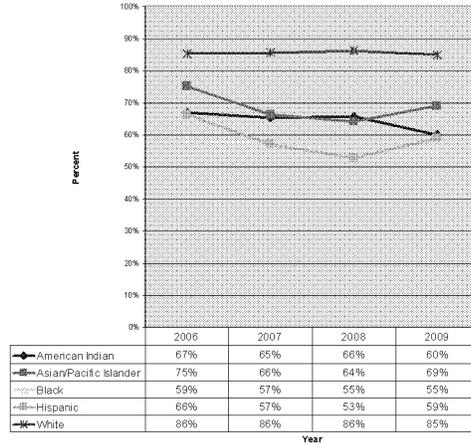
22

## Grade 3 Reading MCA-II



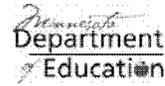
### Percent of Students Proficient by Year - Ethnicity

Grade 3 Reading MCA-II



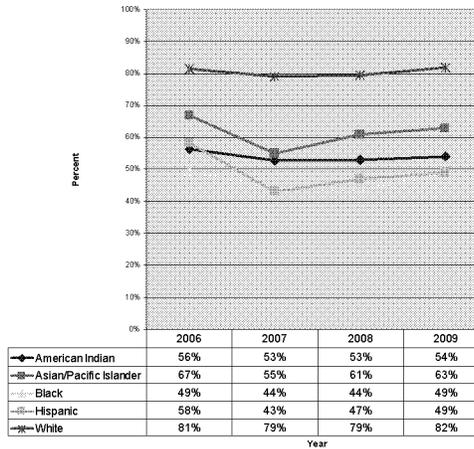
Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 23

## Grade 4 Reading MCA-II



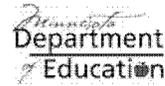
### Percent of Students Proficient by Year - Ethnicity

Grade 4 Reading MCA-II

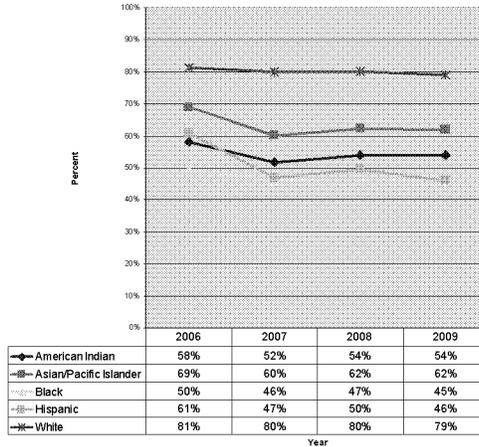


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 24

## Grade 5 Reading MCA-II



Percent of Students Proficient by Year - Ethnicity  
Grade 5 Reading MCA-II

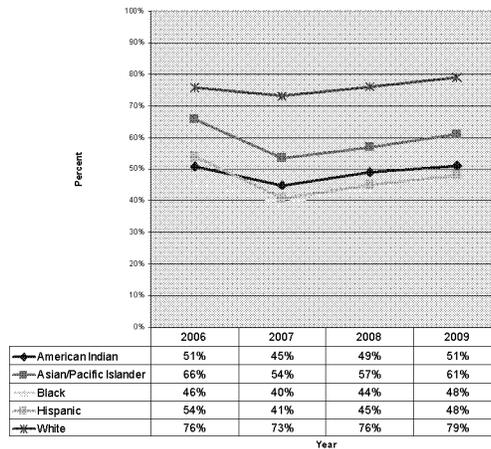


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 25

## Grade 6 Reading MCA-II

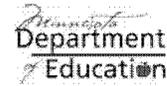


Percent of Students Proficient by Year - Ethnicity  
Grade 6 Reading MCA-II

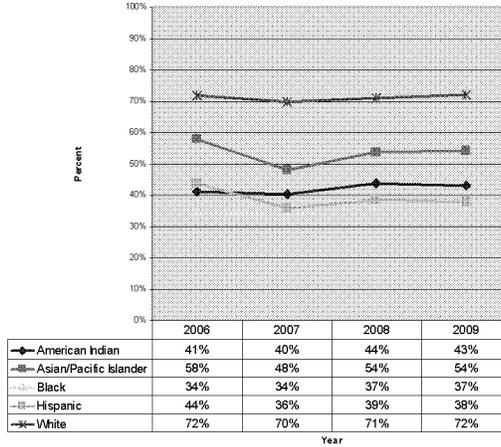


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 26

## Grade 7 Reading MCA-II



Percent of Students Proficient by Year - Ethnicity  
Grade 7 Reading MCA-II

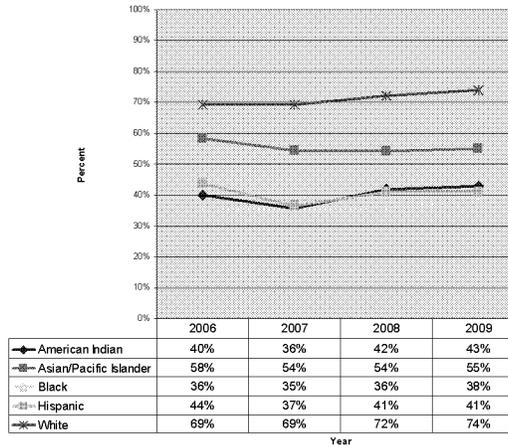


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 27

## Grade 8 Reading MCA-II

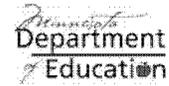


Percent of Students Proficient by Year - Ethnicity  
Grade 8 Reading MCA-II



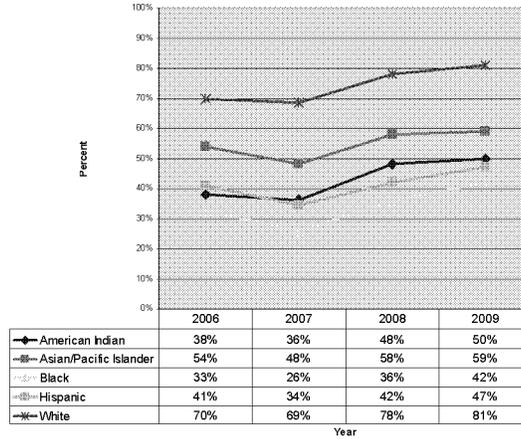
Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 28

# Grade 10 Reading MCA-II



## Percent of Students Proficient by Year - Ethnicity

Grade 10 Reading MCA-II

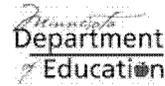


Most English language learners took the TEAE in 2006; all were assessed using the MCA-II in 2007 and following years. 29

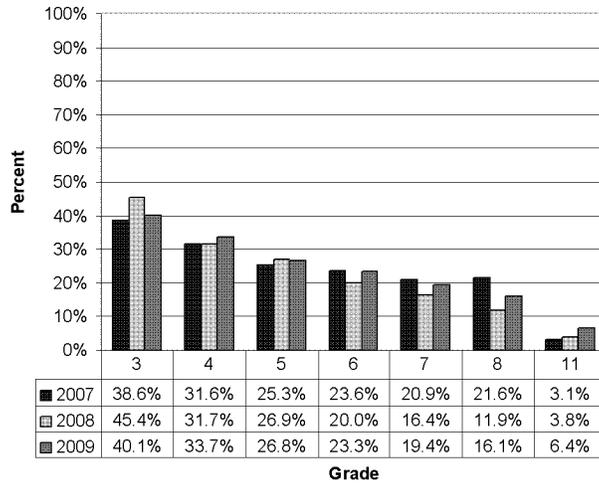


# 2009 Mathematics Test for English Language Learners (MTELL)

# Mathematics MTELL



Percent of Students Proficient in Each Grade by Year

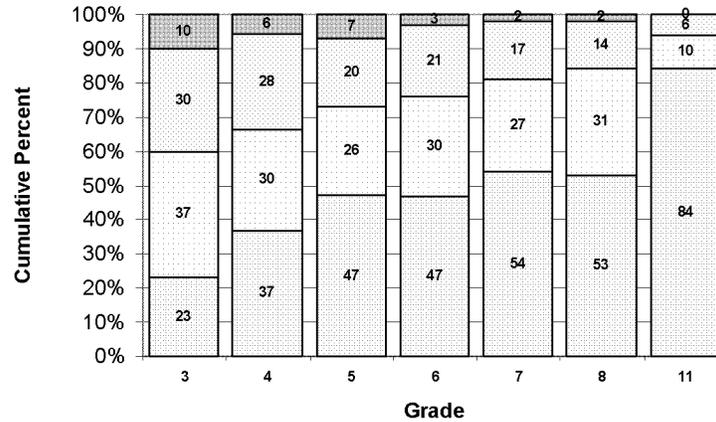


31

# 2009 Mathematics MTELL



Percent of Students at Each Achievement Level



% may not add up to 100 because of rounding

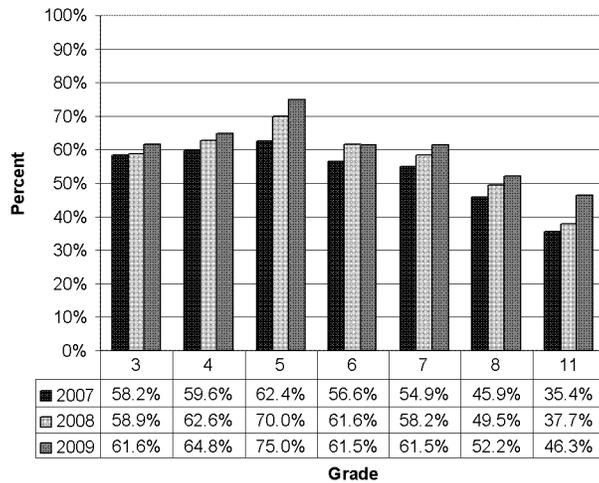
□ Does Not Meet □ Partially Meets □ Meets □ Exceeds

32

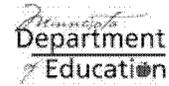
# 2009 Mathematics Minnesota Test of Academic Skills (MTAS)

## Mathematics MTAS

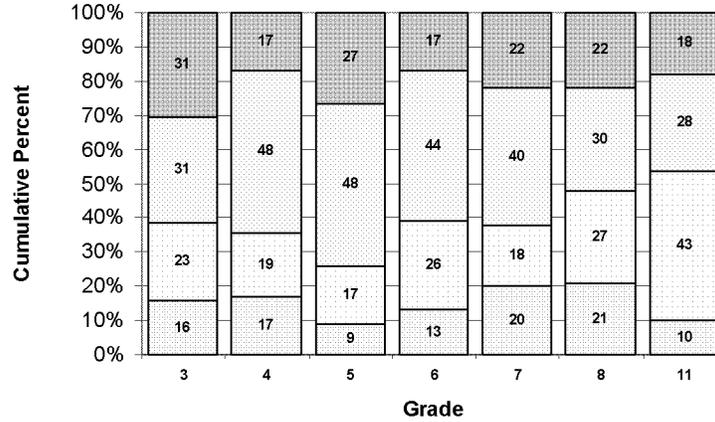
Percent of Students Proficient on Alternate Achievement Standards



# 2009 Mathematics MTAS



Percent of Students at Each Achievement Level by Year



% may not add up to 100 because of rounding

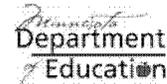
Does Not Meet 
  Partially Meets 
  Meets 
  Exceeds

35

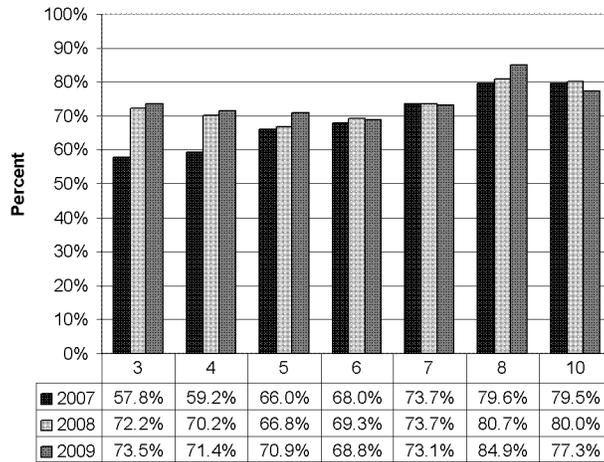


# 2009 Reading Minnesota Test of Academic Skills (MTAS)

# Reading MTAS



Percent of Students Proficient on Alternate Achievement Standards



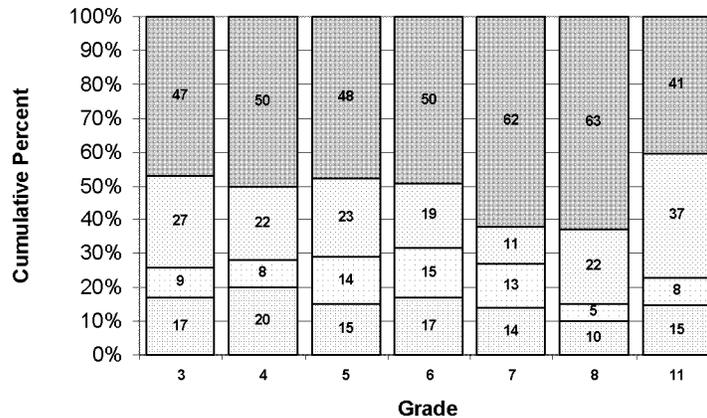
Grade

37

# 2009 Reading MTAS



Percent of Students at Each Achievement Level by Year



Grade

% may not add up to 100 because of rounding

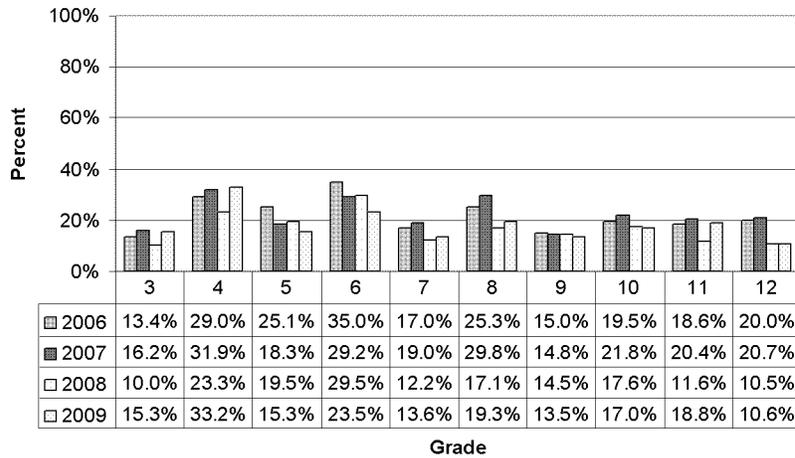
Does Not Meet 
  Partially Meets 
  Meets 
  Exceeds

38

# 2009 Test of Emerging Academic English (TEAE)

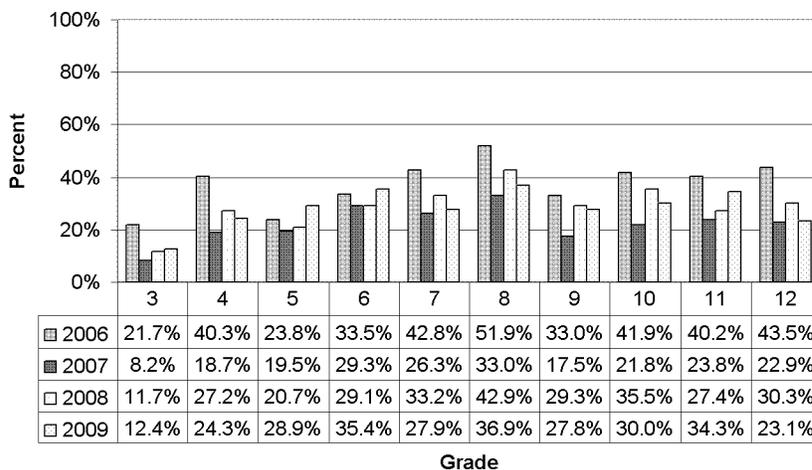
## Reading TEAE

Percent of Students Proficient in Each Grade by Year



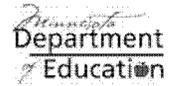
## Writing TEAE

Percent of Students Proficient in Each Grade by Year

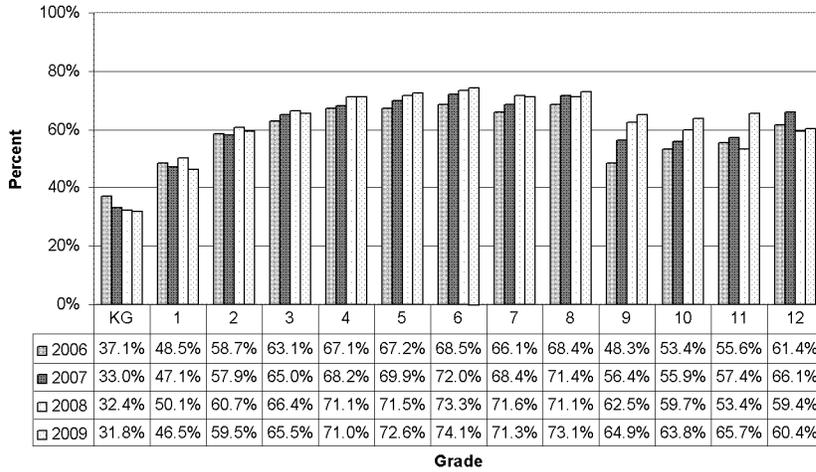


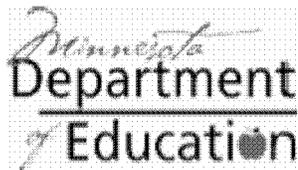
# 2009 Minnesota Student Oral Language Observation Matrix (MN SOLOM)

# Listening/Speaking MN SOLOM



Percent of Students Proficient in Each Grade by Year





Embargoed Until:  
12:01 a.m. July 21, 2009

Contact:  
Christine Dufour (651) 582-8720  
Brianna Chambers (651) 582-8619

## MINNESOTA SCIENCE MCA-II SCORES SHOW STRONG IMPROVEMENT

Roseville - Science MCA-II online assessment results released by the Minnesota Department of Education (MDE) today showed strong improvement over last year's results. For 2009, fifth-grade scores improved by nearly six percentage points over last year, eighth-grade scores increased by about four percentage points, and high school scores improved by about seven percentage points.

"These results show that a strong focus on rigorous science education is paying off," Minnesota Education Commissioner Alice Seagren said. "While there is much work to be done, Minnesota's students and educators can be proud of this strong step forward."

On the 2009 online Science MCA-II:

- 45 percent of fifth-graders were proficient on the Science MCA-II compared to 39 percent in 2008.
- About 43 percent of eighth-graders were proficient, compared to 39 percent in 2008.
- About 50 percent of high school students were proficient, compared to approximately 43 percent in 2008.
- Scores for every ethnic subgroup of students in all grade levels tested (5th, 8th, high school) showed improvement.

This spring, a total of about 181,600 students in grades 5, 8 and high school took the Science MCA-II, which measures student performance on Minnesota's Academic Standards. The science standards define what students should know and be able to do in a particular grade and are developed in partnership with Minnesota educators. Each student earns a score in one of four achievement levels: Does Not Meet Standards, Partially Meets Standards, Meets the Standards or Exceeds the Standards. Students who Meet or Exceed standards are proficient. Currently, results from the science assessment do not currently impact Adequate Yearly Progress (AYP).

The Science MCA-II is interactive and allows students to simulate experiments online.

Over the last several years, Minnesota has been working to improve science education to better prepare its students for a 21st century job market. This year, for example, educators, parents and community leaders put the finishing touches on new, more rigorous academic science standards, which will focus on college and career readiness.

### MCA-II Science Results

#### MCA-II Science Results Overview

1500 Highway 36 West, Roseville, MN 55113-4266 651-582-8200 TTY: 651-582-8201

# Minnesota Assessments 2009 Science

Minnesota Comprehensive Assessments-Series II  
Minnesota Test of Academic Skills

July 21, 2009

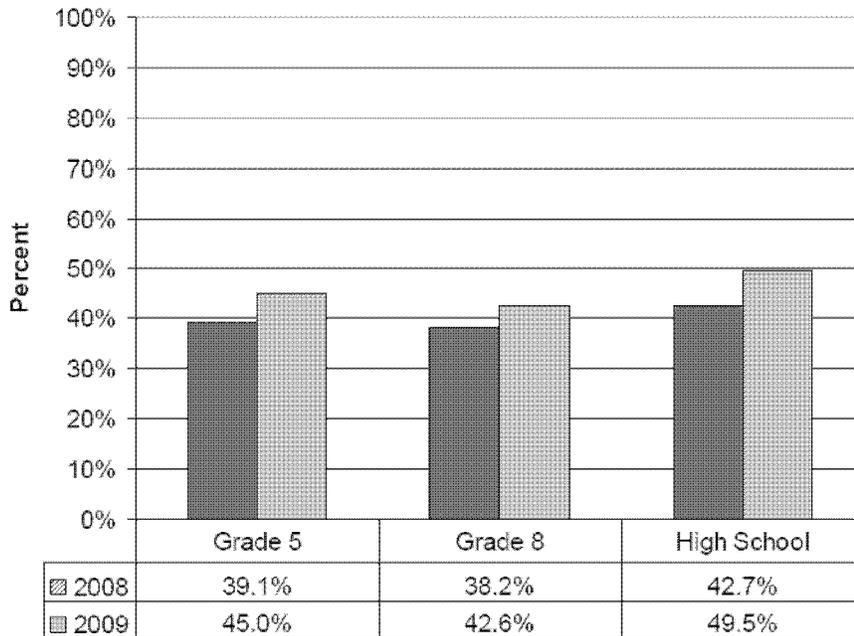
## 2009 Results

### ***Minnesota Science MCA-II Scores Show Strong Improvement***

- Science MCA-II assessment results showed strong improvement over last year's results.
- 45 percent of fifth-graders were proficient on the Science MCA-II compared to 39 percent in 2008.
- About 43 percent of eighth-graders were proficient, compared to 39 percent in 2008.
- About 50 percent of high school students were proficient, compared to approximately 43 percent in 2008.
- Scores for every ethnic subgroup of students in all grade levels tested (5th, 8th, high school) showed improvement.

# Science MCA-II

Percent of Students Proficient in Each Grade by Year

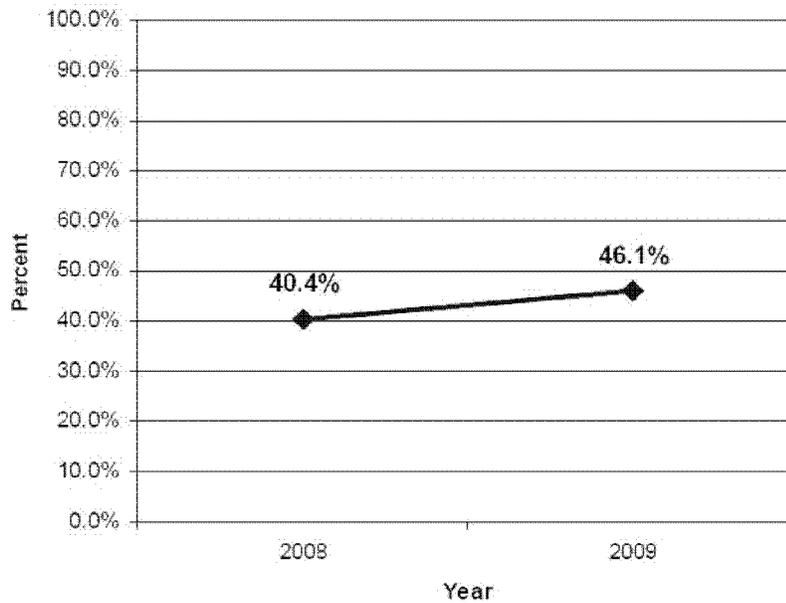


# Science Overall

Including  
MCA-II  
MTAS

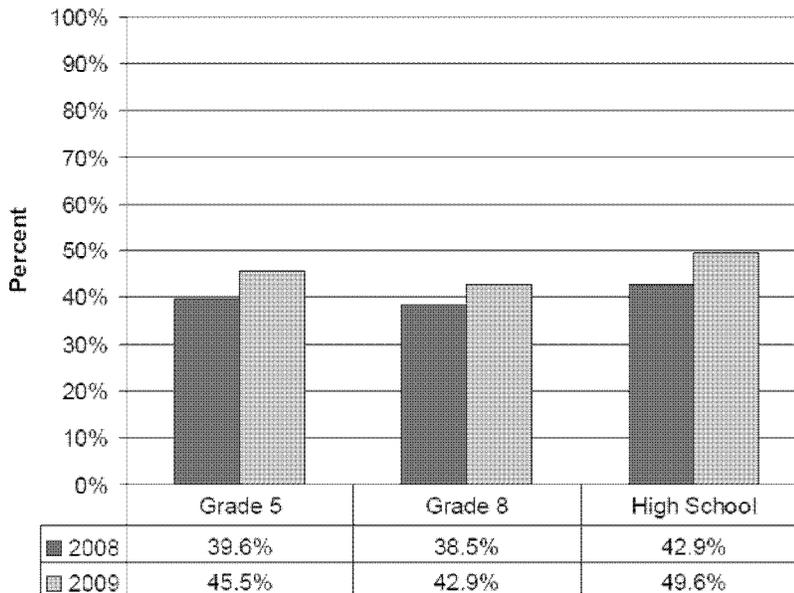
## Science (MCA-II; MTAS)

Percent of Students Proficient by Year



## Science (MCA-II; MTAS)

Percent of Students Proficient in Each Grade

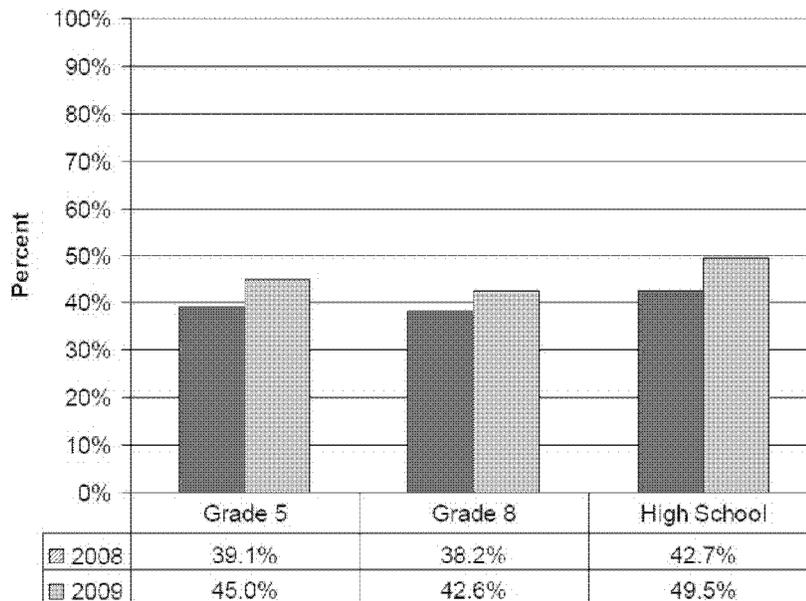


# Science MCA-II

(Minnesota Comprehensive Assessments)

## Science MCA-II

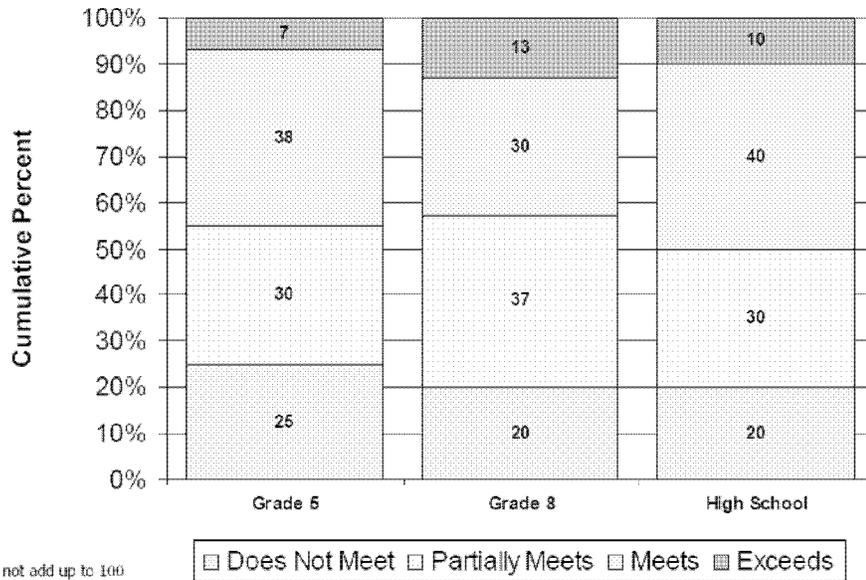
Percent of Students Proficient in Each Grade by Year



# 2009 Science MCA-II

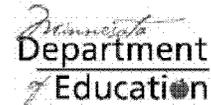


Percent of Students at Each Achievement Level

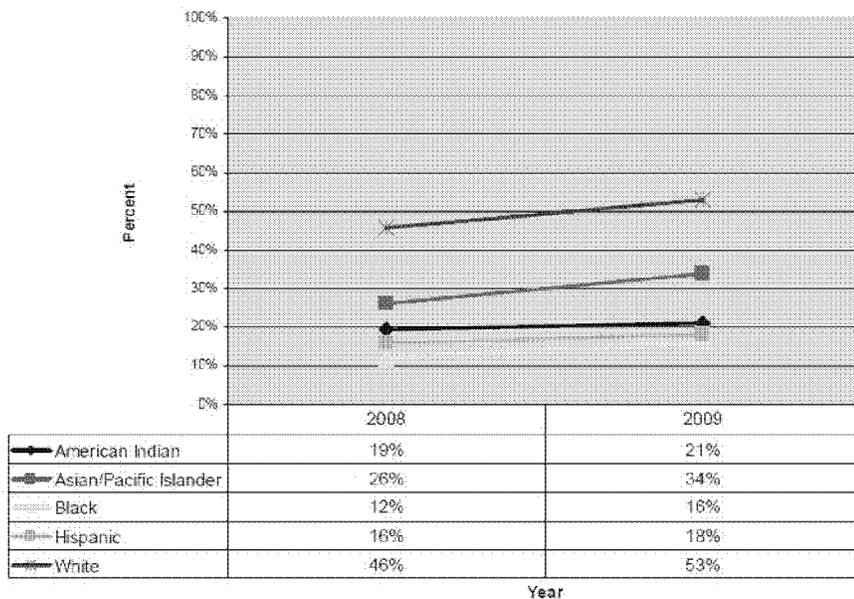


% may not add up to 100 because of rounding

# Grade 5 Science MCA-II



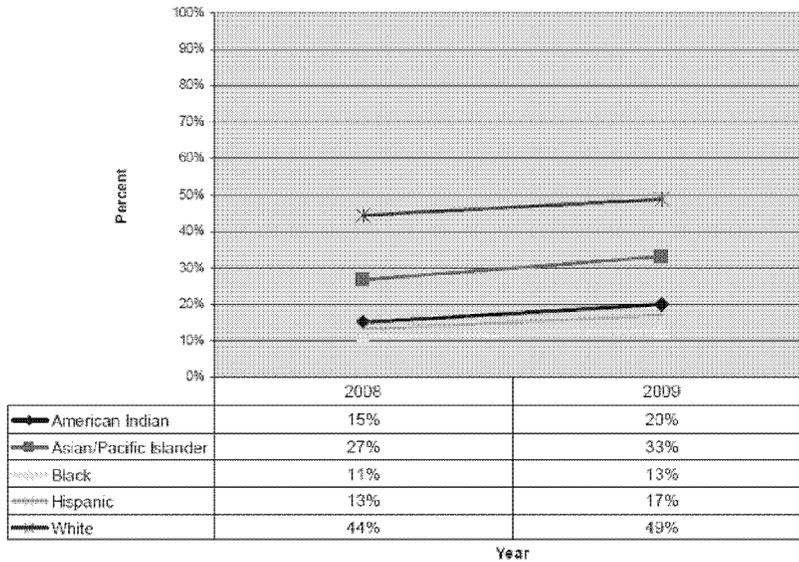
Percent of Students Proficient by Year - Ethnicity  
Grade 5 Science MCA-II



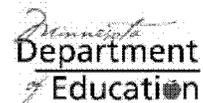
# Grade 8 Science MCA-II



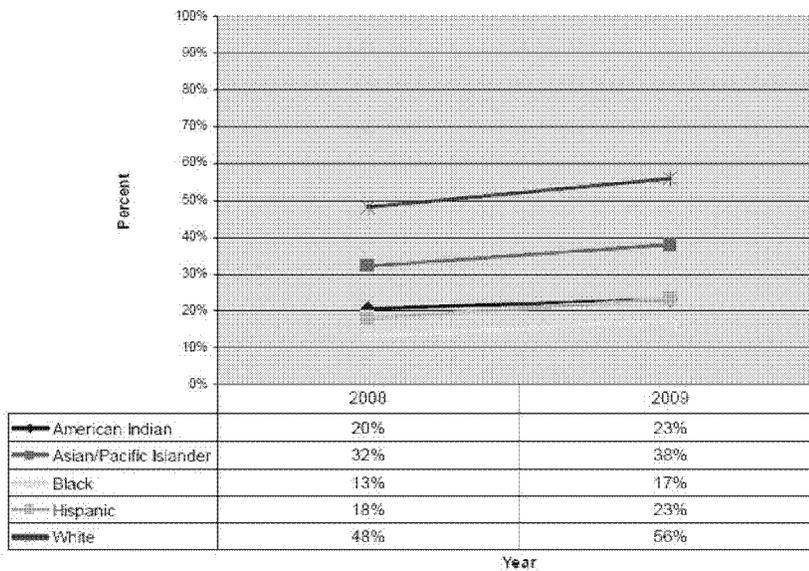
Percent of Students Proficient by Year - Ethnicity  
Grade 8 Science MCA-II



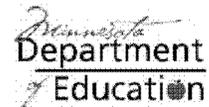
# High School Science MCA-II



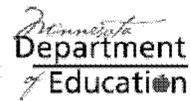
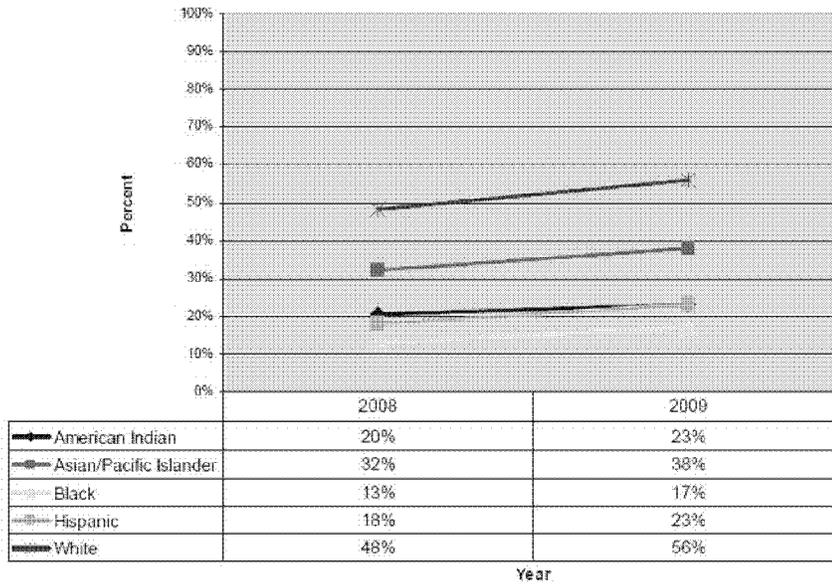
Percent of Students Proficient by Year - Ethnicity  
High School Science MCA-II



# High School Science MCA-II



Percent of Students Proficient by Year - Ethnicity  
High School Science MCA-II

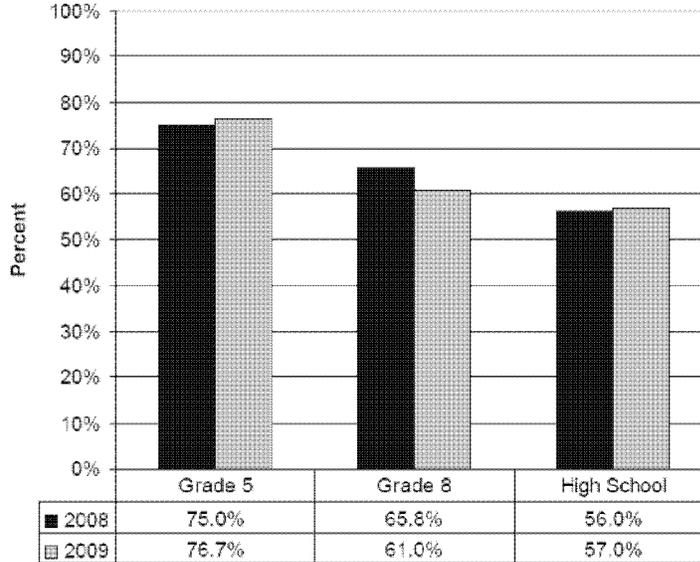


## Science MTAS

(Minnesota Test of Academic Skills)

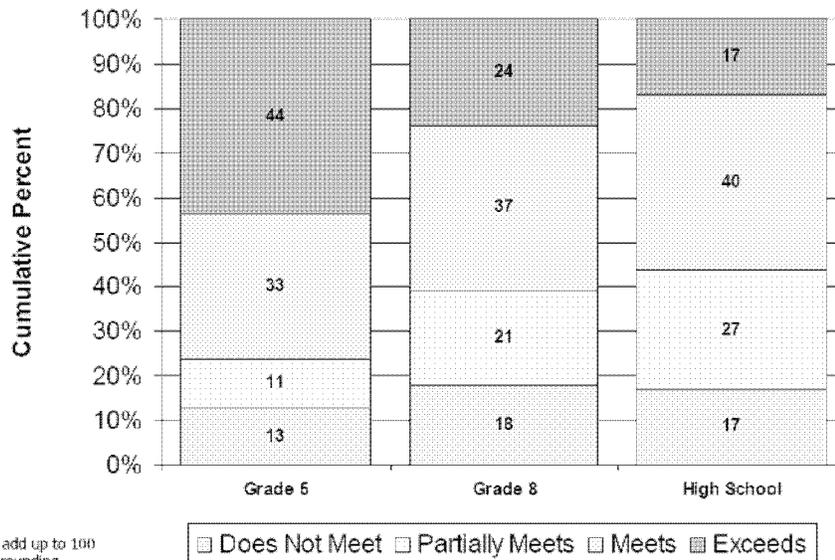
# Science MTAS

Percent of Students Proficient on Alternate Achievement Standards in Each Grade by Year



# 2009 Science MTAS

Percent of Students at Each Achievement Level



2003-2005 Data (Note grades 7, 10, and 11 were not tested until 2004)

**2003 - 2005 MCA Percent of Students Proficient**

| Grade 3<br>Group/Subgroup | Mathematics |      |      | Reading |      |      |
|---------------------------|-------------|------|------|---------|------|------|
|                           | Year        |      |      | Year    |      |      |
|                           | 2003        | 2004 | 2005 | 2003    | 2004 | 2005 |
| All                       | 71.5        | 70.5 | 77.5 | 72.6    | 73.3 | 78.4 |
| American Indian           | 54.2        | 52.3 | 63.6 | 56.0    | 58.3 | 64.4 |
| Asian/Pacific Islander    | 59.4        | 57.1 | 67.9 | 52.1    | 54.4 | 65.0 |
| Black                     | 40.7        | 39.0 | 48.0 | 43.1    | 45.5 | 53.9 |
| Hispanic                  | 43.8        | 44.7 | 53.4 | 41.3    | 43.4 | 54.2 |
| White                     | 77.7        | 77.0 | 83.7 | 79.4    | 80.0 | 84.2 |
| Free/Reduced Lunch        | 53.0        | 51.6 | 60.3 | 52.4    | 54.2 | 61.7 |
| Special Education         | 44.9        | 44.7 | 53.0 | 40.6    | 40.2 | 47.2 |
| LEP                       | 39.9        | 38.2 | 48.6 | 31.2    | 33.3 | 46.3 |

| Grade 5<br>Group/Subgroup | Mathematics |      |      | Reading |      |      |
|---------------------------|-------------|------|------|---------|------|------|
|                           | Year        |      |      | Year    |      |      |
|                           | 2003        | 2004 | 2005 | 2003    | 2004 | 2005 |
| All                       | 74.9        | 74.3 | 80.1 | 76.8    | 75.5 | 80.7 |
| American Indian           | 55.1        | 52.0 | 63.6 | 58.5    | 54.6 | 64.3 |
| Asian/Pacific Islander    | 61.5        | 62.9 | 70.8 | 58.1    | 57.0 | 66.7 |
| Black                     | 39.0        | 42.5 | 50.5 | 47.5    | 47.5 | 55.4 |
| Hispanic                  | 45.7        | 47.1 | 55.7 | 48.4    | 48.8 | 54.4 |
| White                     | 81.4        | 80.6 | 86.0 | 83.0    | 81.8 | 86.6 |
| Free/Reduced Lunch        | 54.9        | 55.0 | 62.7 | 57.9    | 56.2 | 63.5 |
| Special Education         | 44.5        | 44.4 | 51.6 | 43.2    | 40.6 | 47.2 |
| LEP                       | 37.2        | 40.1 | 49.4 | 34.4    | 34.8 | 44.7 |

| Grade 7<br>Group/Subgroup | Mathematics |      | Reading |      |
|---------------------------|-------------|------|---------|------|
|                           | Year        |      | Year    |      |
|                           | 2004        | 2005 | 2004    | 2005 |
| All                       | 66.7        | 75.8 | 69.8    | 74.2 |
| American Indian           | 38.6        | 52.1 | 46.3    | 53.3 |
| Asian/Pacific Islander    | 52.9        | 68.9 | 47.6    | 59.4 |
| Black                     | 28.3        | 40.2 | 35.0    | 43.6 |
| Hispanic                  | 36.7        | 48.0 | 39.7    | 46.4 |
| White                     | 73.5        | 82.1 | 76.7    | 80.3 |
| Free/Reduced Lunch        | 43.0        | 55.5 | 46.9    | 54.2 |
| Special Education         | 25.3        | 35.5 | 27.6    | 33.0 |
| LEP                       | 25.9        | 44.1 | 20.9    | 34.6 |

| Grade 10               | Reading |      |
|------------------------|---------|------|
|                        | Year    |      |
|                        | 2004    | 2005 |
| All                    | 77.9    | 81.2 |
| American Indian        | 56.9    | 65.7 |
| Asian/Pacific Islander | 65.8    | 71.2 |
| Black                  | 40.7    | 47.2 |
| Hispanic               | 45.6    | 56.5 |
| White                  | 83.5    | 86.2 |
| Free/Reduced Lunch     | 56.8    | 62.4 |
| Special Education      | 34.0    | 39.8 |
| LEP                    | 30.5    | 38.5 |

| Grade 11               | Mathematics |      |
|------------------------|-------------|------|
|                        | Year        |      |
|                        | 2004        | 2005 |
| All                    | 70.3        | 71.9 |
| American Indian        | 47.3        | 52.5 |
| Asian/Pacific Islander | 66.2        | 66.8 |
| Black                  | 27.9        | 32.0 |
| Hispanic               | 39.9        | 42.8 |
| White                  | 75.0        | 76.7 |
| Free/Reduced Lunch     | 46.7        | 50.9 |
| Special Education      | 24.1        | 30.2 |
| LEP                    | 29.3        | 34.1 |

Data Source (3/28/06):

[http://education.state.mn.us/ReportCard2005/schoolDistrictInfo.do?SCHOOL\\_NUM=000&DISTRICT\\_NUM=9999&DISTRICT\\_TYPE=99](http://education.state.mn.us/ReportCard2005/schoolDistrictInfo.do?SCHOOL_NUM=000&DISTRICT_NUM=9999&DISTRICT_TYPE=99)

**(A)(3) – Exhibit E: “Get Ready, Get Credit” legislative package**

Get Ready Get Credit:

**120B.13 ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS.**

Subdivision 1. Program structure; training programs for teachers.

(a) The advanced placement and international baccalaureate programs are well-established academic programs for mature, academically directed high school students. These programs, in addition to providing academic rigor, offer sound curricular design, accountability, comprehensive external assessment, feedback to students and teachers, and the opportunity for high school students to compete academically on a global level. Advanced placement and international baccalaureate programs allow students to leave high school with the academic skills and self-confidence to succeed in college and beyond. The advanced placement and international baccalaureate programs help provide Minnesota students with world-class educational opportunity.

(b) Critical to schools' educational success is ongoing advanced placement/international baccalaureate-approved teacher training. A secondary teacher assigned by a district to teach an advanced placement or international baccalaureate course or other interested educator may participate in a training program offered by The College Board or International Baccalaureate North America, Inc. The state may pay a portion of the tuition, room, board, and out-of-state travel costs a teacher or other interested educator incurs in participating in a training program. The commissioner shall determine application procedures and deadlines, select teachers and other interested educators to participate in the training program, and determine the payment process and amount of the subsidy. The procedures determined by the commissioner shall, to the extent possible, ensure that advanced placement and international baccalaureate courses become available in all parts of the state and that a variety of course offerings are available in school districts. This subdivision does not prevent teacher or other interested educator participation in training programs offered by The College Board or International Baccalaureate North America, Inc., when tuition is paid by a source other than the state.

Subd. 2. Support programs.

The commissioner shall provide support programs during the school year for teachers who attended the training programs and teachers experienced in teaching advanced placement or international baccalaureate courses. The support programs shall provide teachers with opportunities to share instructional ideas with other teachers. The state may pay the costs of participating in the support programs, including substitute teachers, if necessary, and program affiliation costs.

Subd. 3. Subsidy for examination fees.

The state may pay all or part of the fee for advanced placement or international baccalaureate examinations. The commissioner shall pay all examination fees for all public and nonpublic students of low-income families, as defined by the commissioner, and to the limit of the available appropriation, shall also pay a portion or all of the examination fees for other public and nonpublic students sitting for an advanced placement examination, international baccalaureate examination, or both. The commissioner shall determine procedures for state payments of fees.

Subd. 3a. College credit.

The colleges and universities of the Minnesota State Colleges and Universities system must award, and the University of Minnesota and private postsecondary institutions are encouraged to award, college credit to high school students who receive a score of three or higher on an advanced placement or four or higher on the international baccalaureate program examination.

Subd. 4. Information.

The commissioner shall submit the following information to the education committees of the legislature each year by February 1:

- (1) the number of pupils enrolled in advanced placement and international baccalaureate courses in each school district;
- (2) the number of teachers in each district attending training programs offered by the college board or International Baccalaureate North America, Inc.;
- (3) the number of teachers in each district participating in support programs;
- (4) recent trends in the field of advanced placement and international baccalaureate programs;
- (5) expenditures for each category in this section; and
- (6) other recommendations for the state program.

History:

1992 c 499 art 7 s 10; 1993 c 224 art 13 s 46; 1994 c 647 art 7 s 9; 1Sp1995 c 3 art 16 s 13; 1998 c 397 art 2 s 129,164; 2000 c 489 art 6 s 1; 1Sp2001 c 6 art 2 s 2; 2002 c 220 art 3 s 1; 1Sp2005 c 5 art 2 s 13-15

**120B.128 EDUCATIONAL PLANNING AND ASSESSMENT SYSTEM (EPAS) PROGRAM.**

(a) School districts and charter schools may elect to participate in the Educational Planning and Assessment System (EPAS) program offered by ACT, Inc. to provide a longitudinal, systematic approach to student educational and career planning, assessment, instructional support, and

evaluation. The EPAS achievement tests include English, reading, mathematics, science, and components on planning for high school and postsecondary education, interest inventory, needs assessments, and student education plans. These tests are linked to the ACT assessment for college admission and allow students, parents, teachers, and schools to determine the student's college readiness before grades 11 and 12.

(b) The commissioner of education shall provide ACT Explore tests for students in grade 8 and the ACT Plan test for students in grade 10 to assess individual student academic strengths and weaknesses, academic achievement and progress, higher order thinking skills, and college readiness. The state shall pay the test costs for school districts and charter schools that choose to participate in the EPAS program. The commissioner shall establish an application procedure and a process for state payment of costs.

History:

1Sp2005 c 5 art 2 s 12

#### 120B.132 RAISED ACADEMIC ACHIEVEMENT; ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS.

Subdivision 1. Establishment; eligibility.

A program is established to raise kindergarten through grade 12 academic achievement through increased student participation in preadvanced placement, advanced placement, and international baccalaureate programs, consistent with section 120B.13. Schools and charter schools eligible to participate under this section:

(1) must have a three-year plan approved by the local school board to establish a new international baccalaureate program leading to international baccalaureate authorization, expand an existing program that leads to international baccalaureate authorization, or expand an existing authorized international baccalaureate program; or

(2) must have a three-year plan approved by the local school board to create a new or expand an existing program to implement the college board advanced placement courses and exams or preadvanced placement initiative; and

(3) must propose to further raise students' academic achievement by:

(i) increasing the availability of and all students' access to advanced placement or international baccalaureate courses or programs;

(ii) expanding the breadth of advanced placement or international baccalaureate courses or programs that are available to students;

(iii) increasing the number and the diversity of the students who participate in advanced placement or international baccalaureate courses or programs and succeed;

(iv) providing low-income and other disadvantaged students with increased access to advanced placement or international baccalaureate courses and programs; or

(v) increasing the number of high school students, including low-income and other disadvantaged students, who receive college credit by successfully completing advanced placement or international baccalaureate courses or programs and achieving satisfactory scores on related exams.

Subd. 2. Application and review process; funding priority.

(a) Charter schools and school districts in which eligible schools under subdivision 1 are located may apply to the commissioner, in the form and manner the commissioner determines, for competitive funding to further raise students' academic achievement. The application must detail the specific efforts the applicant intends to undertake in further raising students' academic achievement, consistent with subdivision 1, and a proposed budget detailing the district or charter school's current and proposed expenditures for advanced placement, preadvanced placement, and international baccalaureate courses and programs. The proposed budget must demonstrate that the applicant's efforts will support implementation of advanced placement, preadvanced placement, and international baccalaureate courses and programs. Expenditures for administration must not exceed five percent of the proposed budget. The commissioner may require an applicant to provide additional information.

(b) When reviewing applications, the commissioner must determine whether the applicant satisfied all the requirements in this subdivision and subdivision 1. The commissioner may give funding priority to an otherwise qualified applicant that demonstrates:

(1) a focus on developing or expanding preadvanced placement, advanced placement, or international baccalaureate courses or programs or increasing students' participation in, access to, or success with the courses or programs, including the participation, access, or success of low-income and other disadvantaged students;

(2) a compelling need for access to preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(3) an effective ability to actively involve local business and community organizations in student activities that are integral to preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(4) access to additional public or nonpublic funds or in-kind contributions that are available for preadvanced placement, advanced placement, or international baccalaureate courses or programs; or

(5) an intent to implement activities that target low-income and other disadvantaged students.

Subd. 3. Funding; permissible funding uses.

(a) The commissioner shall award grants to applicant school districts and charter schools that meet the requirements of subdivisions 1 and 2. The commissioner must award grants on an equitable geographical basis to the extent feasible and consistent with this section. Grant awards must not exceed the lesser of:

(1) \$85 times the number of pupils enrolled at the participating sites on October 1 of the previous fiscal year; or

(2) the approved supplemental expenditures based on the budget submitted under subdivision 2. For charter schools in their first year of operation, the maximum funding award must be calculated using the number of pupils enrolled on October 1 of the current fiscal year. The commissioner may adjust the maximum funding award computed using prior year data for changes in enrollment attributable to school closings, school openings, grade level reconfigurations, or school district reorganizations between the prior fiscal year and the current fiscal year.

(b) School districts and charter schools that submit an application and receive funding under this section must use the funding, consistent with the application, to:

(1) provide teacher training and instruction to more effectively serve students, including low-income and other disadvantaged students, who participate in preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(2) further develop preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(3) improve the transition between grade levels to better prepare students, including low-income and other disadvantaged students, for succeeding in preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(4) purchase books and supplies;

(5) pay course or program fees;

(6) increase students' participation in and success with preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(7) expand students' access to preadvanced placement, advanced placement, or international baccalaureate courses or programs through online learning;

(8) hire appropriately licensed personnel to teach additional advanced placement or international baccalaureate courses or programs; or

(9) engage in other activity directly related to expanding students' access to, participation in, and success with preadvanced placement, advanced placement, or international baccalaureate courses or programs, including low-income and other disadvantaged students.

Subd. 4. Annual reports.

(a) Each school district and charter school that receives a grant under this section annually must collect demographic and other student data to demonstrate and measure the extent to which the district or charter school raised students' academic achievement under this program and must report the data to the commissioner in the form and manner the commissioner determines. The commissioner annually by February 15 must make summary data about this program available to the education policy and finance committees of the legislature.

(b) Each school district and charter school that receives a grant under this section annually must report to the commissioner, consistent with the Uniform Financial Accounting and Reporting Standards, its actual expenditures for advanced placement, preadvanced placement, and international baccalaureate courses and programs. The report must demonstrate that the school district or charter school has maintained its effort from other sources for advanced placement, preadvanced placement, and international baccalaureate courses and programs compared with the previous fiscal year, and the district or charter school has expended all grant funds, consistent with its approved budget.

History:

2006 c 282 art 4 s 1; 2007 c 146 art 2 s 7

**(A)(3) – Exhibit F: Minnesota Four-Year Graduation Rates**

| Demographic Description        | Ending Status | 2003              | 2004              | 2005              | 2006              | 2007              | 2008              | Difference in 4 yr percent |
|--------------------------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------------|
|                                |               | Four Year Percent |                            |
| All Students                   | Graduate      | 70.74             | 71.94             | 72.87             | 73.41             | 73.25             | 72.75             | 2.01                       |
| All Students                   | Dropout       | 8.59              | 7.65              | 6.79              | 6.5               | 6.38              | 6.3               |                            |
| All Students                   | Continuing    | 13.43             | 13.46             | 13.9              | 13.56             | 13.82             | 14.36             |                            |
| All Students                   | Unknown       | 7.24              | 6.94              | 6.44              | 6.53              | 6.54              | 6.59              |                            |
| All Students                   | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| American Indian/Alaskan Native | Graduate      | 35.43             | 38.62             | 40.61             | 39.64             | 40.67             | 40.98             | 5.55                       |
| American Indian/Alaskan Native | Dropout       | 24.96             | 21.08             | 17.52             | 19.85             | 18.87             | 20.24             |                            |
| American Indian/Alaskan Native | Continuing    | 23.93             | 23.97             | 26.49             | 27.14             | 27.2              | 25.78             |                            |
| American Indian/Alaskan Native | Unknown       | 15.68             | 16.34             | 15.38             | 13.38             | 13.26             | 13                |                            |
| American Indian/Alaskan Native | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Asian/Pacific Islander         | Graduate      | 62.07             | 65.14             | 67.18             | 68.12             | 66.03             | 65.05             | 2.98                       |
| Asian/Pacific Islander         | Dropout       | 9.82              | 7.32              | 7.37              | 6.94              | 6.19              | 6.56              |                            |
| Asian/Pacific Islander         | Continuing    | 20.4              | 19.58             | 18.08             | 15.67             | 18.42             | 19.02             |                            |
| Asian/Pacific Islander         | Unknown       | 7.72              | 7.96              | 7.37              | 9.28              | 9.36              | 9.37              |                            |
| Asian/Pacific Islander         | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Hispanic                       | Graduate      | 32.44             | 33.1              | 35.04             | 39.09             | 40.67             | 39.58             | 7.14                       |
| Hispanic                       | Dropout       | 31.8              | 28.65             | 25.71             | 22.26             | 19.86             | 20.52             |                            |
| Hispanic                       | Continuing    | 22.02             | 24.71             | 25.19             | 23.37             | 23.35             | 24.08             |                            |
| Hispanic                       | Unknown       | 13.73             | 13.54             | 14.06             | 15.29             | 16.12             | 15.81             |                            |
| Hispanic                       | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Black, not of Hispanic origin  | Graduate      | 34.48             | 36.16             | 36.76             | 38.72             | 40.27             | 40.9              | 6.42                       |
| Black, not of Hispanic origin  | Dropout       | 19.49             | 17.27             | 14.79             | 13.74             | 13.69             | 13.07             |                            |
| Black, not of Hispanic origin  | Continuing    | 32.87             | 33.43             | 35.95             | 34.27             | 32.72             | 33.54             |                            |
| Black, not of Hispanic origin  | Unknown       | 13.16             | 13.15             | 12.5              | 13.27             | 13.32             | 12.49             |                            |
| Black, not of Hispanic origin  | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| White, not of Hispanic origin  | Graduate      | 77.62             | 78.9              | 79.79             | 80.51             | 80.75             | 80.58             | 2.96                       |
| White, not of Hispanic origin  | Dropout       | 5.87              | 5.23              | 4.63              | 4.39              | 4.31              | 4.07              |                            |
| White, not of Hispanic origin  | Continuing    | 10.42             | 10.22             | 10.47             | 10.2              | 10.21             | 10.53             |                            |
| White, not of Hispanic origin  | Unknown       | 6.08              | 5.65              | 5.11              | 4.91              | 4.73              | 4.82              |                            |
| White, not of Hispanic origin  | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Limited English Proficient     | Graduate      | 39.06             | 40.85             | 41.8              | 43.95             | 43.88             | 43.35             | 4.29                       |
| Limited English Proficient     | Dropout       | 19.94             | 18.78             | 18.21             | 17.21             | 15.88             | 15.84             |                            |
| Limited English Proficient     | Continuing    | 28.57             | 27.44             | 28.1              | 25.5              | 25.87             | 26.21             |                            |
| Limited English Proficient     | Unknown       | 12.43             | 12.92             | 11.89             | 13.34             | 14.36             | 14.59             |                            |
| Limited English Proficient     | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Special Education              | Graduate      | 49.32             | 52.2              | 50.92             | 51.76             | 51.76             | 51.77             | 2.45                       |
| Special Education              | Dropout       | 13.93             | 12.53             | 11.43             | 11.53             | 10.92             | 10.68             |                            |
| Special Education              | Continuing    | 26.71             | 26.08             | 29.14             | 29.07             | 29.51             | 30.26             |                            |
| Special Education              | Unknown       | 10.04             | 9.18              | 8.5               | 7.64              | 7.81              | 7.28              |                            |
| Special Education              | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Free/Reduced Priced Lunch      | Graduate      | 49.79             | 49.98             | 50.88             | 52                | 52.73             | 51.8              | 2.01                       |
| Free/Reduced Priced Lunch      | Dropout       | 16.47             | 15.54             | 14.19             | 13.79             | 12.96             | 13.04             |                            |
| Free/Reduced Priced Lunch      | Continuing    | 22.99             | 23.54             | 25.01             | 23.95             | 23.76             | 24.79             |                            |
| Free/Reduced Priced Lunch      | Unknown       | 10.75             | 10.95             | 9.91              | 10.25             | 10.56             | 10.37             |                            |
| Free/Reduced Priced Lunch      | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Male                           | Graduate      | 66.85             | 68.78             | 69.57             | 70.47             | 70.1              | 69.79             | 2.94                       |
| Male                           | Dropout       | 10.09             | 8.9               | 7.84              | 7.47              | 7.29              | 7.05              |                            |
| Male                           | Continuing    | 15.29             | 15.09             | 15.99             | 15.36             | 15.81             | 16.34             |                            |
| Male                           | Unknown       | 7.77              | 7.23              | 6.6               | 6.69              | 6.8               | 6.82              |                            |
| Male                           | TOTAL         |                   |                   |                   |                   |                   |                   |                            |
| Female                         | Graduate      | 74.91             | 75.29             | 76.37             | 76.53             | 76.52             | 75.87             | 0.96                       |
| Female                         | Dropout       | 6.99              | 6.33              | 5.68              | 5.47              | 5.44              | 5.52              |                            |
| Female                         | Continuing    | 11.44             | 11.74             | 11.68             | 11.64             | 11.76             | 12.26             |                            |
| Female                         | Unknown       | 6.66              | 6.64              | 6.27              | 6.36              | 6.28              | 6.34              |                            |
| Female                         | TOTAL         |                   |                   |                   |                   |                   |                   |                            |

**(A)(3) – Exhibit G: *Advanced Placement Support and Score Trends***

**Summary: Minnesota Support for Advanced Placement (AP)**

The state of Minnesota's support for AP has been consistent over seventeen years and has steadily gained momentum in the last six years. Minnesota's support has been shown through funding and coordination that falls into four areas: student exam fee reimbursement, teacher training in Advanced Placement, vertical team teacher training in pre-AP strategies, and grants to schools for whole school program building.

As legislative support in Minnesota has increased over the years, Advanced Placement programs have expanded commensurately. State funding for the AP and IB (International Baccalaureate) programs was initiated in 1992, with \$300,000 distributed to the first recipients in FY 1993. Initial funding provided for subsidies for exam fees for low-income public school students, teacher training and support. In 1994-1995 the funding was increased to \$750,000 each year for a total of \$1,500,000. The funded categories were expanded to include exam fees for all students in FY 1994. Training scholarships were expanded to non-public teachers in FY 1998.

For the 2008-2009 biennium, the legislature appropriated \$4,500,00 each year, with \$500,000 of this funding to be used across both AP and IB for teacher training, and the remaining \$4,000,000 to be distributed at 75 percent for AP and 25 percent for IB. These funds are designated for exam fees and teacher training.

Minnesota is in its 17<sup>th</sup> year of providing AP exam fee support for all students. In 2007, of the 532 public and non-public high schools in Minnesota, 284 schools participated in AP, representing 53 percent of the high schools. The number of students testing and exams taken in FY 2008 continues to demonstrate significant gains. In May 2008, 27,605 students took 44,281 exams with 62.8 percent of the public school test takers receiving scores of 3 and above on a scale of 1-5, an increase of 7.7 percent compared to a national increase of 6.2 percent. Minnesota's AP programs have recorded a steady increase in participation by minority students, with 12.8 percent more students of color taking exams in 2008 than in 2007.

|           | Test Takers | % Change '07 to '08 | Exams Taken | % Change '07to '08 |
|-----------|-------------|---------------------|-------------|--------------------|
| Nation    | 1, 580,821  | +8.0                | 2,736,445   | +8.0               |
| Minnesota | 27,605      | +6.2                | 44,281      | +6.0               |

#### Minnesota Public School Student AP Exam Participation 1996-2006

| Year | Number of Students Taking AP Exams | Increase Over Prior Year | Cumulative Increase Since 1996 |
|------|------------------------------------|--------------------------|--------------------------------|
| 2008 | 27,605                             | 6.2%                     | 275.9%                         |
| 2007 | 25,988                             | 32.3%                    | 253.9%                         |
| 2006 | 19,632                             | 19.6%                    | 167.4%                         |
| 2005 | 16,409                             | 8.4%                     | 123.5%                         |
| 2004 | 15,144                             | 4.2%                     | 106.3%                         |
| 2003 | 14,538                             | 4.5%                     | 98.0%                          |
| 2002 | 13,907                             | 9.2%                     | 89.4%                          |
| 2001 | 12,741                             | 73.5%*                   | 73.5%                          |
| 1996 | 7,342                              | na                       | na                             |

\*Five year increase from 1996 to 2001. (College Board State Report, 2006)

In addition to increasing student participation in AP exams, more Minnesota students have been taking more than one AP exam.

#### Minnesota AP Exams Taken 1996-2006

| Year | Number of AP Exams Taken | Increase Over Prior Year | Cumulative Increase Since 1996 |
|------|--------------------------|--------------------------|--------------------------------|
| 2008 | 44,281                   | 6.0%                     | 364.8%                         |
| 2007 | 41,763                   | 17.0%                    | 338.4%                         |
| 2006 | 31,075                   | 22.3%                    | 226.2%                         |
| 2005 | 25,405                   | 8.7%                     | 166.7%                         |
| 2004 | 23,370                   | 6.1%                     | 145.3%                         |
| 2003 | 22,030                   | 3.4%                     | 131.2%                         |

|             |        |         |        |
|-------------|--------|---------|--------|
| <b>2002</b> | 21,302 | 8.2%    | 123.6% |
| <b>2001</b> | 19,680 | 106.6%* | 106.6% |
| <b>1996</b> | 9,527  | na      | na     |

\*Five year increase from 1996 to 2001. (College Board State Report, 2006)

### Distribution of candidates and AP exams by ethnicity for Minnesota (2005-2007)

| ETHNIC GROUP                    | FY 05         |               | FY 06         |               | FY 07         |               |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                 | Students      | Exams         | Students      | Exams         | Students      | Exams         |
| <i>American Indian</i>          | 65            | 84            | 79            | 126           | 78            | 118           |
| <i>Asian</i>                    | 1,245         | 2,223         | 1,528         | 2,701         | 1612          | 2986          |
| <i>Black/African-American</i>   | 285           | 411           | 401           | 559           | 508           | 739           |
| <i>Latino: Mexican American</i> | 127           | 193           | 155           | 256           | 158           | 236           |
| Latino: Puerto Rican            | 20            | 35            | 29            | 44            | 25            | 40            |
| Latino: Other Hispanic          | 128           | 186           | 158           | 240           | 210           | 334           |
| Other322                        | 524           | 450           | 780           | 406           | 716           |               |
| Not Stated                      | 517           | 806           | 857           | 1,581         | 639           | 1002          |
| White                           | 16,193        | 25,018        | 18,812        | 29,534        | 19,293        | 30,599        |
| <b>Total</b>                    | <b>18,902</b> | <b>29,480</b> | <b>22,469</b> | <b>35,821</b> | <b>22,929</b> | <b>36,770</b> |

The intent of the legislated funding is to assist public and non-public students in paying for AP and IB exam fees. This involves development of a fee schedule for payment of all or a portion of the exam fees for all students and the entire fee for students of low-income families. In 2008, the state reimbursed \$50 for non fee-reduced students out of a total cost of \$84 per exam and \$54 per exam for low-income students. Along with the \$22 reduction provided by the College Board and an additional school administration rebate, low-income students were able to test without charge. In 2008, AP exam fees reimbursements totaled \$2,343,976.

Teacher training is a critical component for student success. In 2008, the Minnesota Department of Education (MDE), in joint collaboration with Augsburg College and Carleton College, facilitated in-depth summer training institutes for AP and Pre-AP teachers. Carleton College trained 250 teachers and Augsburg College trained 363 AP and Pre-AP teachers in week-long institutes, with 34 AP teachers receiving similar training out-of-state. Scholarships plus room and board reimbursements were provided for in-state training, and up to \$1,000 was provided for out-of-state training, for a total summer teacher training allocation of \$493,750.00. Additionally, 603 teachers attended the College Board sponsored, University of Minnesota-hosted, follow-up workshops and meetings coordinated by MDE. Registration and/or substitute costs were reimbursed for the UM follow-up sessions with AP support program expenditures of \$105,525.

| <b>Growth in Teacher Training</b> | <b>FY'04</b> | <b>FY'05</b> | <b>FY'06</b> | <b>FY'07</b> |
|-----------------------------------|--------------|--------------|--------------|--------------|
| Courses Offered                   | 1,089        | 1,122        | 1,206        | 1,460        |
| New Courses Offered               | 111          | 96           | 125          | 137          |
| AP Teachers                       | 1,068        | 1,095        | 1,123        | 1,392        |
| Carleton summer institute         | 180          | 164          | 215          | 144          |
| Augsburg summer institute         | 145          | 130          | 244          | 321          |
| Out-of-State summer training      | 11           | 24           | 48           | 25           |
| UM Midwest Regional Conference    | 488          | 411          | 288          | 337          |
| <i>Total Teacher Training</i>     | <i>824</i>   | <i>729</i>   | <i>795</i>   | <i>827</i>   |

New AP courses offered in Minnesota high schools went from 96 in 2005 to 125 in 2006, an increase of 30 percent. In summary, Advanced Placement programs in Minnesota exhibit the following trends:

- Increased overall participation;
- Increased participation by underrepresented populations;
- Growth in number of AP exams students are taking; and
- Steady improvement in AP exam scores in relation to populations tested in other states

## **Raised Academic Achievement Grants**

Minnesota has a history of establishing and funding programs to raise academic achievement for students in grade six and above through increased student participation in Pre-AP and AP programs. As a direct result of the *Get Ready, Get Credit* program that passed the Minnesota legislature in 2005, Minnesota experienced an almost 20 percent increase in the number of students taking AP tests and saw an 18.5 percent increase in the number of students scoring high enough to earn college credit. The legislature then appropriated a total of \$6,000,000 to fund the Raised Academic Achievement-Advanced Placement Grant Program. Funds were made available through M.S.120B.132, Article 2, Sec. 7 and 46. Twenty-one sites were awarded two-year grants in October 2007 to implement programs designed to:

- increase the availability of and all students' access to AP courses or programs;
- expand the breadth of AP courses or programs available to students;
- increase the number and the diversity of the students who participate in AP courses or programs and succeed;
- provide low-income and other disadvantaged students with increased access to AP courses and programs; or
- increase the number of high school students, including low-income and other disadvantaged students, who earn college credit by successfully completing AP courses or programs and achieving satisfactory scores on related exams.

## **Pre-AP Training**

With the goal of preparing a growing number of students for the challenges offered by the Advanced Placement Program, focusing on those who are traditionally underrepresented in AP courses, Minnesota funding has supported Pre-AP teacher training for both grant and non-grant sites. Training has especially highlighted the concept of Vertical Teams in order to construct programs that teach a continuum of skills and concepts supported from one grade level to the next. In 2008, through the state funded Raised Academic Achievement grants, the College Board offered fifty AP sessions at middle schools and high schools across the state. All sessions filled to capacity (30 teachers each) for a total of 1,500 Minnesota teachers trained in Pre-AP strategies and vertical teaming. For the spring of 2009, the College Board is facilitating approximately 45 additional, regionally based sessions.

To access further technical assistance, schools and students interested in AP programs can visit the Minnesota Department of Education's (MDE) Website College and Career Readiness page, which includes links and information on Advanced Placement.

[http://education.state.mn.us/MDE/Academic\\_Excellence/College\\_Career\\_Readiness/Advanced\\_Placement/index.html](http://education.state.mn.us/MDE/Academic_Excellence/College_Career_Readiness/Advanced_Placement/index.html)

### **Educational Planning and Assessment System (EPAS)**

Another component of Minnesota's *Get Ready, Get Credit* initiative includes state support for districts using the ACT's EXPLORE and PLAN (EPAS) assessments. The EPAS program was first available with statewide funding in 2005-2006. In 2008, approximately 85,000 students participated in these assessments. The Minnesota Department of Education expects participation to continue to increase during the 2008-2009 and 2009-2010 school years as a result of funding from the United States Department of Education College Access Challenge Grant program, which is providing training for middle school counselors in analyzing data from these assessments to support high school rigorous course planning and college readiness. EPAS training in 2008-09 included 161 counselors from 105 districts from all regions of the state. An electronic support network has been developed for them, and plans are underway to provide additional training to under-represented areas in 2009-2010.

The Minnesota Department of Education (MDE) is responsible for the administration of AP program components as funded by legislation. MDE staff responsibilities include the following:

- Collaborate with the Minnesota Advanced Placement Advisory Council and the College Board to create training programs. In 2008, state-funded AP summer trainings were conducted at Augsburg and Carleton Colleges.
- Assist in the development, promotion and evaluation of the teacher trainings.
- Work with the College Board to support teachers and provide follow-up to training experiences.
- Process the reimbursement process for out-of-state and in-state training costs incurred by teachers and districts.
- Communicate opportunities for exam fee subsidies to all Minnesota schools and students;
- Gather data from individual public and non-public schools regarding their AP programs, including the number of students tested, exams taken, courses offered and teachers teaching an AP course;
- Work with the College Board to create invoice forms for payment of AP fees;

- Work with the public and non-public schools to pay for exam fees for all AP exams; and,
- Prepare documentation to provide direct payment of exam subsidies to AP districts.
- Prepare and maintain the AP budget
- Prepare annual reports to the legislature and respond to legislative inquiries;
- Meet regularly with Advanced Placement advisory boards
- Work with Minnesota public and private universities and colleges to prepare *Credit Policies for Courses earned through Advanced Placement Exams*
- Do informational AP presentations for groups of interested parents, teachers and students;
- Respond to phone and e-mail requests from program coordinators, teachers, parents and students;
- Communicate regularly with AP coordinators regarding program information, program start-up, application processes and payments to their school or district; and,
- Gather and report data to the media, higher education, secondary schools and other organizations regarding student participation in AP programs.

**Biennial Funding and Combined Participation Totals for Advanced Placement and International Baccalaureate Programs**

| <b>Year</b> | <b>Biennium<br/>Funding</b> | <b>Students<br/>(AP &amp; IB)</b> | <b>Exams<br/>Taken</b> |
|-------------|-----------------------------|-----------------------------------|------------------------|
| <b>1993</b> | <b>\$300,000</b>            | <b>4,938</b>                      | <b>6,638</b>           |
| 1994        | \$750,000                   | 5,394                             | 7,304                  |
| 1995        | \$750,000                   | 7,846                             | 10,459                 |
| 1996        | \$875,000                   | 9,158                             | 12,495                 |
| 1997        | \$875,000                   | 10,184                            | 14,324                 |
| 1998        | \$1,875,000                 | 11,916                            | 18,062                 |
| 1999        | \$1,875,000                 | 12,916                            | 19,883                 |
| 2000        | \$1,875,000                 | 13,995                            | 21,860                 |
| 2001        | \$1,875,000                 | 15,882                            | 25,230                 |

|      |                                     |                          |                          |
|------|-------------------------------------|--------------------------|--------------------------|
| 2002 | \$2,000,000                         | 17,162                   | 27,163                   |
| 2003 | <del>\$1,000,000</del><br>\$450,000 | 17,869                   | 28,036                   |
| 2004 | \$778,000                           | 18,699                   | 29,831                   |
| 2005 | \$778,000                           | 20,143                   | 32,255                   |
| 2006 | \$4,500,000                         | 23,947                   | 38,892                   |
| 2007 | \$4,500,000                         | 24,571                   | 40,180                   |
| 2008 | \$11,000,000                        | 27,605<br>(AP data only) | 44,281<br>(AP data only) |
| 2009 | \$11,000,000                        | na                       | na                       |

### **Projected Support**

The 2009 Legislative session is currently in progress. Minnesota is facing a large budget deficit, however state level commitment for Advanced Placement remains strong. Although final appropriations will not be determined until later in the spring, the House, Senate, and Governor’s education bills all include continued support for Advanced Placement teacher training, exam fee reimbursement, and grants to schools to initiate or increase current Advanced Placement programs.

The current Senate bill proposes 3.5 million per year for teacher training and exam reimbursements and 1 million for grants to schools; the House bill would provide 4.5 million per year for teacher training and exam reimbursements; and the Governor’s bill offers 4 million per year for teacher training and exam reimbursements and 2 million for grants to schools.

Additionally, Minnesota is currently developing a reciprocity arrangement with Wisconsin to allow Minnesota school districts the ability to offer up to twenty online AP courses to our students, utilizing the platform and technical support provided by the Wisconsin Virtual School. This exciting opportunity will expand the access of AP, particularly to rural schools with small enrollments and limited resources.



**Summary: Minnesota National Math and Science Initiative Proposal Objectives**

The goal of the Minnesota NMSI Proposal is *to increase the number of students in Minnesota*

*who earn a 3 or higher on AP exams or pass Pre-AP end-of-course exams in math, science and English.* The Minnesota Proposal focuses on three main areas to accomplish its stated goal. Measurable objectives have been identified in the following categories: student programming, teacher training and school assistance.

**Student Programming.** The goal *to increase the number of students in Minnesota who earn a 3 or higher on AP exams or pass Pre-AP end-of-course exams in math, science and English* can be accomplished with student programming through:

1. Access to more AP and Pre-AP courses, course preparatory skill building and subject preparation:
  - Increased number of Pre-AP and AP courses offered in schools
  - Increased participation in Pre-AP and AP courses
  - Increased number tutoring programs, Pre-AP and AP Saturday and summer camps and workshops offered
2. Advising and registration for more Pre-AP and AP courses
  - Student advising on the merits of Pre-AP and AP coursework
  - Students’ 8th grade Personal Graduation Plans on file including Pre-AP and AP courses in their graduation plan
  - Increased number of students participating in PLAN and EXPLORE
3. Incentives for students passing exams
  - Increased number of students earning ACHIEVE scholarships for AP passing scores
  - Increased number of student earning federal post-secondary scholarship for AP passing scores
  - Increased number of college credits earned by high school students for AP passing scores

**Student Incentives and Scholarship Funds Available to Students Passing AP Exams**

| Program | Advanced Placement Criteria | Amount |
|---------|-----------------------------|--------|
|---------|-----------------------------|--------|

|  |   |                             |
|--|---|-----------------------------|
| State ACHIEVE Scholarships             | Requires a minimum of two AP courses and passing scores on the AP exams, three or higher. | \$1,200                     |
| Federal Academic Competitiveness Grant | Requires a minimum of two AP exams with passing scores of three or higher.                | \$750 yr. 1<br>\$1300 yr. 2 |

**Teacher Training.** The goal to *increase the number of students in Minnesota who earn a 3 or higher on AP exams or pass Pre-AP end-of- course exams in math, science and English* will be accomplished with teacher training through:

4. Access to training opportunities and incentives to acquire training and teach courses:
  - Increased number of summer training institutes and school year training opportunities, site and registrant slots available statewide
  - Increased number of College Board-trained trainers in Minnesota

**School and District Support.** To achieve the goal to *increase the number of students in Minnesota who earn a 3 or higher on AP exams or pass Pre-AP end-of-course exams in math, science and English*, schools and districts need support from MDE, reliable data tracking systems and training in program administration and data use:

5. Assistance in building and coordinating the infrastructure necessary for a broader capacity, data-driven Pre-AP and AP program
  - Coordinate data collection of Pre-AP and AP data by the MDE, including teacher training, course offering, exam scores and student-teacher links
  - Data checking and cleansing by schools and district based on reports from MDE
  - Training and technical assistance by MDE on use and meaning of data and analysis techniques
6. Access and assistance in connecting to student and teacher programs that build capacity to make students successful
  - All students will participate in EPAS
  - All students will have an eighth-grade personal graduation plan that follows the student through high school graduation
  - Participation of schools in data use workshops
  - Schools administrator’s use of data for school action plans that are focused on increasing student achievement on Pre-AP and AP exams
7. Assistance in providing additional courses and expanding capacity.
  - Increased number of Pre-AP and AP course offerings in the registration guide

- Increased number of students registered and enabled to complete Pre-AP and AP course work
- Increased number of schools who offer Pre-AP and AP programs throughout Minnesota

Awardees are expected to share strategies, activities, and outcomes with MDE and other educational entities, including professional organizations.

### **Current Minnesota legislation supporting Advanced Placement programs:**

#### **MS 120B.13 ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS.**

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##### **Subdivision 1. Program structure; training programs for teachers.**

(a) The advanced placement and international baccalaureate programs are well-established academic programs for mature, academically directed high school students. These programs, in addition to providing academic rigor, offer sound curricular design, accountability, comprehensive external assessment, feedback to students and teachers, and the opportunity for high school students to compete academically on a global level. Advanced placement and international baccalaureate programs allow students to leave high school with the academic skills and self-confidence to

succeed in college and beyond. The advanced placement and international baccalaureate programs help provide Minnesota students with world-class educational opportunity.

(b) Critical to schools' educational success is ongoing advanced placement/international baccalaureate-approved teacher training. A secondary teacher assigned by a district to teach an advanced placement or international baccalaureate course or other interested educator may participate in a training program offered by The College Board or International Baccalaureate North America, Inc. The state may pay a portion of the tuition, room, board, and out-of-state travel costs a teacher or other interested educator incurs in participating in a training program. The commissioner shall determine application procedures and deadlines, select teachers and other interested educators to participate in the training program, and determine the payment process and amount of the subsidy. The procedures determined by the commissioner shall, to the extent possible, ensure that advanced placement and international baccalaureate courses become available in all parts of the state and that a variety of course offerings are available in school districts. This subdivision does not prevent teacher or other interested educator participation in training programs offered by The College Board or International Baccalaureate North America, Inc., when tuition is paid by a source other than the state.

**Subd. 2. Support programs.**

The commissioner shall provide support programs during the school year for teachers who attended the training programs and teachers experienced in teaching advanced placement or international baccalaureate courses. The support programs shall provide teachers with opportunities to share instructional ideas with other teachers. The state may pay the costs of participating in the support programs, including substitute teachers, if necessary, and program affiliation costs.

**Subd. 3. Subsidy for examination fees.**

The state may pay all or part of the fee for advanced placement or international baccalaureate examinations. The commissioner shall pay all examination fees for all public and nonpublic students of low-income families, as defined by the commissioner, and to the limit of the available appropriation, shall also pay a portion or all of the examination fees for other public and nonpublic students sitting for an advanced placement examination, international baccalaureate examination, or both. The commissioner shall determine procedures for state payments of fees.

**Subd. 3a. College credit.**

The colleges and universities of the Minnesota State Colleges and Universities system must award, and the University of Minnesota and private postsecondary institutions are encouraged to award, college credit to high school students who receive a score of three or higher on an advanced placement or four or higher on the international baccalaureate program examination.

**Subd. 4. Information.**

The commissioner shall submit the following information to the education committees of the legislature each year by February 1:

- (1) the number of pupils enrolled in advanced placement and international baccalaureate courses in each school district;
  - (2) the number of teachers in each district attending training programs offered by the college board or International Baccalaureate North America, Inc.;
  - (3) the number of teachers in each district participating in support programs;
  - (4) recent trends in the field of advanced placement and international baccalaureate programs;
  - (5) expenditures for each category in this section; and
  - (6) other recommendations for the state program.
- 

**Minnesota Session Laws 2007, Chapter 146, Sec.44**

Subd. 12. [EXAMINATION FEES; TEACHER TRAINING AND SUPPORT PROGRAMS.]

(a) For students' advanced placement and international baccalaureate examination fees under Minnesota Statutes, section 120B.13, subdivision 3, and the training and related costs for teachers and other interested educators under Minnesota Statutes, section 120B.13, subdivision 1:

|              |       |      |
|--------------|-------|------|
| \$ 4,500,000 | ..... | 2008 |
| \$ 4,500,000 | ..... | 2009 |

(b) The advanced placement program shall receive 75 percent of the appropriation each year and the international baccalaureate program shall receive 25 percent of the appropriation each year. The department, in consultation with representatives of the advanced placement and international baccalaureate programs selected by the Advanced Placement Advisory Council and IBMN, respectively, shall determine the amounts of the expenditures each year for examination fees and training and support programs for each program.

(c) Notwithstanding Minnesota Statutes, section 120B.13, subdivision 1, at least \$500,000 each year is for teachers to attend subject matter summer training programs and follow-up support workshops approved by the advanced placement or international baccalaureate programs. Teachers shall apply for teacher training scholarships to prepare for teaching in the advanced placement or international baccalaureate program. Any reserved funding not expended for teacher training may be used for exam fees and other support programs for each program.

(d) The commissioner shall pay all examination fees for all students of low-income families under Minnesota Statutes, section 120B.13, subdivision 3, and to the extent of available appropriations shall also pay examination fees for students sitting for an advanced placement examination, international baccalaureate examination, or both. Any balance in the first year does not cancel but is available in the second year.

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**MS 120B.132 RAISED ACADEMIC ACHIEVEMENT; ADVANCED PLACEMENT AND INTERNATIONAL BACCALAUREATE PROGRAMS.**

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**Subdivision 1. Establishment; eligibility.**

A program is established to raise kindergarten through grade 12 academic achievement through increased student participation in preadvanced placement, advanced placement, and international baccalaureate programs, consistent with section 120B.13. Schools and charter schools eligible to participate under this section:

(1) must have a three-year plan approved by the local school board to establish a new international baccalaureate program leading to international baccalaureate authorization, expand an existing program that leads to international baccalaureate authorization, or expand an existing authorized international baccalaureate program; or

(2) must have a three-year plan approved by the local school board to create a new or expand an existing program to implement the college board advanced placement courses and exams or preadvanced placement initiative; and

(3) must propose to further raise students' academic achievement by:

(i) increasing the availability of and all students' access to advanced placement or international baccalaureate courses or programs;

(ii) expanding the breadth of advanced placement or international baccalaureate courses or programs that are available to students;

(iii) increasing the number and the diversity of the students who participate in advanced placement or international baccalaureate courses or programs and succeed;

(iv) providing low-income and other disadvantaged students with increased access to advanced placement or international baccalaureate courses and programs; or

(v) increasing the number of high school students, including low-income and other disadvantaged students, who receive college credit by successfully completing advanced placement or international baccalaureate courses or programs and achieving satisfactory scores on related exams.

**Subd. 2. Application and review process; funding priority.**

(a) Charter schools and school districts in which eligible schools under subdivision 1 are located may apply to the commissioner, in the form and manner the commissioner determines, for competitive funding to further raise students' academic achievement. The application must detail the specific efforts the applicant intends to undertake in further raising students' academic achievement, consistent with subdivision 1, and a proposed budget detailing the district or charter

school's current and proposed expenditures for advanced placement, preadvanced placement, and international baccalaureate courses and programs. The proposed budget must demonstrate that the applicant's efforts will support implementation of advanced placement, preadvanced placement, and international baccalaureate courses and programs. Expenditures for administration must not exceed five percent of the proposed budget. The commissioner may require an applicant to provide additional information.

(b) When reviewing applications, the commissioner must determine whether the applicant satisfied all the requirements in this subdivision and subdivision 1. The commissioner may give funding priority to an otherwise qualified applicant that demonstrates:

(1) a focus on developing or expanding preadvanced placement, advanced placement, or international baccalaureate courses or programs or increasing students' participation in, access to, or success with the courses or programs, including the participation, access, or success of low-income and other disadvantaged students;

(2) a compelling need for access to preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(3) an effective ability to actively involve local business and community organizations in student activities that are integral to preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(4) access to additional public or nonpublic funds or in-kind contributions that are available for preadvanced placement, advanced placement, or international baccalaureate courses or programs; or

(5) an intent to implement activities that target low-income and other disadvantaged students.

**Subd. 3. Funding; permissible funding uses.**

(a) The commissioner shall award grants to applicant school districts and charter schools that meet the requirements of subdivisions 1 and 2. The commissioner must award grants on an equitable geographical basis to the extent feasible and consistent with this section. Grant awards must not exceed the lesser of:

(1) \$85 times the number of pupils enrolled at the participating sites on October 1 of the previous fiscal year; or

(2) the approved supplemental expenditures based on the budget submitted under subdivision 2. For charter schools in their first year of operation, the maximum funding award must be calculated using the number of pupils enrolled on October 1 of the current fiscal year. The commissioner may adjust the maximum funding award computed using prior year data for changes in enrollment attributable to school closings, school openings, grade level reconfigurations, or school district reorganizations between the prior fiscal year and the current fiscal year.

(b) School districts and charter schools that submit an application and receive funding under this section must use the funding, consistent with the application, to:

(1) provide teacher training and instruction to more effectively serve students, including low-income and other disadvantaged students, who participate in preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(2) further develop preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(3) improve the transition between grade levels to better prepare students, including low-income and other disadvantaged students, for succeeding in preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(4) purchase books and supplies;

(5) pay course or program fees;

(6) increase students' participation in and success with preadvanced placement, advanced placement, or international baccalaureate courses or programs;

(7) expand students' access to preadvanced placement, advanced placement, or international baccalaureate courses or programs through online learning;

(8) hire appropriately licensed personnel to teach additional advanced placement or international baccalaureate courses or programs; or

(9) engage in other activity directly related to expanding students' access to, participation in, and success with preadvanced placement, advanced placement, or international baccalaureate courses or programs, including low-income and other disadvantaged students.

#### **Subd. 4. Annual reports.**

(a) Each school district and charter school that receives a grant under this section annually must collect demographic and other student data to demonstrate and measure the extent to which the district or charter school raised students' academic achievement under this program and must report the data to the commissioner in the form and manner the commissioner determines. The commissioner annually by February 15 must make summary data about this program available to the education policy and finance committees of the legislature.

(b) Each school district and charter school that receives a grant under this section annually must report to the commissioner, consistent with the Uniform Financial Accounting and Reporting Standards, its actual expenditures for advanced placement, preadvanced placement, and international baccalaureate courses programs compared with the previous fiscal year, and the

district or charter school has expended all grant funds, consistent with its approved budget and programs. The report must demonstrate that the school district or charter school has maintained its effort from other sources for advanced placement, preadvanced placement, and international baccalaureate courses and

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**Minnesota Session Law, Chapter 146, Section 45.Subd. 13.**

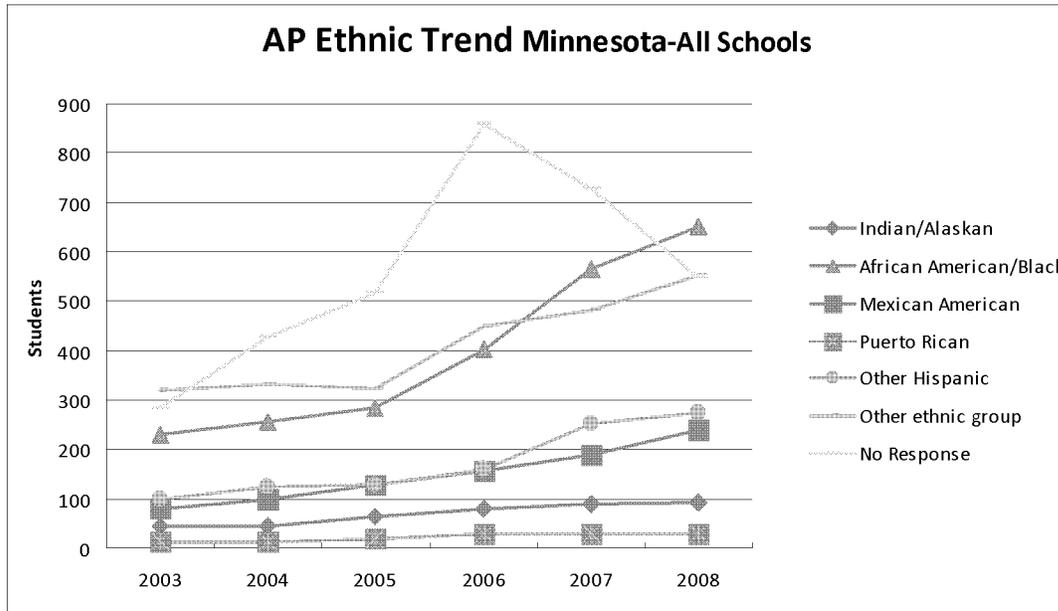
**Preadvanced placement, advanced placement, international baccalaureate, and concurrent enrollment programs.** For preadvanced placement, advanced placement, international baccalaureate, and concurrent enrollment programs under Minnesota Statutes, sections 120B.132 and 124D.091:

|              |       |      |      |
|--------------|-------|------|------|
| \$ 6,500,000 | ..... | 2008 |      |
| \$ 6,500,000 | ..... |      | 2009 |

Of this amount, \$2,500,000 each year is for concurrent enrollment program aid under Minnesota Statutes, section 124D.091. If the appropriation is insufficient, the commissioner must proportionately reduce the payment to each district.

The base appropriation for fiscal year 2010 and later is \$2,000,000.

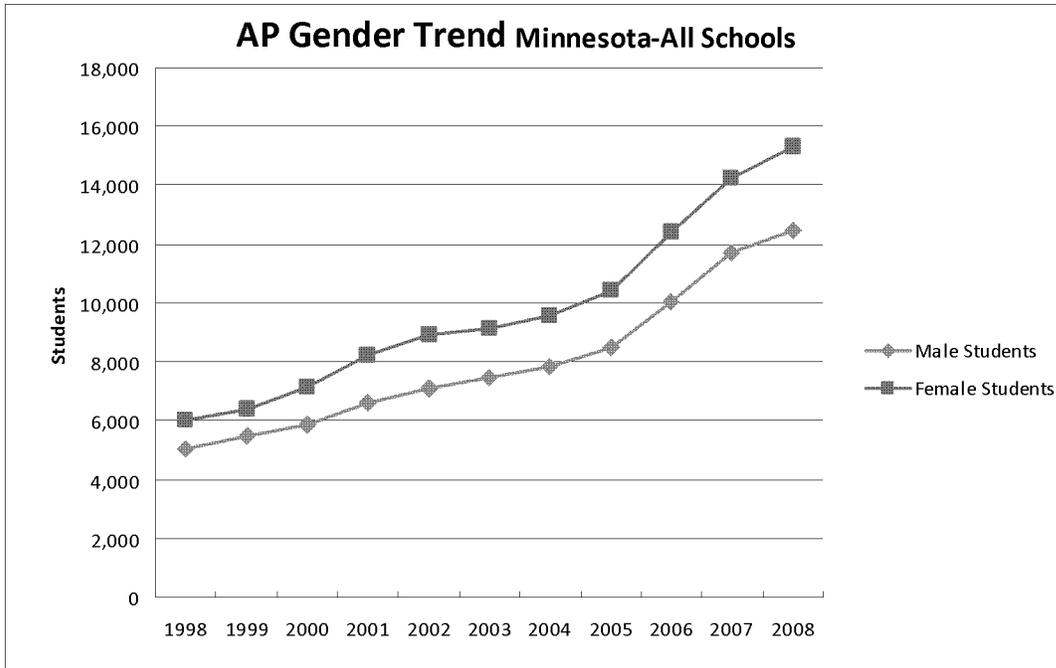
AP Trend Report 2003 – 2009



| 2009 Ethnic Trend Report- All Schools |        |        |        |        |        |        |        |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                       | 2009   | 2008   | 2007   | 2006   | 2005   | 2004   | 2003   |
| American Indian/Alaskan               | 119    | 92     | 89     | 79     | 65     | 46     | 46     |
| Asian*                                | 2,272  | 1,979  | 1,778  | 1,528  | 1,245  | 1,198  | 1,133  |
| African American/Black                | 775    | 652    | 566    | 401    | 285    | 254    | 230    |
| Mexican American                      | 287    | 239    | 187    | 155    | 127    | 100    | 81     |
| Puerto Rican                          | 54     | 30     | 30     | 29     | 20     | 13     | 14     |
| Other Hispanic                        | 275    | 275    | 253    | 158    | 128    | 124    | 98     |
| White**                               | 25,181 | 23,236 | 21,874 | 18,812 | 16,193 | 14,941 | 14,434 |
| Other ethnic group                    | 625    | 552    | 483    | 450    | 322    | 332    | 319    |
| No response                           | 804    | 550    | 728    | 857    | 517    | 429    | 285    |

\*Asian students accounted for 6.9% of the annual AP Exam volume from 2003-2008.

\*\*White students accounted for 84.8% of the annual AP Exam volume from 2003-2008.



| Year | Total  | % Δ  | Male   | Female |
|------|--------|------|--------|--------|
| 2004 | 17,437 | 4.8  | 7,859  | 9,578  |
| 2003 | 16,640 | 3.9  | 7,486  | 9,154  |
| 2002 | 16,011 | 7.9  | 7,077  | 8,934  |
| 2008 | 27,605 | 6.2  | 12,473 | 15,312 |
| 2001 | 14,839 | 14.0 | 6,622  | 8,217  |
| 2007 | 25,988 | 15.7 | 11,730 | 14,258 |
| 2000 | 13,018 | 9.5  | 5,867  | 7,151  |
| 2006 | 22,469 | 18.9 | 10,032 | 12,437 |
| 1999 | 11,893 | 7.7  | 5,486  | 6,407  |
| 2005 | 18,902 | 8.4  | 8,477  | 10,425 |

|      |        |     |       |       |
|------|--------|-----|-------|-------|
| 1998 | 11,041 | N/A | 5,046 | 5,995 |
|------|--------|-----|-------|-------|

**AP Participation by Ethnic Group Taking One or More Exam: Public Schools**

|                 | <b>04-05</b>  | <b>05-06</b>  | <b>06-07</b>  | <b>07-08</b>  | <b>08-09</b>  |
|-----------------|---------------|---------------|---------------|---------------|---------------|
| American Indian | 50            | 72            | 78            | 85            | 113           |
| Asian           | 1,095         | 1,375         | 1,612         | 1,751         | 1,995         |
| Black           | 245           | 349           | 507           | 592           | 698           |
| Hispanic        | 224           | 287           | 393           | 458           | 523           |
| White           | 14,086        | 16,372        | 19,278        | 20,571        | 22,359        |
| Other           | 269           | 383           | 406           | 486           | 533           |
| No Response     | 433           | 758           | 639           | 478           | 706           |
| <b>Total</b>    | <b>16,402</b> | <b>19,596</b> | <b>22,913</b> | <b>24,421</b> | <b>26,927</b> |

**Participation by Ethnic Group with Grades 3,4 or 5 : Public Schools**

|                 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 |
|-----------------|-------|-------|-------|-------|-------|
| American Indian | 19    | 43    | 37    | 43    | 56    |
| Asian           | 654   | 754   | 890   | 999   | 1,105 |
| Black           | 77    | 117   | 149   | 195   | 247   |

|              |               |               |               |               |               |
|--------------|---------------|---------------|---------------|---------------|---------------|
| Hispanic     | 129           | 149           | 202           | 231           | 266           |
| White        | 9,593         | 10,855        | 12,321        | 13,351        | 14,730        |
| Other        | 179           | 241           | 249           | 305           | 338           |
| No Response  | 282           | 505           | 367           | 263           | 387           |
| <b>Total</b> | <b>10,933</b> | <b>12,664</b> | <b>14,215</b> | <b>15,387</b> | <b>17,129</b> |

Minnesota Public Schools- 2008-2009

AP Performance and Participation Overview

| Student group     | # of Test-takers | # of Exams taken | # of Grades 3-5 |
|-------------------|------------------|------------------|-----------------|
| Total             | 26,927           | 43,530           | 27,694          |
| Change from 07-08 | +10.3%           | +11.8%           | +13.3%          |
| American Indian   | 113              | 157              | 79              |
| Change from 07-08 | +32.9%           | +29.8%           | +41.1%          |
| Asian             | 1,995            | 3,713            | 2,186           |
| Change from 07-08 | +13.9%           | +17.9%           | +18.0%          |
| Black             | 698              | 995              | 343             |
| Change from 07-08 | +17.9%           | +13.8%           | +22.1%          |
| Hispanic Overall  | 523              | 823              | 413             |
| Change from 07-08 | +14.2%           | +14.9%           | +14.4%          |
| White             | 22,359           | 35,886           | 23,532          |
| Change from 07-08 | +8.7%            | +10.2%           | +12.0%          |
| Other             | 533              | 872              | 543             |
| Change from 07-08 | +9.7%            | +9.3%            | +8.8%           |
| No Response       | 706              | 1,084            | 598             |
| Change from 07-08 | +47.4%           | +50.6%           | +55.7%          |



**(B)(1) – Exhibit A: Common Core Standards Memorandum of Agreement**

The Council of Chief State School Officers and  
The National Governors Association Center for Best Practices

**Common Core Standards  
Memorandum of Agreement**

**Purpose.** This document commits states to a state-led process that will draw on evidence and lead to development and adoption of a common core of state standards (common core) in English language arts and mathematics for grades K-12. These standards will be aligned with college and work expectations, include rigorous content and skills, and be internationally benchmarked. The intent is that these standards will be aligned to state assessment and classroom practice. The second phase of this initiative will be the development of common assessments aligned to the core standards developed through this process.

**Background.** Our state education leaders are committed to ensuring all students graduate from high school ready for college, work, and success in the global economy and society. State standards provide a key foundation to drive this reform. Today, however, state standards differ significantly in terms of the incremental content and skills expected of students.

Over the last several years, many individual states have made great strides in developing high-quality standards and assessments. These efforts provide a strong foundation for further action. For example, a majority of states (35) have joined the American Diploma Project (ADP) and have worked individually to align their state standards with college and work expectations. Of the 15 states that have completed this work, studies show significant similarities in core standards across the states. States also have made progress through initiatives to upgrade standards and assessments, for example, the New England Common Assessment Program.

**Benefits to States.** The time is right for a state-led, nation-wide effort to establish a common core of standards that raises the bar for all students. This initiative presents a significant opportunity to accelerate and drive education reform toward the goal of ensuring that all children graduate from high school ready for college, work, and competing in the global economy and society. With the adoption of this common core, participating states will be able to:

- Articulate to parents, teachers, and the general public expectations for students;
- Align textbooks, digital media, and curricula to the internationally benchmarked standards;
- Ensure professional development to educators is based on identified need and best practices;
- Develop and implement an assessment system to measure student performance against the common core; and
- Evaluate policy changes needed to help students and educators meet the common core standards and “end-of-high-school” expectations.

An important tenet of this work will be to increase the rigor and relevance of state standards across all participating states; therefore, no state will see a decrease in the level of student expectations that exist in their current state standards.

#### Process and Structure

- **Common Core State-Based Leadership.** The Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) shall assume responsibility for coordinating the process that will lead to state adoption of a common core set of standards. These organizations represent governors and state commissioners of education who are charged with defining K-12 expectations at the state level. As such, these organizations will

facilitate a state-led process to develop a set of common core standards in English language arts and math that are:

- Fewer, clearer, and higher, to best drive effective policy and practice;
  - Aligned with college and work expectations, so that all students are prepared for success upon graduating from high school;
  - Inclusive of rigorous content and application of knowledge through high-order skills, so that all students are prepared for the 21<sup>st</sup> century;
  - Internationally benchmarked, so that all students are prepared for succeeding in our global economy and society; and
  - Research and evidence-based.
- **National Validation Committee.** CCSSO and the NGA Center will create an expert validation group that will serve a several purposes, including validating end-of-course expectations, providing leadership for the development of K-12 standards, and certifying state adoption of the common core. The group will be comprised of national and international experts on standards. Participating states will have the opportunity to nominate individuals to the group. The national validation committee shall provide an independent review of the common core. The national validation committee will review the common core as it is developed and offer comments, suggestions, and validation of the process and products developed by the standards development group. The group will use evidence as the driving factor in validating the common core.
  - **Develop End-of-High-School Expectations.** CCSSO and the NGA Center will convene Achieve, ACT and the College Board in an open, inclusive, and efficient process to develop a set of end-of-high-school expectations in English language arts and mathematics based on evidence. We will ask all participating states to review and provide input on these expectations. This work will be completed by July 2009.
  - **Develop K-12 Standards in English Language Arts and Math.** CCSSO and the NGA Center will convene Achieve, ACT, and the College Board in an open, inclusive, and efficient process to develop K-12 standards that are grounded in empirical research and draw on best practices in standards development. We will ask participating states to provide input into the drafting of the common core and work as partners in the common core standards development process. This work will be completed by December 2009.

- **Adoption.** The goal of this effort is to develop a true common core of state standards that are internationally benchmarked. Each state adopting the common core either directly or by fully aligning its state standards may do so in accordance with current state timelines for standards adoption not to exceed three (3) years.

This effort is voluntary for states, and it is fully intended that states adopting the common core may choose to include additional state standards beyond the common core. States that choose to align their standards to the common core standards agree to ensure that the common core represents at least 85 percent of the state's standards in English language arts and mathematics.

Further, the goal is to establish an ongoing development process that can support continuous improvement of this first version of the common core based on research and evidence-based learning and can support the development of assessments that are aligned to the common core across the states, for accountability and other appropriate purposes.

- **National Policy Forum.** CCSSO and the NGA Center will convene a National Policy Forum (Forum) comprised of signatory national organizations (e.g., the Alliance for Excellent Education, Business Roundtable, National School Boards Association, Council of Great City Schools, Hunt Institute, National Association of State Boards of Education, National Education Association, and others) to share ideas, gather input, and inform the common core initiative. The forum is intended as a place for refining our shared understanding of the scope and elements of a common core; sharing and coordinating the various forms of implementation of a common core; providing a means to develop common messaging between and among participating organizations; and building public will and support.

- **Federal Role.** The parties support a state-led effort and not a federal effort to develop a common core of state standards; there is, however, an appropriate federal role in supporting this state-led effort. In particular, the federal government can provide key financial support for this effort in developing a common core of state standards and in moving toward common assessments, such as through the Race to the Top Fund authorized in the American Recovery and Reinvestment Act of 2009. Further, the federal government can incentivize this effort through a range of tiered incentives, such as providing states with greater flexibility in the use of existing federal funds, supporting a revised state accountability structure, and offering financial support for states to effectively implement the standards. Additionally, the federal government can provide additional long-term financial support for the development of common assessments, teacher and principal professional development, other related common core standards supports, and a research agenda that can help continually improve the common core over time. Finally, the federal government can revise and align existing federal education laws with the lessons learned from states' international benchmarking efforts and from federal research.

**Agreement.** The undersigned state leaders agree to the process and structure as described above and attest accordingly by our signature(s) below.

| Signatures                  |  |
|-----------------------------|--|
| Governor:                   |  5/6/09 |
| Chief State School Officer: |         |

The names of the states and territories that have joined the Common Core State Standards Initiative: **Alabama; Arizona; Arkansas; California; Colorado; Connecticut; Delaware; District of Columbia; Florida; Georgia; Hawaii; Idaho; Illinois; Indiana; Iowa; Kansas; Kentucky; Louisiana; Maine; Maryland; Massachusetts; Michigan; Minnesota; Mississippi; Missouri; Montana; Nebraska; Nevada; New Hampshire; New Jersey; New Mexico; New York; North Carolina; North Dakota; Ohio; Oklahoma; Oregon; Pennsylvania; Puerto Rico; Rhode Island; South Carolina; South Dakota; Tennessee; Utah; Vermont; Virgin Islands; Virginia; Washington; West Virginia; Wisconsin; Wyoming.**

**(B)(1) – Exhibit B: Evidence Common Core Standards ensure college and career readiness**

### **International Benchmarking and the Common Core**

The Common Core State Standards (CCSS) are designed to be **college- and career-ready** and **internationally benchmarked**. To that end, the development process included the review and consideration of many sources, including research studies, existing standards from the U.S and abroad, and the professional judgment of teachers, content area experts, and college faculty. This paper will briefly describe how international benchmarking was used to develop the CCSS.

#### **What documents were used to ensure that the CCSS were internationally benchmarked?**

To ensure that the standards prepare students to be globally competitive, the development team used a number of sources, including: the frameworks for PISA and TIMSS; the International Baccalaureate syllabi; the American Institutes for Research report, *Informing Grades 1-6 Mathematics Standards Development: What Can Be Learned From High-Performing Hong Kong, Korea, and Singapore* and; the A+ Composite found in *A Coherent Curriculum: The Case for Mathematics* by Bill Schmidt, Richard Houang, and Leland Cogan.

In addition, the development team looked to the standards of a number of individual countries and provinces to inform the content, structure and language of the CCSS. In *mathematics*, twelve set of standards were selected to help guide the writing of the standards: Belgium, Canada [Alberta], China, Chinese Taipei, England, Finland, Hong Kong, India, Ireland, Japan, Korea, and Singapore.<sup>1</sup> In *English language arts*, the writing team looked closely at ten sets of standards from Australia (New South Wales and Victoria), Canada (Alberta, British Columbia, and Ontario), England, Finland, Hong Kong, Ireland, and Singapore.<sup>1</sup>

#### **How were the international benchmarks used to inform the development of the CCSS?**

The goal of the international benchmarking in the common core state standards development process was to ensure that the CCSS are as rigorous as comparable standards in the high-performing and other countries. However, the use of international benchmarks as evidence is no easy feat; it is not simply a matter of identifying the “best” source and copying it, or of aggregating all viable sources to find some set of shared expectations. Rather, international benchmarks were used to guide critical decisions in the following areas:

- *Whether particular content should be included:* One of the principal ways international standards were used in this development process was as a guide when making tough decisions about whether content should be included or excluded.
- *When content should be introduced and how that content should progress:* The progression of topics in the international mathematics standards helped the development team make decisions about when to introduce topics in the CCSS as well as when to stop focusing on them.
- *Ensuring focus and coherence:* Standards from other countries tend to be very focused, including only what is absolutely necessary.
- *Organizing and formatting the standards:* Certain organizational aspects or characteristics of international standards that promoted clarity and ease of reading and use served as a model for the CCSS.
- *Determining emphasis on particular topics in standards:* Where emphasis on particular topics was found repeatedly in international standard, this was instructive in determining their importance for inclusion in the CCSS.

\* \* \* \* \*

When the final version of the K-12 Common Core State Standards is released, it will be accompanied by a discussion of the evidence that was used in their development. In the meantime, the evidence from the September 2009 draft of the College and Career Ready Standards is available: The URL for the ELA document is <http://www.corestandards.org/Files/ELAEvidence.pdf>, and the URL for the mathematics document is <http://www.corestandards.org/Files/MathEvidence.pdf>.

i Eight of these were high-performers on either TIMSS, PISA or both: Belgium, Canada [Alberta], Chinese Taipei, Finland, Hong Kong, Japan, Korea, and Singapore. England and Ireland, which have uneven performances on international assessments, were included because of their cultural links to the United States. China and India were included because of their growing global competitiveness.

ii Differences in language have a greater impact on the teaching and learning of language arts than of mathematics, so the teams looked primarily at English-speaking countries. All were high-performers on PISA except Singapore, which did not participate, and England, which as in mathematics was selected partly for its cultural links to the United States.

**(B)(1) – Exhibit C: *Confidential drafts of Common Core Standards***  
*(see end of appendix)*

[SEE END OF APPENDIX]

**(B)(1) – Exhibit D: Achieve assessment of MN standards**



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December 5, 2008

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Dear Commissioner Seagren:

Achieve has completed the final Quality Review of the alignment of the proposed *Minnesota College and Work Readiness Expectations – Language Arts*. The primary purpose of this review is to ensure that the state's academic performance expectations for exiting high school align with the expectations for success in college and careers. The American Diploma Project (ADP) Benchmarks to which these proposed Minnesota expectations were compared represent the knowledge and skills required for successful entry into credit-bearing college courses and quality jobs. A secondary purpose of this review is to ensure that the Minnesota expectations meet the criteria of high quality standards that include rigor, coherence, focus, specificity, clarity/accessibility, and measurability.

The proposed *Minnesota College and Work Readiness Expectations – Language Arts* present student learning expectations that are intellectually demanding and well aligned with the ADP Benchmarks. If Minnesota students master these expectations, they will likely be well prepared for both workplace and college success. The content, organization, and wording of the proposed expectations should serve as a useful reference tool for the state's consideration as it engages in its upcoming review of its English language arts standards.

Summary of Findings

- *The proposed Minnesota College and Work Readiness Expectations – Language Arts are well aligned to the ADP Benchmarks. The revisions enhance the rigor of the standards and their alignment with the ADP Benchmarks, specifically in the areas of Language, Communication, Writing, Research, Logic, Informational Text, and Media.*
- *The proposed Minnesota College and Work Readiness Expectations – Language Arts exhibit many of the criteria of high-quality standards.*

In addition to rigor, Achieve has several other criteria for high quality standards, which include coherence, focus, specificity, clarity/accessibility, and measurability. Reviewers specifically recognized the state's reorganization of the standards, which has reduced areas of redundancy and improved clarity for users of the document.

In conclusion, by successfully completing these proposed expectations, Minnesota has taken an important step to better prepare young people for success in postsecondary education and in their careers. We hope that the alignment process and the resulting review materials from Achieve prove useful as Minnesota engages in the revision of the state's K-12 standards for English language arts that is scheduled for the 2009-10 academic year. My Achieve colleagues and I look forward to continuing to support your efforts to ensure that Minnesota's students are prepared for the real-world demands they will face upon graduation.

Regards,

(b)(6)

Laura Slover  
Vice President for Content & Policy Research,  
Achieve

LMS:ms

Enclosure

cc:  
The Honorable Tim Pawlenty  
Governor of the State of Minnesota

Dr. Susan Heegaard  
Director, Minnesota Office of Higher Education

## Minnesota Achieve Quality Review II Detailed Comments from English Language Arts Review Panel Enclosure

In this final Quality Review, Achieve focused primarily on how the proposed revisions to the *Minnesota College and Work Readiness Expectations – Language Arts* (dated September 15, 2007) align with the Achieve American Diploma Project (ADP) English Benchmarks. This alignment is discussed briefly below and is shown more fully in the attached updated side-by-side alignment tool demonstrating alignment between the ADP English Benchmarks and the September 15, 2007 revisions to the *Minnesota College and Work Readiness Expectations – Language Arts*.

In addition to their rigor, Achieve also considered how the proposed expectations meet the other criteria for quality standards: coherence, focus, specificity, clarity/accessibility, and measurability. These criteria are discussed further in this report and referenced briefly in the notes section of the attached side-by-side alignment tool.

### Documents Reviewed

To evaluate the rigor, coherence, focus, specificity, clarity/accessibility, and measurability of the standards, Achieve reviewers considered the proposed *Minnesota College and Work Readiness Expectations – Language Arts* (dated September 15, 2007). The Achieve reviewers also considered the February 19, 2007 Quality Review I of the November 2006 *Minnesota College and Work Readiness Expectations – Language Arts*.

### Prior Recommendations

In Quality Review I (February 19, 2007), Achieve reviewers regarded the November 2006 proposed *Minnesota College and Work Readiness Expectations – Language Arts* as more closely aligned with the ADP English Benchmarks than earlier drafts had been, but still with some significant gaps in the areas of Communication, Writing, Logic, Informational Text, Media, and Literature.

The November 2006 draft version of the expectations attended to many of the recommendations provided by Achieve's initial alignment review in February 2006. The revised expectations in November 2006 more strongly signaled the importance of informational texts, work-related texts, and research, as well as taking a number of substantial steps towards greater alignment with the content of the ADP Benchmarks in English. Among these steps was the state's inclusion of new statements on oral presentations and group work that serve to delineate expectations for effectiveness in these previously unaddressed areas. In the February 2006 review, Achieve reviewers had noted that some content from the ADP Benchmarks was reflected only at grades *below* Grade 9; the state remedied this problem by creating a document specifically for high school, which includes essential skills.

While Achieve found the November 2006 *Minnesota College and Work Readiness Expectations – Language Arts* to be more closely aligned with the ADP Benchmarks than the February draft,

Achieve's Quality Review I suggested revisions to strengthen the alignment and improve quality even further. The Quality Review I noted that the criteria of focus, specificity, and measurability were not fully met by the November 2006 draft document. Achieve noted some issues that were problematic in regards to the:

- organization (specifically as it related to redundancies in the document and to the focus of the content within headers/subheaders),
- focus (in regards to the inclusion of some content—such as reading for specific purposes—they may not be needed for a set of exit expectations),
- specificity (particularly in relation to the level of reading materials students should encounter),
- clarity (specifically as it related to use of terminology/inclusion of examples), and
- measurability (the inclusion of processes rather than products/outcomes).

A particular concern of the reviewers of the November 2006 document was that the Minnesota document, while succinct, included some redundancies and unclear issues of subordination of skills, and lacked attention to the specific reading skills that are particular and unique to different types of text such as informational, persuasive/arguments, and literary.

These concerns have been well addressed in the current proposed *Minnesota College and Work Readiness Expectations – Language Arts* (September 15, 2007) document. The September 15, 2007 version incorporates the following changes:

- the addition of content to increase alignment with the ADP English Benchmarks,
- the reorganization of content to reduce redundancies and focus on products, rather than on processes, of English language arts, and
- the inclusion of an appendix that includes a description of the characteristics of complex and challenging texts.

A more detailed discussion of the September 2007 draft is presented in this report.

#### Review Panel Findings

- **The proposed *Minnesota College and Work Readiness Expectations – Language Arts* are well aligned to the ADP Benchmarks.**

The revisions proposed in the state's November 2006 version of the expectations were more closely aligned to the ADP English Benchmarks than the previous standards drafts reviewed. The September 2007 proposed revisions increase this alignment, making the new expectations well aligned to the ADP English Benchmarks, with some very minor exceptions. Those minor exceptions include an absence of statements on foundational texts, poetry, and drama in the Literature strand or an expectation for understanding the distinction between deductive and inductive arguments in the Logic strand.

In Quality Review I, Achieve recommended that Minnesota closely review areas of non-alignment and partial alignment and revise its proposed *Minnesota College and Work Readiness*

*Expectations – Language Arts* document accordingly, paying particular attention to the areas of work-related writing and informational reading skills.

The state has done so. For example, in the area of work-related writing, the November 2006 revision of the expectations included a reference to some types of workplace writing but did not provide any explicit details as to the characteristics of effectiveness for this type of writing:

MN Writing I.A: Write electronic and print correspondence, such as e-mails, letters, brief memos, reports, and minutes.

Achieve reviewers suggested that more clearly stating the expectations for effectiveness in this genre of writing, as ADP C10 does, would help guide teaching and learning in the state:

ADP C10. Produce work-related texts (for example, memos, e-mails, correspondence, project plans, work orders, proposals, bios) that:

- address audience needs, stated purpose and context;
- translate technical language into non-technical English;
- include relevant information and exclude extraneous information;
- use appropriate strategies, such as providing facts and details, describing or analyzing the subject, explaining benefits or limitations, comparing or contrasting, and providing a scenario to illustrate;
- anticipate potential problems, mistakes and misunderstandings that might arise for the reader;
- create predictable structures through the use of headings, white space and graphics, as appropriate; and
- adopt a customary format, including proper salutation, closing and signature, when appropriate.

The September 15, 2007 revision to the proposed *Minnesota College and Work Readiness Expectations – Language Arts* clearly, and fully, responds to Achieve’s reviewers’ concerns. The new statement places an appropriate emphasis on this type of writing as an expectation for high school graduates and clearly specifies the criteria for effectiveness.

MN Writing I.B: Write or produce workplace documents, including memos, e-mails, or other correspondence, project plans, work orders, proposals, and formal reports of investigations, that demonstrate the student’s ability to:

1. Address audience needs.
2. State the purpose, e.g., to pose or answer a question, to recommend a course of action, to convey requested information, to solve a problem.
3. Communicate only what is relevant; keep the writing concise.
4. Ensure accuracy and honesty in details; anticipate and address potential technical problems, uncertainties, or ethical questions.
5. Maintain an appropriate level of formality in language (e.g., translate technical language into non-technical English, depending on the audience).
6. Use headings, white space and graphics to create navigable structure (on paper or in electronic media).

7. Adopt customary formats.

In the area of Informational Text, Minnesota has added statements to address several ADP Benchmarks that address content/topics that were previously not included in the proposed *Minnesota College and Work Readiness Expectations – Language Arts*. For example, see the state's additions of:

**Reading II.A. Comprehend relationships in a variety of reading selections**  
2. Summarize informational and technical texts using the printed text as well as visual and graphic aids. (Aligns with ADP F3)

**Reading II.A. Comprehend relationships in a variety of reading selections**  
8. Understand the distinctions between summarizing, analyzing, critiquing, interpreting, evaluating, synthesizing, and creating. (Aligns with ADP F4)

**Reading II.B. Interpret a variety of readings based on explicit and implicit information**  
5. Analyze the ways in which a text's organizational structure supports or confounds its meaning or purpose. (Aligns with ADP F9)

**Reading II.C. Read critically to synthesize and evaluate information in a variety of texts**  
4. Use logic and informed judgment to accept or reject information, i.e., recognize irony, paradox, ambiguity, false premises, contradictions and logical fallacies and understand their effect on the point being argued. (Aligns with ADP F10)

- The proposed *Minnesota College and Work Readiness Expectations – Language Arts* exhibit criteria of high-quality standards.

In addition to rigor, Achieve has several other criteria for high quality standards, which include coherence, focus, specificity, clarity/accessibility, and measurability. Revisions made in the September 15, 2007 draft of the expectations, including revisions to the organization of the document and to the specific language of the expectations, helped to contribute to the overall clarity and accessibility of the standards. A brief discussion, organized by the Achieve criteria, follows.

#### Coherence

While progression was not examined by Achieve reviewers because the expectations focus on the benchmarks for one point—high school exit—Achieve reviewers did consider the organization of the expectations to evaluate the coherence of the document.

The proposed *Minnesota College and Work Readiness Expectations – Language Arts* convey a unified vision of the discipline. The organization is logical and highlights important areas, such as informational text reading, research, viewing/media, and listening as well as reading and writing. Issues of redundancy have been improved from earlier drafts of the expectations.

The subheaders used to organize the expectations internally are also helpful. However, they still do not always seem as logically connected to the content beneath them as they might be. For

example, the header Reading II.A. states that students will “Comprehend relationships in a variety of reading selections.” Beneath this, expectation #3 states that students will “Follow instructions in informational or technical texts to perform specific tasks, answer questions, or solve problems.” It is not entirely clear how this expectation is connected to comprehending relationships. (Later, the expectation that students will “Identify interrelationships between and among ideas and concepts within a text, such as cause-and-effect relationships” appears under a different heading—Reading II.B.—which seems puzzling because this expectation does specifically refer to relationships.) This issue was noted in the 2007 review of the expectations and has not been fully resolved.

### Focus

The focus of the proposed *Minnesota College and Work Readiness Expectations – Language Arts* seems appropriate and is improved from the earlier draft of the expectations that Achieve reviewed in 2007. Almost all of the priorities evident in the proposed *Minnesota College and Work Readiness Expectations – Language Arts* are consistent with the ADP Benchmarks. Those statements in Minnesota that do not align with ADP are included at the end of the attached side-by-side alignment tool.

Minnesota has made revisions to the content of its statements that help improve the focus—allowing the expectations to focus on the most essential aspects of college and workplace readiness.

The earlier draft included some topics that did not seem entirely appropriate for a set of exit expectations including, for example, a set of expectations on reading for different purposes.

The revised version of the proposed expectations no longer separates these expectations out. Instead, and more appropriately, these concepts are embedded in the expectations that detail the types of texts students will read and what they will be expected to do when reading these texts such as, identify main ideas, evaluate quality of evidence, support a research report, and analyze the credibility of the document.

### Specificity

Minnesota’s proposed revised expectations provide sufficient detail to convey the level of performance expected without being overly prescriptive. The addition of an appendix to address issues of text levels expected is a strength that directly responds to Achieve’s earlier feedback that providing information regarding the level of texts to which the reading skills should be applied is important. While Achieve has not reviewed the content of this appendix, the reviewers assumed that the final appendix will list specific text titles, provide sample passages, and/or describe a progression of text complexity. Achieve reviewers did look at the appendix attached at the end of the 9-10-07 draft. If this is the appendix referenced, it may be useful to provide this information in the context of how it relates to the expectations for students, such as by stating explicitly that Minnesota’s students are expected to comprehend, analyze, and evaluate complex and challenging texts that have the features described.

In terms of jargon, Achieve’s earlier review noted some specific examples of language—such as “text aids” or “literary elements”—that might be unclear or not specific to the audience as they

can be interpreted in different ways to include different topics. Minnesota has responded to this feedback by making specific revisions to wording to be clearer and more specific.

#### Clarity/Accessibility

As stated above, revisions to language are proposed in order to make the statements clearer and more specific. In a few instances, clarity could still be improved. For example, the statement Reading I.A.—“Apply word meanings to fit different contexts and to understand passage meaning”—is somewhat unclear. How does one apply word meanings to fit different contexts? This suggests a writing expectation. If it is intended for reading, then it is unclear how doing this differs from B.—“Use context to determine the meaning ....” As another example, Research II.F. states that students will “... identify complexities and discrepancies in formation.” This reference to “formation” is unclear. Is this organization? The structure of an argument? The support for a thesis? These problems with clarity only arise in a few of the expectations; however, overall the expectations are clear and will be accessible to a wide audience.

Accessibility could still be further improved in terms of organization. As stated above, the organization used in the revised September 2007 expectations is logical and coherent. Because the headers at the Roman numeral level are used simply as organizers, though, and not as expectations, perhaps they could be further abbreviated so that the user may more easily use them to locate different sections. Reducing the verbiage makes it easier for the reader to see at a glance what is included in each section. Because they are not performance expectations in and of themselves, the performance verbs can be removed. For example, see the suggestions below as one way to reduce this verbiage.

#### READING

- I. ~~Apply appropriate strategies to understand meanings of words.~~ Word Meanings (or “Vocabulary Acquisition”)
- II. ~~Read competently in a variety of informational/technical/academic texts.~~ Informational Texts
- III. ~~Read competently in a variety of literary texts.~~ Literary Texts

#### WRITING

- I. ~~Compose competently in a variety of formats and genres by demonstrating knowledge of the processes.~~ Writing Genres
- II. ~~Demonstrate qualities of effective writing.~~ Effective Writing Criteria
- III. ~~Revise, edit, polish, and proofread his or her writing.~~ Process

#### SPEAKING, LISTENING, and VIEWING

- I. ~~Speak in a variety of formats or situations and for a variety of purposes and audiences.~~ Speaking Purposes
- II. ~~Demonstrate qualities of effective speeches or presentations.~~ Effective Speaking Criteria
- III. ~~Participate productively in small groups or work teams.~~ Team Work
- IV. ~~Demonstrate qualities of effective listening.~~ Listening
- V. ~~Demonstrate qualities of effective viewing.~~ Viewing

#### RESEARCH

- I. ~~Engage in inquiry.~~ Inquiry
- II. ~~Locate and evaluate information from diverse sources.~~ Sources
- III. ~~Communicate findings with consideration of audience and purpose.~~ Reporting Findings

### Measurability

In general, the proposed *Minnesota College and Work Readiness Expectations – Language Arts* focus on outcomes rather than processes and are written in such a way as to be measurable, observable, or verifiable in some way.

A few of the statements may pose measurability challenges. For example, expectation Reading I.D. may be difficult to measure. Reading I.D. expects that the high school graduate will have:

Acquired sizeable meaning vocabularies including knowledge of many words and terms foundational to various disciplines (academic, literary, and technical) and greater depth of knowledge of words beyond the most common meaning.

Words such as “sizeable” and “greater” may be particularly open to interpretation. Some examples here might be helpful.

Another statement that may pose a measurement challenge is Reading.II.B.4.:

Understand the approach taken by an author of a text or authors across different texts (e.g., author’s point of view or perspective, kinds of evidence used).

The phrase “the approach” may vary depending on interpretation and the verb “understand” describes an internal process rather than a visible performance.

Because of the important connection between standards and assessment, it is useful for standards writers to consider the assessment impact of their work. Standards writers do not need to be assessment experts, but they should consider expectations from a measurement perspective and be sure that they are comfortable with the expectations as written being used as a blueprint for assessment developers. Overall, the proposed *Minnesota College and Work Readiness Expectations – Language Arts* describe measurable performances. This note of caution, however, may be useful for the state writing team charged with revisions to the standards over the 2009-10 academic year.

### Conclusion

The proposed *Minnesota College and Work Readiness Expectations – Language Arts* present student learning expectations that are intellectually demanding and align well to the ADP Benchmarks. The revisions to the prior draft respond clearly to the issues raised in Achieve’s Quality Review I, and the document is now a rigorous, logically organized, focused, and specific communication of the state’s high expectations for its graduates.



Achieve, Inc.

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Michael Cohen

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

Dear Commissioner Seagren:

Achieve has completed a Quality Review of the alignment of the *Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* with the American Diploma Project (ADP) Benchmarks. The primary purpose of this review is to ensure that the state's academic standards align the expectations for exiting high school with the expectations for success in college and careers. The ADP Benchmarks to which these Minnesota standards were compared represent the knowledge and skills required for successful entry into credit-bearing college courses and quality jobs. A secondary purpose of this review is to ensure that the Minnesota standards meet the criteria of high quality standards that include rigor, focus, coherence, specificity, clarity, and measurability.

*The Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* present student learning expectations that are intellectually demanding and well aligned with the ADP Benchmarks, with minor exceptions. If Minnesota students master the state standards, they will likely be well prepared for both workplace and college success.

Summary of Findings in Mathematics

- *The Minnesota K-12 Academic Standards in Mathematics are well aligned to the ADP Benchmarks, with minor exceptions. In the areas of Number Sense and Operation, Algebra, Geometry and Measurement, and Data Analysis and Probability the standards are well aligned. Indeed, in some areas they exceed the level of rigor for ALL students in the ADP Benchmarks. However, the Minnesota standards are less explicit than the ADP Benchmarks around some aspects of mathematical reasoning.*

For example, inductive and deductive reasoning are not specifically cited. While both the ADP Benchmarks and the Minnesota standards strive to infuse mathematical reasoning and problem-solving in the content expectations, Minnesota should clearly articulate rather than imply these important skills

- *The Minnesota K-12 Academic Standards in Mathematics exhibit the criteria of high quality standards.* In general, the coherence, specificity, clarity and measurability of the expectations are strong. The organization of the standards around the four content strands of Number and Operation; Geometry and Measurement; Algebra; and Data Analysis and Probability provides a clear focus for the direction of mathematics in the state. Furthermore, the articulation of standards for Grades K-8 allows users to understand the progression of content across the grades from elementary through middle school and the foundation students are expected to have as they enter high school. Finally, the numbering schema that uniquely identifies each benchmark in reference to grade level, strand, and standard is a good addition and will make it easier for teachers, curriculum developers, assessment developers, and the public to reference and communicate about these expectations.

### Recommendations for Next Steps

Achieve commends Minnesota for its efforts to increase the intellectual demand and the alignment of the *Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* with the ADP Benchmarks. We encourage Minnesota to pursue the following next steps:

- Revise the *Minnesota K-12 Academic Standards in Mathematics* where appropriate to explicitly include aspects of mathematical reasoning such as inductive and deductive reasoning that are stated in the ADP Benchmarks.
- Develop model course descriptions in mathematics consistent with the state's intention to support the variety of high school mathematics curricula—some traditional and some integrated—that exist in the state. These models can guide districts in identifying options for curriculum and instructional delivery and provide teachers with clear pathways that students must follow in order to achieve the *Minnesota K-12 Academic Standards in Mathematics* by the end of high school. Model course descriptions will also ensure greater consistency and rigor across districts in the state. Achieve's Algebra II –End of Course Assessment Framework and ADP Mathematics Course Descriptions may serve as useful resources for this work.
- Engage Minnesota's postsecondary institutions in a process to reinforce the rigorous standards outlined in the *Minnesota K-12 Academic Standards in Mathematics* by clarifying how meeting them is essential for placement in credit-bearing coursework and success in postsecondary education.

By successfully completing these standards, Minnesota has taken an important step to better prepare young people for success in postsecondary education and careers. My colleagues and I at Achieve look forward to continuing to support your efforts to ensure that the expectations of high school students reflect the real world demands they will face upon graduation.

Sincerely,

(b)(6)

Michael Cohen

cc: The Honorable Tim Pawlenty  
Governor

Susan Heegaard  
Commissioner, Minnesota Office of Higher Education

Enclosure

## Minnesota Achieve Quality Review II Detailed Comments from Mathematics Review Panel

### Documents Reviewed

In this final Quality Review (Phase II), Achieve focused primarily on how the *Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)*, as amended based on Achieve's earlier analyses, align with the Achieve ADP Benchmarks in mathematics. The document considered for this review was supplied by the state and was prepared based on months of work undertaken as part of the state's involvement in the American Diploma Project (ADP) Alignment Institutes (2005-06).

### Review Panel Comments

- *The Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* are well aligned when compared to the ADP Benchmarks in mathematics, with minor exceptions.

The Minnesota standards are generally well aligned to the ADP Benchmarks in all areas including Number and Operation, Algebra, Geometry and Measurement, and Data Analysis and Probability.

Minnesota has taken its work to align its state standards with the ADP Benchmarks quite seriously. The state has crafted a rigorous set of standards that is much improved in terms of its alignment with the ADP Benchmarks. It is apparent that Minnesota paid close attention to feedback provided by Achieve in its earlier review of the state's 2003 version of its standards, the subsequent review of a draft set of College and Work Readiness Standards, and a review of revised Minnesota Academic Standards in January 2007. Each and every comment made as part of these Achieve reviews has been taken into consideration. The state has responded to this feedback, in most cases, by making edits and/or additions to its standards and benchmarks. There are a very few instances where the state has chosen not to take Achieve's suggestions, and the state has provided a rationale for these decisions.

In its April 2007 standards, Minnesota has included a number of benchmarks that were not consistently included in earlier iterations of its standards. On other occasions, benchmarks have been edited to make them stronger and in better alignment with the ADP Benchmarks. For example, in the Number and Operations strand, computation with numbers in scientific notation, the concept of absolute value, and the development of the number system through complex numbers are now clearly present, ensuring close alignment with the ADP Benchmarks. In Geometry and Measurement, revisions in this most recent draft include the addition of a benchmark that refers to geometric constructions

and more specific and focused benchmarks addressing similarity, special right triangles, and unit selection. Geometric proof and logical justification—while addressed somewhat generically in the revised Minnesota benchmarks—are further clarified through the use of examples that add an important level of specificity to the standards. In Algebra, the revised benchmarks involving graphing and slope/rate of change have been strengthened, and additions were made to include such concepts as factoring polynomials, evaluating polynomial and rational expressions, and linear inequalities. The Data Analysis and Probability benchmarks have now been enhanced to include topics related to misleading uses of data and the confusion between correlation and causation.

With respect to content, the most recent Minnesota standards, at this point, do not include a few things that are in the ADP Benchmarks. In two instances—one relating to experimental design and sampling and the other to the relationship between 3-dimensional figures and their 2-dimensional representations—the state is still considering rewording of benchmarks to include these concepts. In another instance related to non-Euclidean geometry, the state justifies its stance not to address this topic in its Geometry standards. This is a relatively minor omission and does not impact the high degree of alignment with the ADP Benchmarks otherwise noted in this review.

Perhaps the greatest variation between the revised 2007 Minnesota standards and the ADP Benchmarks is in the level of explicitness around some aspects of mathematical reasoning. While both the ADP Benchmarks and the Minnesota standards strive to infuse mathematical reasoning and problem solving into their content expectations, the ADP Benchmarks also contain a set of nine expectations with respect to mathematical reasoning. It is in this area that the Minnesota standards are sometimes less explicit than the ADP Benchmarks. For example, inductive and deductive reasoning are not specifically cited in the Minnesota benchmarks although induction is implied by "examples and counterexamples" and deduction is implied by validation of "steps in a solution." Inductive and deductive reasoning were deemed to be important enough to merit specific mention in the ADP Benchmarks, thus attesting to the importance of their inclusion in the high school curriculum. The importance of students being able to shift regularly between the specific and the general, using examples to understand general ideas and extending specific results to more general cases to gain insight, is also implied in the Minnesota benchmarks but not clearly articulated as it is in the ADP Benchmarks.

Other areas where the Minnesota standards are less explicit than the ADP Benchmarks are in defining specific problem-solving strategies students should be able to employ, articulating the importance of using special symbols of mathematics correctly and precisely, and distinguishing relevant from irrelevant information, and coping with missing information.

- *The Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* are rigorous and include some content that exceeds the level of rigor for ALL students in the ADP Benchmarks. A challenge will be to help teachers figure out how the depth and breadth of content included in the state's standards can be effectively implemented in Minnesota classrooms.

The ADP Benchmarks that are asterisked represent content that is recommended for all students but is required for those students who plan to take calculus in college, a requisite for mathematics and many mathematics-intensive majors. There are a number of benchmarks in the Minnesota standards identified for all students that exceed those for all students in the ADP Benchmarks. Some of Minnesota's expectations for all students—e.g., determining the domain of a function, applying the properties of rational exponents, deriving and using the formulas for the general term and summation of finite arithmetic and geometric series, and knowing and justifying the equation for the graph of a circle—are asterisked in the ADP Benchmarks, indicating they are required only for calculus-intending students.

Minnesota's mathematics standards also include some topics that are not addressed by the ADP Benchmarks such as arithmetic with complex numbers, quadratic and absolute value inequalities, the solution of equations that contain radical expressions, and concepts of intersections, unions and complements. These benchmarks increase the rigor of the Minnesota standards for all students. While the commitment to maintaining these topics is admirable, the state needs to give careful consideration to whether all of these concepts are important for all students—and, if so, how and to what depth this breadth of content should be taught.

- **The Minnesota standards provide a solid basis for local development of mathematics course sequences.**

In its compilation of "Frequently Asked Questions about the 2007 Minnesota Mathematics Standards and Benchmarks for Grades K-12" Minnesota makes clear that the combination of standards and benchmarks for Grades 9-11 is purposeful. The state is intent on supporting the variety of high school mathematics curricula—some traditional and some integrated—that exists in the state, and the most recent standards will form a solid foundation for that. For example, the standards clearly define essential elements in data analysis, statistics, and probability—concepts that all too often are omitted from high school courses yet are critical for students if they are to be successful in college and work and as citizens. That they exist in the standards speaks to their importance, but HOW these topics get incorporated into the high school curriculum is being left to schools and districts.

- **The Minnesota standards continue to generally be clear, specific, coherent, focused, and measurable.**

In addition to rigor, Achieve has several other criteria for high quality standards. Minnesota's previous reviews offered advice to the state on how to improve the standards' clarity, measurability, coherence, specificity, and focus. It is apparent that Minnesota heeded this advice since marked improvements have been made resulting in a clearer and more coherent set of standards.

The Minnesota standards generally fare well with respect to these criteria. The organization of the standards around the four content strands of Number and Operation; Geometry and Measurement; Algebra; and Data Analysis and Probability provides a clear focus for the direction of mathematics in the state. The articulation of standards for Grades

K – 8 allows users to understand the progression of content across the grades from elementary through middle school and the foundation students are expected to have as they enter high school. In general, the language used in this revised version of the Minnesota standards is clear, concise, and provided in measurable terms. General and vague language that did not make the intent clear has been revised to provide sufficient detail needed for consistent interpretation and implementation across the state. The use of examples also helps to clarify intent, and Minnesota is encouraged to include even more examples since their guidance will be helpful to teachers, curriculum developers, and assessment developers. In addition, Minnesota has “unpacked” some of its earlier benchmarks that were compound in nature, resulting in more specific expectations with clearer rigor and intent. Verbs that describe expected student performances are generally measurable, and when verbs such as *understand* or *know* are used, they have been coupled with more measurable or observable performances such as *use* and *apply* to clearly articulate how a student would demonstrate mastery.

In addition to taking steps to change the substance and wording of its standards, Minnesota has also implemented a four-digit numbering schema to uniquely identify each benchmark in reference to grade level, strand, standard and benchmark. This system will make it easier for teachers, curriculum developers, assessment developers, and the public to reference and communicate about these expectations.

### Conclusion

In conclusion, the *Minnesota K-12 Academic Standards in Mathematics (April 14, 2007 Revision)* are intellectually demanding and align well, with minor exceptions, with the ADP Benchmarks, indicating that if Minnesota students achieve proficiency in the state standards, they will be well prepared for both workplace and college success.

**(B)(1) – Exhibit E: CCRPI - MN Power Indicators**

## **Minnesota Power Indicators**

At the conclusion of the Governor's Education Council (GEC) meeting in June, the College and Career Ready Policy Institute (CCRPI) partners were asked to cull down Minnesota's state education goals outlined in Taking Minnesota Students from Nation-Leading to World-Competing (NLWC) into a limited set of "power" indicators. Taken together, the five power indicators offered by the CCRPI partners are meant to drive improvement in the state's K-12 education system and achieve public support for education goals in Minnesota. Below is a brief summary of the purpose of state education goal setting and background on Minnesota's education goals.

### **Purpose**

In 2005, the National Governors Association Center for Best Practices worked with ten states, including Minnesota, to develop ten-year goals and benchmarks for improving high school graduation and college and career readiness. From this work, we now know that to improve college and career readiness, state leaders first need to establish where current performance stands as well as the annual improvements that are reasonable to expect, before they can offer the public a long term road map for college and career success.

In joining CCRPI, each state committed to anchor their education policies in college and career readiness. Setting education goals is the foundation for creating a coherent state education system—including assessment, accountability, data, and student and school supports—to ensure that all students graduate college- and career-ready. This information is essential for state policymakers to guide strategic decisions and investments, align programs and policies, and gauge impact. A coherent set of goals is also a critical step in establishing a concrete vision for Minnesota's Race to the Top application.

### **Background**

Through the Honor States grant, Minnesota developed a set of 14 indicators of K-12 system performance, covering the following four "key issue areas": core proficiency, college readiness and rigorous course-taking, graduation rates, and college success indicators. After reviewing this information, the GEC requested that the CCRPI partners identify a set of research-based "power" indicators that could provide an accurate measure of Minnesota's progress in preparing its students for college and careers, while making it easier for the public to understand and track system performance. The power indicators are meant solely as a "check" on system progress, they are not meant to hold individual schools accountable. Furthermore, the power indicators are not meant to represent the only data collected and reported at the state level.

The CCRPI partners reviewed the NLWC report and recommended that Minnesota continue to focus on the aforementioned issue areas because they are often used as a national model. The partners also recommended a set of power indicators winnowed from NLWC that as a group gauge system performance in the key issue areas. The partners chose a limited set of indicators to ensure that the information could be easily communicated to and understood by the general public. Each power indicator provides an important picture of Minnesota's efforts to prepare its students for college and careers, as well as ensuring that rigor remains in the system.

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## Power Indicators

The five “power” indicators recommended for stakeholders in Minnesota to judge the K-12 education system’s performance are:

- \* Percentage of Students Completing a College- and Career-Ready Course of Study
- \* Percentage of Students at the College and Career Readiness Level on Anchor Assessments
- \* Percentage of Students Obtaining College Credit or a Meaningful Career Certificate in High School
- \* NGA Cohort Graduation Rate
- \* Percentage of Traditional First-Year Students Requiring Enrollment in Any Developmental Course

While there are many other measures of success, the partners believe that these five are the minimum set of indicators necessary to accurately gauge system performance. At the same time, these indicators are sufficient to provide a full picture of system progress because each indicator serves as a check against other indicators in the group. For instance, requiring a rigorous course of study ensures that standards have not been reduced to increase the state’s graduation rate. Please see the attached chart for a summary of what each indicator measures, fails to capture, and how it complements other indicators.

**Minnesota Power Indicators Cross-Reference Table**

| <b>Power Indicators</b>                           | <b>What It Measures</b>   | <b>What It Leaves Out</b>   | <b>Complemented By</b>  |
|---|---|---|---|
| Graduation Rate                                   | Did students finish?  | Have students taken the courses necessary to prepare them for college and career?<br>Can students pass a college level test?<br>Can students pass a college level course?<br>Did schools actually prepare students for success in college?  | CCR Score on Anchor Assessment<br>CCR Coursework<br>College Credit in HS<br>Enrollment in Development Coursework                    |
| CCR Score on Anchor Assessment                    | Can students pass a college-level test?   | Can students finish, or did schools push out the students who could not pass?<br>Have students taken the courses necessary to prepare them for college and career?<br>Can students pass a college level course?<br>Did schools actually prepare students for success in college?  | Graduation Rate<br>CCR Coursework<br>College Credit in HS<br>Enrollment in Development Coursework                                   |
| College- & Career-Ready Coursework                | Have students taken the courses necessary to prepare them for college and career?                             | Did students finish?<br>Can students pass a college-level test?<br>Can students pass a college level course?<br>Did schools actually prepare students for success in college?   | Graduation Rate<br>CCR Score on Anchor Assessment<br>College Credit in HS<br>Enrollment in Development Coursework                   |
| College Credit in HS                              | Can students pass a college level course?   | Did students finish?<br>Have students taken the courses necessary to prepare them for college and career?<br>Can students pass a college-level test?  | Graduation Rate<br>CCR Score on Anchor Assessment<br>CCR Coursework   |
| Enrollment in Developmental Coursework in College | Did schools actually prepare students for success in college?<br>Is the CCR cut score set at the right level? | Are there students that did not reach college?<br>Did students enrolled in developmental courses take a rigorous course of study?<br>Did students enrolled in developmental courses pass the anchor assessment?   | Graduation Rate<br>CCR Score on Anchor Assessment<br>CCR Coursework   |
| Enrollment in MN higher education                 | Did students enroll in college?   | Have students taken the courses necessary to prepare them for college and career?<br>Can students pass a college level test?<br>Did schools actually prepare students for success in college?<br>Did students enroll in non-Minnesota colleges?   | CCR Score on Anchor Assessment<br>CCR Coursework<br>Enrollment in Development Coursework  |
| Proficiency on Anchor Assessment                  | Can students pass HS-level test?  | Did students finish, or did schools push out the students who could not pass?<br>Can students pass a college-level test?<br>Have students taken the courses necessary to prepare them for college and career?<br>Can students pass a college level course?<br>Did schools actually prepare students for success in college? | Graduation Rate<br>CCR Score on Anchor Assessment<br>CCR Coursework<br>College Credit in HS<br>Enrollment in Development Coursework |

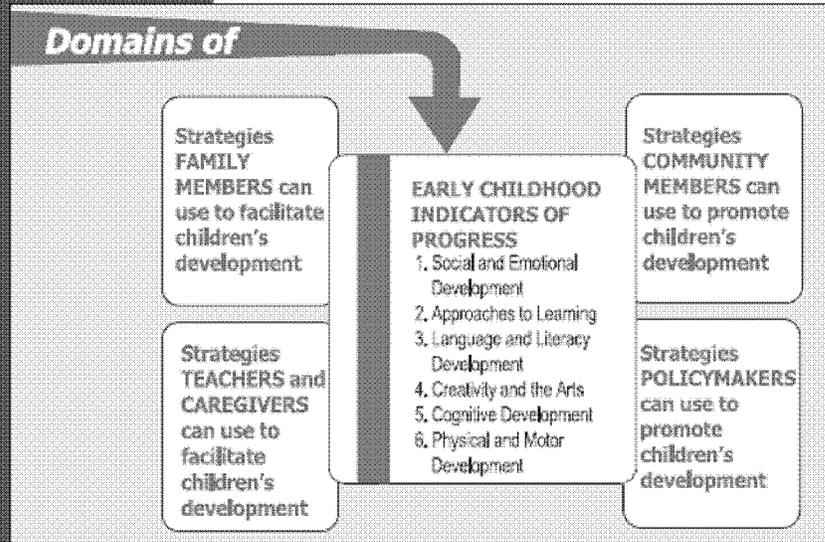
**(B)(1) – Exhibit F: Detail on Minnesota Early Learning Standards Alignment, excerpts from Minnesota’s Early Learning Standards overview**

**EARLY CHILDHOOD INDICATORS OF PROGRESS:**

**Minnesota’s Early Learning Standards**

**Organization and Structure of Document**

The *Early Childhood Indicators of Progress: Minnesota’s Early Learning Standards* are intended to provide a framework for understanding and communicating a common set of developmentally appropriate expectations for young children within a context of shared responsibility and accountability for helping children meet these expectations. It is divided into six domains that reflect the full range of child development as listed in the center box below.



Each domain is further divided into three to five components that describe indicators of children’s progress in gaining concepts, knowledge, and skills. (See domain components on next page.) Strategies family members and teachers and caregivers in early childhood education and care programs can use to facilitate children’s development are listed for each component. The lists of strategies for family members and teachers and caregivers are not intended to be all-inclusive, but rather provide suggested learning activities for enhancing children’s development. Strategies community members and policymakers can use to promote children’s development are also included for each domain. The strategies for community members and policymakers are repeated for each component within a domain.

The *Early Childhood Indicators of Progress* are intended to be used as a guide for children in the preschool period of ages 3 to 5. The indicators are based on widely held developmental expectations observed in a child approximately four years of age. It is expected that most children will meet the majority of these expectations by the end of the pre-kindergarten year. Because normal development varies greatly from child to child, the *Early Childhood Indicators of Progress* document is intended to be a flexible guide in describing a child’s individual progress.

**EARLY  
CHILDHOOD  
INDICATORS  
OF PROGRESS:**

*Minnesota's Early Learning Standards*

(b)(6)

**EARLY CHILDHOOD  
INDICATORS OF  
PROGRESS\***

**SOCIAL AND EMOTIONAL  
DEVELOPMENT**

**EMOTIONAL DEVELOPMENT**

1. Demonstrate increasing competency in recognizing and describing own emotions
2. Demonstrate increasing use of words instead of actions to express emotions
3. Begin to understand and respond to others' emotions
4. Begin to show self-regulation to handle emotions appropriately
5. Explore a wide range of emotions in different ways (e.g., through play, art, music, dance)
6. Respond to praise, limits, and correction

**SELF-CONCEPT**

1. Begin to experiment with own potential and show confidence in own abilities
2. Demonstrate increasing self-direction and independence
3. Develop an awareness of self as having certain abilities, characteristics, and preferences
4. Begin to develop awareness, knowledge, and acceptance of own gender and cultural identity

**SOCIAL COMPETENCE  
AND RELATIONSHIPS**

1. Interact easily with one or more children
2. Interact easily with familiar adults
3. Approach others with expectations of positive interactions
4. Begin to participate successfully as a member of a group
5. Use play to explore, practice, and understand social roles and relationships
6. Begin to understand others' rights and privileges
7. Sustain interaction by cooperating, helping, sharing, and expressing interest
8. Seek adult help when needed for emotional support, physical assistance, social interaction, and approval
9. Use words and other constructive strategies to resolve conflicts

## **APPROACHES TO**

### **LEARNING**

#### **CURIOSITY**

1. Show eagerness and a sense of wonder as a learner
2. Show interest in discovering and learning new things

#### **RISK-TAKING**

1. Choose new as well as a variety of familiar activities
2. Use a variety of strategies to solve problems

#### **IMAGINATION AND INVENTION**

1. Approach tasks and experiences with flexibility, imagination, and inventiveness
2. Use new ways or novel strategies to solve problems or explore objects
3. Try out various pretend roles in play or with make-believe objects

#### **PERSISTENCE**

1. Work at a task despite distractions or interruptions
2. Seek and/or accept help or information when needed
3. Demonstrate ability to complete a task or stay engaged in an experience

#### **REFLECTION AND**

#### **INTERPRETATION**

1. Think about events and experiences and apply this knowledge to new situations
2. Generate ideas, suggestions, and/or make predictions

## **LANGUAGE AND LITERACY DEVELOPMENT**

#### **LISTENING**

1. Understand non-verbal and verbal cues
2. Listen with understanding to stories, directions, and conversations
3. Follow directions that involve a two or three-step sequence of actions
4. Listen to and recognize different sounds in rhymes and familiar words

#### **SPEAKING**

1. Communicate needs, wants, or thoughts through non-verbal gestures, actions, expressions, and/or words
2. Communicate information using home language and/or English
3. Speak clearly enough to be understood in home language and/or English
4. Use language for a variety of purposes
5. Use increasingly complex and varied vocabulary and language
6. Initiate, ask questions, and respond in conversation with others

#### **EMERGENT READING**

1. Initiate stories and respond to stories told or read aloud
2. Represent stories told or read aloud through various media or during play
3. Guess what will happen next in a story using pictures as a guide
4. Retell information from a story
5. Show beginning understanding of concepts about print
6. Recognize and name some letters of the alphabet, especially those in own name
7. Begin to associate sounds with words or letters

#### **EMERGENT WRITING**

1. Understand that writing is a way of communicating
2. Use scribbles, shapes, pictures, or dictation to represent thoughts or ideas
3. Engage in writing using letter-like symbols to make letters or words
4. Begin to copy or write own name

## **CREATIVITY AND THE ARTS**

#### **CREATING**

1. Use a variety of media and materials for exploration and creative expression
2. Participate in art and music experiences
3. Participate in creative movement, drama, and dance

#### **RESPONDING**

1. Show others and/or talk about what they have made or done
2. Show interest and respect for the creative work of self and others

#### **EVALUATING**

1. Share experiences, ideas, and thoughts about art and creative expression
2. Share opinions about likes and dislikes in art and creative expression

## **COGNITIVE DEVELOPMENT**

### **MATHEMATICAL AND LOGICAL THINKING**

#### **Number Concepts and Operations**

1. Demonstrate increasing interest in and awareness of numbers and counting
2. Demonstrate understanding of one-to-one correspondence between objects and number
3. Demonstrate ability to count in sequence
4. Demonstrate ability to state the number that comes next up to 9 or 10
5. Demonstrate beginning ability to combine and separate numbers of objects

#### **Patterns and Relationships**

6. Recognize and duplicate simple patterns
7. Sort objects into subgroups by one or two characteristics
8. Order or sequence several objects on the basis of one characteristic

#### **Spatial Relationships/Geometry**

9. Identify and name common shapes
10. Use words that show understanding of order and position of objects

#### **Measurement**

11. Recognize objects can be measured by height, length, weight, and time
12. Make comparisons between at least two groups of objects

### Mathematical Reasoning

13. Use simple strategies to solve mathematical problems

### SCIENTIFIC THINKING AND PROBLEM-SOLVING

#### Observing

1. Use senses to explore materials and the environment
2. Identify and/or describe objects by physical characteristics

#### Questioning

3. Express wonder about the natural world
4. Ask questions and seek answers through active exploration
5. Make predictions about objects and natural events

#### Investigating

6. Use tools (e.g., magnifying glass, binoculars, maps) for investigation of the environment
7. Make comparisons between objects that have been collected or observed

### SOCIAL SYSTEMS UNDERSTANDING

#### Human Relationships

1. Recognize and appreciate similarities and differences between self and others from diverse backgrounds
2. Understand various family roles, jobs, rules, and relationships
3. Participate in activities to help others in the community

#### Understanding the World

4. Recognize and describe the roles of workers in the community
5. Share responsibility in taking care of their environment
6. Begin to recall recent and past events
7. Identify characteristics of the places where they live and play within their community
8. Begin to understand the uses of media and technology and how they affect their lives

### PHYSICAL AND MOTOR DEVELOPMENT

#### GROSS MOTOR DEVELOPMENT

1. Develop large muscle control and coordination
2. Develop body strength, balance, flexibility, and stamina
3. Use a variety of equipment for physical development
4. Develop ability to move their body in space with coordination

#### FINE MOTOR DEVELOPMENT

1. Develop small muscle control and coordination
2. Use eye-hand coordination to perform a variety of tasks
3. Explore and experiment with a variety of tools (e.g., spoons, crayons, paintbrushes, scissors, keyboards)

### PHYSICAL HEALTH AND WELL-BEING

1. Participate in a variety of physical activities to enhance personal health and physical fitness
2. Follow basic health and safety rules
3. Recognize and eat a variety of nutritious foods
4. Demonstrate increasing independence with basic self-care skills

\* These indicators apply to children in the preschool period of ages three to five. They are based on expectations for children approximately four years of age.

**(B)(1) – Exhibit G: *Minn. Stat. § 120B.021 – Required Academic Standards***

**120B.021 REQUIRED ACADEMIC STANDARDS.**

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**Subdivision 1 – Required academic standards.**

The following subject areas are required for statewide accountability:

- (1) language arts;
- (2) mathematics;
- (3) science;
- (4) social studies, including history, geography, economics, and government and citizenship;
- (5) health and physical education, for which locally developed academic standards apply; and
- (6) the arts, for which statewide or locally developed academic standards apply, as determined by the school district. Public elementary and middle schools must offer at least three and require at least two of the following four arts areas: dance; music; theater; and visual arts. Public high schools must offer at least three and require at least one of the following five arts areas: media arts; dance; music; theater; and visual arts.

The commissioner must submit proposed standards in science and social studies to the legislature by February 1, 2004.

For purposes of applicable federal law, the academic standards for language arts, mathematics, and science apply to all public school students, except the very few students with extreme cognitive or physical impairments for whom an individualized education plan team has determined that the required academic standards are inappropriate. An individualized education plan team that makes this determination must establish alternative standards.

A school district, no later than the 2007-2008 school year, must adopt graduation requirements that meet or exceed state graduation requirements established in law or rule. A school district that incorporates these state graduation requirements before the 2007-2008 school year must provide students who enter the 9th grade in or before the 2003-2004 school year the opportunity to earn a diploma based on existing locally established graduation requirements in effect when the students entered the 9th grade. District efforts to develop, implement, or improve instruction or curriculum as a result of the provisions of this section must be consistent with sections 120B.10, 120B.11, and 120B.20.

The commissioner must include the contributions of Minnesota American Indian tribes and communities as they relate to the academic standards during the review and revision of the required academic standards.

**Subdivision 1a – Rigorous course of study; waiver.**

- (a) Upon receiving a student's application signed by the student's parent or guardian, a school district, area learning center, or charter school must declare that a student meets or exceeds a specific academic standard required for graduation under this section if the local school board, the school board of the school district in which the area learning center is located, or the charter school board of directors determines that the student:
- (1) is participating in a course of study, including an advanced placement or international baccalaureate course or program; a learning opportunity outside the curriculum of the district, area learning center, or charter school; or an approved preparatory program for employment or postsecondary education that is equally or more rigorous than the corresponding state or local academic standard required by the district, area learning center, or charter school;
  - (2) would be precluded from participating in the rigorous course of study, learning opportunity, or preparatory employment or postsecondary education program if the student were required to achieve the academic standard to be waived; and
  - (3) satisfactorily completes the requirements for the rigorous course of study, learning opportunity, or preparatory employment or postsecondary education program.

Consistent with the requirements of this section, the local school board, the school board of the school district in which the area learning center is located, or the charter school board of directors also may formally determine other circumstances in which to declare that a student meets or exceeds a specific academic standard that the site requires for graduation under this section.

- (b) A student who satisfactorily completes a postsecondary enrollment options course or program under section 124D.09, or an advanced placement or international baccalaureate course or program under section 120B.13, is not required to complete other requirements of the academic standards corresponding to that specific rigorous course of study.

**Subdivision 2 – Standards development.**

- (a) The commissioner must consider advice from at least the following stakeholders in developing statewide rigorous core academic standards in language arts, mathematics, science, social studies, including history, geography, economics, government and citizenship, and the arts:
  - (1) parents of school-age children and members of the public throughout the state;
  - (2) teachers throughout the state currently licensed and providing instruction in language arts, mathematics, science, social studies, or the arts and licensed elementary and secondary school principals throughout the state currently administering a school site;
  - (3) currently serving members of local school boards and charter school boards throughout the state;
  - (4) faculty teaching core subjects at postsecondary institutions in Minnesota; and
  - (5) representatives of the Minnesota business community.
- (b) Academic standards must:
  - (1) be clear, concise, objective, measurable, and grade-level appropriate;
  - (2) not require a specific teaching methodology or curriculum; and
  - (3) be consistent with the Constitutions of the United States and the state of Minnesota.

**Subdivision 3 – Rulemaking**

The commissioner, consistent with the requirements of this section and section 120B.022, must adopt statewide rules under section 14.389 for implementing statewide rigorous core academic standards in language arts, mathematics, science, social studies, and the arts. After the rules authorized under this subdivision are initially adopted, the commissioner may not amend or repeal these rules nor adopt new rules on the same topic without specific legislative authorization. The academic standards for language arts, mathematics, and the arts must be implemented for all students beginning in the 2003-2004 school year. The academic standards for science and social studies must be implemented for all students beginning in the 2005-2006 school year.

**History:**

2003 c 129 art 1 s 3; 2004 c 294 art 2 s 2; art 5 s 1; art 6 s 1; 1Sp2005 c 5 art 2 s 5; 2006 c 263 art 2 s 2; 2007 c 146 art 2 s 3

**(B)(1) – Exhibit H: Minn. Stat. § 120B.023 Benchmarks**

**120 B.023 BENCHMARKS**

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**Subdivision 1 – Benchmarks implement, supplement statewide academic standards.**

- (a) The commissioner must supplement required state academic standards with grade-level benchmarks. High school benchmarks may cover more than one grade. The benchmarks must implement statewide academic standards by specifying the academic knowledge and skills that schools must offer and students must achieve to satisfactorily complete a state standard. The commissioner must publish benchmarks to inform and guide parents, teachers, school districts, and other interested persons and to use in developing tests consistent with the benchmarks.
- (b) The commissioner shall publish benchmarks in the State Register and transmit the benchmarks in any other manner that makes them accessible to the general public. The commissioner may charge a reasonable fee for publications.
- (c) Once established, the commissioner may change the benchmarks only with specific legislative authorization and after completing a review under subdivision 2.
- (d) The commissioner must develop and implement a system for reviewing each of the required academic standards and related benchmarks and elective standards on a periodic cycle, consistent with subdivision 2.
- (e) The benchmarks are not subject to chapter 14 and section 14.386 does not apply.

**Subdivision 2 – Revisions and reviews required.**

- (a) The commissioner of education must revise and appropriately embed technology and information literacy standards consistent with recommendations from school media specialists into the state's academic standards and graduation requirements and implement a review cycle for state academic standards and related benchmarks, consistent with this subdivision. During each review cycle, the commissioner also must examine the alignment of each required academic standard and related benchmark with the knowledge and skills students need for college readiness and advanced work in the particular subject area.
- (b) The commissioner in the 2006-2007 school year must revise and align the state's academic standards and high school graduation requirements in mathematics to require that students satisfactorily complete the revised mathematics standards, beginning in the 2010-2011 school year. Under the revised standards:

- (1) students must satisfactorily complete an algebra I credit by the end of eighth grade; and
- (2) students scheduled to graduate in the 2014-2015 school year or later must satisfactorily complete an algebra II credit or its equivalent.

The commissioner also must ensure that the statewide mathematics assessments administered to students in grades 3 through 8 and 11 are aligned with the state academic standards in mathematics, consistent with section 120B.30, subdivision 1, paragraph (b). The commissioner must implement a review of the academic standards and related benchmarks in mathematics beginning in the 2015-2016 school year.

- (c) The commissioner in the 2007-2008 school year must revise and align the state's academic standards and high school graduation requirements in the arts to require that students satisfactorily complete the revised arts standards beginning in the 2010-2011 school year. The commissioner must implement a review of the academic standards and related benchmarks in arts beginning in the 2016-2017 school year.
- (d) The commissioner in the 2008-2009 school year must revise and align the state's academic standards and high school graduation requirements in science to require that students satisfactorily complete the revised science standards, beginning in the 2011-2012 school year. Under the revised standards, students scheduled to graduate in the 2014-2015 school year or later must satisfactorily complete a chemistry or physics credit. The commissioner must implement a review of the academic standards and related benchmarks in science beginning in the 2017-2018 school year.
- (e) The commissioner in the 2009-2010 school year must revise and align the state's academic standards and high school graduation requirements in language arts to require that students satisfactorily complete the revised language arts standards beginning in the 2012-2013 school year. The commissioner must implement a review of the academic standards and related benchmarks in language arts beginning in the 2018-2019 school year.
- (f) The commissioner in the 2010-2011 school year must revise and align the state's academic standards and high school graduation requirements in social studies to require that students satisfactorily complete the revised social studies standards beginning in the 2013-2014 school year. The commissioner must implement a review of the academic standards and related benchmarks in social studies beginning in the 2019-2020 school year.
- (g) School districts and charter schools must revise and align local academic standards and high school graduation requirements in health, physical education, world languages, and career and technical education to require students to complete the revised standards beginning in a school year determined by the school district or charter school. School districts and charter schools must formally establish a periodic review cycle for the academic standards and related

benchmarks in health, physical education, world languages, and career and technical education.

**History:**

2003 c 129 art 1 s 5; 2006 c 263 art 2 s 3; 2009 c 96 art 2 s 5

## **(B)(2) – Exhibit A: Minnesota Assessment System Overview**

### RTTT Narrative – Assessments

The Minnesota assessment system has established a consistent history of high-quality, reliable assessments combined with innovative approaches to measure students' knowledge and skills. The state assessments are acknowledged within the state and recognized throughout the nation as a leading assessment system that provides all stakeholders with actionable data that accurately reflects student knowledge and skills of rigorous standards. The efforts that Minnesota has put toward its assessment system demonstrate a commitment to *establishing* a coherent system built upon the highest technical quality, *advancing* best practices in educational measurement through collaboration, and *innovating* assessment methodologies to advance our knowledge of student achievement.

#### *Establishing a Coherent System*

In March of 2009, the USDE awarded Minnesota the status of *Full Approval* for its standards and assessments in mathematics, reading, and science. Minnesota worked diligently to ensure that its assessment system met the requirements for the peer review process while also meeting the technical standards of *The Standards for Educational and Psychological Testing*. Through this process, Minnesota was able to identify both strengths and areas for improvement within its system. For example, in the state's alternate assessments based on alternate achievement standards, peer reviewers gave accolades to Minnesota's detailed documentation of the assessments' training, administration, and scoring procedures. In addition, Minnesota's extensive technical manual that memorializes the assessment system annually has been cited by USDE as a document of the highest quality and is used by USDE staff in training of peer reviewers in technical documentation.

Minnesota has been resolute in its efforts to include students in special populations in its design considerations, including those who are English language learners (ELLs) and those with disabilities. These efforts have resulted in an operational ELL mathematics assessment, embedded accommodations within its online testing system, and a soon-to-be released alternate assessment based on modified achievement standards.

In 2007, Minnesota administered its Mathematics Test for English Language Learners (MTELL). Receiving peer-review approval from USDE in 2008, this assessment is one of a select few of its kind in the nation that is approved for use in the state's ESEA accountability system. This math test is an alternate assessment based on grade-level standards for ELLs. This assessment is a linguistically-modified math test for those students whose first language is not English. It is an on-line assessment, providing full audio to the students, reading the questions aloud. Minnesota overcame several technical measurement challenges in demonstrating the comparability of this assessment, not only to demonstrate comparability of measuring grade level standards equal to the general assessment, but also in demonstrating comparability of the assessments in a computer administration versus the general education paper administration.

Minnesota has also been a leading advocate in developing embedded accommodations in its online testing engine. Paper and pencil accommodations that may have been cumbersome in administration and ostracizing in participation are now either currently available or scheduled for seamless embedding in the state's online testing administrations within the next 12 months. These include accommodations such as full audio support for screen text, highlighted text accompanying text-to-speech, zoom capabilities, and color contrast overlays. These accommodations are designed for both students who are English language learners as well as those with disabilities. General education students can also take advantage of these accommodations as well if appropriate.

Minnesota has also been developing its alternate assessment based on modified achievement standards. As part of an Enhanced Assessment Grant (EAG) funded through USDE, Minnesota has been working in consortium with Ohio and Oregon to develop an assessment that provides more appropriate access to eligible students, better demonstrating their knowledge of grade-level standards. With over two years of development and preparation, this assessment is scheduled to become operational in the spring of 2011.

In December of 2008, Minnesota released a state-level growth model to help parents and educators track overall student progress toward academic proficiency in mathematics and reading. The Minnesota Growth Model follows the overall progress of students from year-to-year in order to better determine whether they are gaining and retaining skills. This norm-based growth model provides stakeholders with an additional perspective on the performance of schools and districts in reaching proficiency for all students.

In January of 2009, USDE gave Minnesota approval to use a value-table growth model for inclusion in its Adequate Yearly Progress (AYP) calculations. This value table approach included all students in its review, including those taking the alternate assessment based on grade-level standards as well as those administered the alternate assessment based on alternate achievement standards. This USDE-approved growth model allows schools and districts to use an additional tool in demonstrating progress with students through fair and technically appropriate means.

Each of these assessments, accommodations and growth metrics, as well as the recognition they have received, demonstrate that Minnesota has established a coherent system of assessments developed to measure the state's rigorous academic standards. The online testing efforts and alternate assessment development demonstrate that Minnesota is committed to continuing an assessment system that serves its fundamental mission of appropriately measuring students' knowledge and skills on those rigorous standards.

#### *Advancing Best Practices*

Minnesota has long been an advocate and partner in advancing best practices within K-12 measurement. In its collaboration with other states and with national organizations, Minnesota has made its assessment system a transparent one and been a willing partner to share its experiences through its development.

The Minnesota Department of Education has ten different advisory groups to its assessment program that allow for stakeholder input on all things related to statewide testing – from screen resolution to score release. These advisory groups are an important venue for promoting the transparency and accountability of the assessment system while gathering input from a broad audience of stakeholders. These groups serve as both formal and informal oversight on the assessment system, and they contribute to the state’s evaluation of intended and unintended consequences of technical considerations and policy implications. These groups are invaluable in contributing to the validity evidence of the assessment system and to ensure the system meets the state’s educational goals with the appropriate capacity.

While collaborating with state stakeholder groups, Minnesota continues to collaborate with other states as well as national organizations in advancing best practices in statewide assessment. Minnesota routinely presents in national conversations such as the National Conference on Student Assessment hosted by the Council of Chief State School Officers. Additionally, Minnesota staff have served as invited speakers at symposiums with other states as well as the National Research Council’s Board on Teaching and Assessment to discuss the characteristics of its assessment system. With both organizations residing in the Twin Cities metro area, Minnesota regularly interacts with the National Center for Educational Outcomes (NCEO), a center to monitor and assist states in testing practices for students with disabilities and those who are English language learners. The state often provides research data to NCEO through data-sharing agreements as well as serves as discussants and presenters in national presentations. NCEO staff serve on Minnesota’s accommodations committee as well as provide informal advice regarding accommodations and inclusion. Minnesota has also collaborated with NCEO to create *The Minnesota Manual of Accommodations for Students with Disabilities in Instruction and Assessment*. This manual is a resource for individual education plan (IEP) teams to use in determining the need for, and relationship between, accommodations used in instruction and in assessment.

Minnesota also continues to improve its assessment policies in collaboration with other states. In a project entitled “Refining State Assessment Policies for Accommodating ELLs,” Minnesota is receiving technical assistance to review and refine its state assessment policy for these students from the George Washington University Center for Equity and Excellence in Education (GW-CEEE). This project is funded by the USDE and sponsored by the North Central Comprehensive Center (NCCC). Revisions to the state’s documentation have been identified by GW-CEEE as model for other states collaborating in this effort.

Minnesota is involved in other national efforts to advance of best practices in state assessments. Minnesota staff serve as one of three states representing the Council of Chief State School Officers which is collaborating with the Association of Test Publishers to produce a Best Practices document for statewide, large-scale assessment, which covers all major components of operating a large scale assessment program within a state, from contract procurement to test security. When officially released in 2010, this document will

serve as best practices for states and publishers to strengthen state testing programs in the United States.

### *Innovating Assessment Methodologies*

In 2007, Minnesota was one of only two states to participate in the Trends in International Mathematics and Science Study (TIMSS) as a mini-nation. Funded jointly through both the Minnesota state legislature and top-tier business partners throughout the state, Minnesota sought out additional information about the proficiency of its students as measured through international comparisons and benchmarks. For example, participating in this study in this unique way allowed Minnesota to see gains in fourth-grade mathematics performance that was among the largest of any of the 16 countries that participated in both the 1995 and 2007 TIMSS. Through efforts such as this, Minnesota has demonstrated that it is undaunted by what additional measurement data may show, and that its educational system has the ability to make marked improvements system wide.

Minnesota's summative assessment in science is another area of its assessment system that demonstrates innovation and advancement. Currently, Minnesota is the only state in the nation delivering an on-line science assessment to fulfill the requirements of ESEA. Going beyond simply improved administration efficiencies, the Minnesota Comprehensive Assessments in science use the tools of computer technology to assess student knowledge and skills in unique and engaging ways. Using "drag-and-drop," graphing, and "hot spot" capabilities, Minnesota is assessing students' science knowledge in ways that are more cognitively complex than traditional multiple-choice tests. Minnesota continues to innovate as the next generation of the science assessments scheduled to begin in 2012 also will include simulations, furthering students' ability to demonstrate their knowledge of science inquiry in an engaging and efficient way.

With over three years of success on its science test, Minnesota is advancing its other content area assessments to computer as well, with the same emphasis on innovation. Minnesota's summative math assessment was field tested in the fall of 2009. It, too, included similar advanced item types that can be scored by the computer – allowing for questions of greater cognitive complexity and results at the speed of a computer processor. The next generation of both the mathematics and reading assessments is being developed as computer-adaptive assessments, allowing more precise measurement of all students in a grade level while using these same item innovations.

Minnesota continues to share its work on these innovative assessments with its fellow state testing agencies. Frequently Minnesota has provided informal advice to other states on the development of these assessments as well as more formal presentations on this innovative work. Invited presentations such those for the National Conference on Student Assessment, the National Research Council, and the annual meeting of the National Council on Measurement in Education have allowed Minnesota to share research in this area. Papers such as "Measurement Properties of Innovative Item Formats in a Computer-Based Science Test" which Minnesota staff co-authored demonstrate the state's commitment to innovation and sharing the knowledge learned from these efforts.

Minnesota has been actively involved in several General Supervision Education Grants (GSEG) and Enhanced Assessment Grants (EAG) funded by the USDE, as well as the National Science Foundation. In the past three years, Minnesota has received four GSEG awards to develop or improve alternate assessments for students with disabilities. Minnesota also currently serves as the lead state and investigator in two EAGs – one to determine if cognitive screeners can aid in determining eligible students for the alternate assessment based on modified achievement standards and a second to develop accessible and portable item protocol for use in on-line testing. In the instances of the two EAGs, Minnesota again is demonstrating its leadership and foresight in advancing assessments for all students in the K-12 setting.

In all of these activities related to the state's assessment system, Minnesota has demonstrated its continued commitment to *establishing* a coherent system, *advancing* best practices, and *innovating* methodologies. The state's assessment program is poised to continue its national leadership in educational measurement through the activities outlined in this application.

**(B)(2) – Exhibit B: Summative Assessment Consortium –  
SMARTER Memorandum of Understanding and list of  
participating states**

**Summative Multi-State Assessment Resources for Teachers and Educational Researchers  
(SMARTER) Memorandum of Understanding**

This non-binding Memorandum of Understanding (MOU) is entered into by and between the states of Delaware, Hawaii, Idaho, Minnesota, Nebraska, Oregon, Tennessee, Utah, Washington, Wisconsin and Wyoming to initiate a consortium of states (Consortium) to serve as a framework of collaboration as required to submit a proposal for a Multi-State Consortium Common Assessment Race to the Top grant. The working title for the proposal is the "Summative Multi-State Assessment Resources for Teachers and Educational Researchers" (SMARTER). In the event the proposal is approved and fully funded by the U.S. Department of Education, the final proposal will serve as the official agreement.

The signatory states shall be referred to as "Lead States" and hereby authorize Oregon to be the signatory for the Lead States in entering into MOUs with additional states that desire to participate under the same terms (Participating States). The terms of the MOU among the Lead States and between the Lead States and subsequent Participating States are set forth below.

1. States in the Consortium will assign a key contact to assist in the drafting of the proposal, and to the extent practicable will engage their teachers, school and district administrators and institutions of higher education in the development and review of the proposal to ensure the design of the assessment system meets the needs of a variety of stakeholders.
2. States may withdraw from the Consortium prior to the establishment of the draft budget for the proposal. The anticipated date for the draft budget is 30 days before the proposal is due to the U.S. Department of Education.
3. States in the Consortium agree in principle to the following elements to be included in a proposal to the U.S. Department of Education:
  - a. The purpose of the proposal is to develop a high quality summative assessment system that is aligned to the Common Core Standards, mutually adopted by Consortium states.
  - b. The assessment system will use online adaptive tests, innovative item design and open-ended items to assess the full breadth of cognitive demand described by the Common Core Standards.
  - c. Proposal writing will be governed by staff from the Lead States that have agreed to this MOU. Governance protocols for proposal development will be established by 2/15/2010.
  - d. If funded, the assessment system will be governed by staff from states that are members of the Consortium, and will be guided with the support of selected technical experts. Governance protocols for the assessment system will be a deliverable of the grant.
  - e. The assessment system will include teachers, school and district administrators, state departments of education and institutions of higher education in the design, administration, scoring and reporting of the assessments.
  - f. States in the Consortium will report student, school, district and state results based upon a single common set of rigorous achievement standards. Additionally, states in the consortium may choose to report student achievement benchmarked to a variety of achievement standards including NAEP, international assessments, and benchmarks predictive of student success in college and careers.
  - g. States in the Consortium will use the summative assessment system to measure school and district effectiveness to meet federal accountability requirements
  - h. The assessments will be designed based on principles of Universal Design and will be consistent with professional standards as described by the APA/AERA/NCME *Standards for Educational and Psychological Testing*.
  - i. The Consortium will coordinate with the MOSAIC consortium as appropriate and with other interested multi-state formative and benchmark assessment initiatives so that schools and districts will have access to a variety of high quality instructionally supportive assessment options that together yield a coherent balanced assessment system.
  - j. The assessment system will use open source software applications accessible to any vendor procured by states in the Consortium.

- k. States in the Consortium will create and adhere to common administration guidelines including accommodations and allowable tools and assistive devices based on high quality research regarding student learning and assessment.
- l. Grant funds allocated to LEAs will in part be used to ensure participation opportunities for teachers. The estimated allocation and purpose of funds will be described in the budget section of the proposal.
- m. States in the Consortium will participate in common procurement practices and deliverables to the extent the procurements are directly related to Consortium-wide activities described in the proposal. Lead states will construct a procurement process taking into account minimum procurement standards used in all participating states.
- n. States in the Consortium will share a common reporting format consistent with a goal of aligning reporting systems.
- o. States in the Consortium will share common security protocols regarding test items.
- p. States in the Consortium will work with their institutions of higher education and teacher preparation institutions to ensure teachers are prepared to use and contribute to the summative assessment system.

This non-binding Memorandum of Understanding shall be effective beginning with the date of the last signature hereon:

Lead State SEA Superintendent/Chief/Commissioner  
(or equivalent authorized signatory)

Chas And  
Signature

1/6/10  
Date

Chas Anderson  
Print Name

Deputy Commissioner  
Title

Please sign and date this agreement by no later than January 8<sup>th</sup>, 2010.

FAX signed copy to Tony Alpert at: (503) 378-5156 or email scanned copy to [Tony.Alpert@state.or.us](mailto:Tony.Alpert@state.or.us)

**States participating in the SMARTER consortium  
(as of 1/14/2010)**

The following states have submitted a signed Memorandum of Understanding (MOU) to participate in the Summative Multi-State Assessment Resources for Teachers and Educational Researchers (SMARTER) consortium to provide high-quality summative assessments.

| <b>State</b>   | <b>Date<br/>SMARTER<br/>MOU-Received</b> | <b>Lead or Participating State</b> |
|--|--|------------------------------------|
| Nebraska   | January 4 <sup>th</sup> , 2010           | Lead                               |
| Washington   | January 4 <sup>th</sup> , 2010           | Lead                               |
| Hawaii   | January 4 <sup>th</sup> , 2010           | Lead                               |
| Wyoming  | January 5 <sup>th</sup> , 2010           | Lead                               |
| Utah   | January 5 <sup>th</sup> , 2010           | Lead                               |
| Tennessee  | January 5 <sup>th</sup> , 2010           | Lead                               |
| Wisconsin  | January 6 <sup>th</sup> , 2010           | Lead                               |
| Kentucky   | January 6 <sup>th</sup> , 2010           | Participating                      |
| Kansas   | January 6 <sup>th</sup> , 2010           | Participating                      |
| Minnesota  | January 6 <sup>th</sup> , 2010           | Lead                               |
| Michigan   | January 6 <sup>th</sup> , 2010           | Lead                               |
| Ohio   | January 6 <sup>th</sup> , 2010           | Participating                      |
| South Carolina   | January 6 <sup>th</sup> , 2010           | Participating                      |
| Oregon   | January 6 <sup>th</sup> , 2010           | Lead                               |
| Montana  | January 8 <sup>th</sup> , 2010           | Participating                      |
| Illinois   | January 8 <sup>th</sup> , 2010           | Lead                               |
| Idaho  | January 7 <sup>th</sup> , 2010           | Lead                               |
| Delaware   | January 7 <sup>th</sup> , 2010           | Lead                               |
| Mississippi  | January 11 <sup>th</sup> , 2010          | Participating                      |
| District of Columbia   | January 11 <sup>th</sup> , 2010          | Participating                      |
| California   | January 12 <sup>th</sup> , 2010          | Participating                      |
| Colorado   | January 13 <sup>th</sup> , 2010          | Lead                               |
| New York   | January 14 <sup>th</sup> , 2010          | Lead                               |
| <b>Total # of states that have<br/>submitted signed MOUs<br/>for SMARTER</b> | <b>23</b>                                |                                    |

Listed below are the states that have submitted a signed MOU to participate in SMARTER. In addition, also included are those states that have submitted formal

statements of their intent to participate in SMARTER, but are not able to submit a signed MOU in time for the Race To the Top first round application deadlines.

| <b>State</b>  | <b>Status of SMARTER MOU</b> |
|---|------------------------------|
| Nebraska  | Signed                       |
| Washington  | Signed                       |
| Hawaii  | Signed                       |
| Wyoming   | Signed                       |
| Utah  | Signed                       |
| Tennessee   | Signed                       |
| Wisconsin   | Signed                       |
| New Mexico  | To be signed after AG review |
| Kentucky  | Signed                       |
| Kansas  | Signed                       |
| Minnesota   | Signed                       |
| Michigan  | Signed                       |
| Ohio  | Signed                       |
| South Carolina  | Signed                       |
| Oregon  | Signed                       |
| Montana   | Signed                       |
| Illinois  | Signed                       |
| Idaho   | Signed                       |
| Delaware  | Signed                       |
| Mississippi   | Signed                       |
| District of Columbia  | Signed                       |
| Colorado  | Signed                       |
| California  | Signed                       |
| New York  | Signed                       |
| <b>Anticipated total # of states that will participate in SMARTER</b> | <b>24</b>                    |

**(B)(2) – Exhibit C: *Formative Assessment Consortium – MOSAIC Memorandum of Understanding***

**MOSAIC**  
*Multiple Options for Student Assessment  
and Instruction Consortium*  
**Memorandum of Understanding**

This Non-Binding Memorandum of Understanding (“MOU”) is entered into by and between the lead state(s): Wisconsin, Nebraska, and Missouri, and Minnesota. The purpose of this agreement is to establish a framework of collaboration, as well as articulate tasks in support of a Multi-State Consortium in its implementation of an approved Standards and Assessment Section of a Race to the Top grant. States might choose to participate in this Consortium even if their Race to the Top grant application is not funded.

**I. PROJECT PROPOSAL**

**A. PARTICIPATING SEA RESPONSIBILITIES**

A Consortium of states proposes to build a balanced assessment system of formative and benchmark assessment in a Race to the Top grant application. A state might choose to participate in this agreement through funding of its own choosing. The name of the system to be built is Multiple Options (for) Student Assessment (and) Instruction Consortium (MOSAIC). The MOSAIC system will be designed to complement a summative assessment system aligned to the Common Core such as the one being proposed under the SMARTER Consortium or any other Consortia that may develop a summative assessment aligned to the Common Core.

The proposed Consortium tasks and activities described in the Race to the Top application include the tasks that follow below. States participating in the Consortium will need to determine which of the tasks they wish to undertake with this Consortium. This decision may be made after the submission of the MOU.

**Task 1.1.1 COMMON CORE: The consortium states will adopt the Common Core Standards.** Within one year of state adoption, all districts within the consortium states will have adopted the Common Core Standards, will have integrated the standards to their local curriculum, and will have aligned professional development to familiarize staff with the college and career-ready expectations.

**Task 1.1.2 PROFESSIONAL DEVELOPMENT—CURRICULAR INTEGRATION: The consortium states will develop and build professional development materials around the instructional integration of Common Core standards.** This will include curricular frameworks aligned to the Common Core, defining of learning progressions within content areas, materials on instructional strategies, and suggested interventions. All materials will be disseminated across the states within the consortium and made available in a web-banked system.

**Task 1.1.3 INSTRUCTIONAL SUPPORT SYSTEM: The consortium states will have access to a computerized system that will provide opportunities for districts to load the system with formative/local assessment tasks, items, and instructional materials including performance assessments.** These can be shared across states, and customized for local use. All will be aligned with the Common Core and will be available electronically to students and teachers with timely data turn-around.

*Task 1.1.4 STATE FLEXIBILITY:* Each state will define the level at which districts/schools in their state participate in the formative/benchmark assessment system. This may vary from state to state, depending on how each state defines voluntary versus optional participation. (One level of required participation within a state might be to require the state's persistently low performing schools and districts to participate in this comprehensive assessment system, and to require that student performance data be tracked over time for growth and improvement.)

*Task 1.1.5 REPORT DEVELOPMENT:* Each state will contribute to the development of district, school, and student-level performance reports on the Common Core. Reports will be generated in parent-friendly and teacher-friendly formats to track progress on the Common Core standards. Emphasis will be placed upon growth and improvement over time, with customized feedback about suggested next-steps based on the student's performance.

*Task 1.1.6 BENCHMARK ASSESSMENT SYSTEM:* Each state will contribute to the development of a benchmark assessment item bank with the capabilities for adaptive testing. From this item bank, common diagnostic/benchmark tests will be developed across the "total package" consortia states through a consortia bid process to a single vendor. Each state will contribute field-tested items to the bank. This bank will be used to diagnose student strengths and deficiencies and serve as an "early warning" system. Common performance standards and cut scores for these diagnostic/benchmark tests will be set across the consortium of states. The common tests will be loaded into the computerized system for immediate data turn around. The common tests will be available to districts/schools within each state as defined by that state – varying levels of participation will require different cost to each state to implement, most likely on a per-pupil basis. (States participating at the Partner or Associate level may access items in the bank, but may not utilize the consortia-developed common assessments).

*Task 1.1.7 PROFESSIONAL DEVELOPMENT—USING DATA TO IMPROVE INSTRUCTION:* Each state will contribute to the development of hands-on training and workshop modules for educators that focus on user-friendly strategies to make data-informed instructional decisions based upon formative, benchmark, and summative assessment results. All materials will be disseminated across the collaborating states.

The selection of tasks by each SEA participating in the Consortium will determine the level of participation of each respective state. There are three levels of participation that may be selected by each SEA in the Consortium. While the level of participation does not need to be selected at the time of signing the MOU, by its signature the state is indicating its interest in participating at a minimum of Level Three.

- **Level One: "Total Package"** – The state participates in all seven tasks with a common vendor, and shares in all resources available through the project, including all formative/benchmark assessments developed under the project. The state has an active role in developing, disseminating and sharing professional development tasks and materials.
- **Level Two: "Partner"** – The state contributes to the item bank (Tasks 1.1.1, 1.1.2, and 1.1.6) and professional development materials, and may use components in their state for state-specific work. (ex: state does not use common assessments developed from the bank; instead, uses the bank to create their own assessment tools with a separate vendor)
- **Level Three: "Associate"** – The state contributes to the item bank, (Task 1.1.6 only) and may use components in their state for state-specific work. The state does not contribute to or have access to professional development components developed through the project.



**(B)(2) – Exhibit D: *Formative Assessment Consortium – MOSAIC list of participating states***

**States participating in the MOSAIC consortium**

The following states have submitted a signed Memorandum of Understanding (MOU) to participate in the Multiple Options for Student Assessment and Instruction Consortium (MOSAIC) consortium to provide high-quality summative assessments. Listed below are the states that have submitted a signed MOU to participate in MOSAIC.

| <b>State</b>   | <b>Date MOSAIC MOU-Received</b>  | <b>Lead or Participating State</b> |
|----------------|----------------------------------|------------------------------------|
| Delaware       | January 5 <sup>th</sup> , 2010   | Participating                      |
| Hawaii         | December 31 <sup>st</sup> , 2009 | Participating                      |
| Idaho          | December 22 <sup>nd</sup> , 2009 | Participating                      |
| Iowa           | January 5 <sup>th</sup> , 2010   | Participating                      |
| Kansas         | January 5 <sup>th</sup> , 2010   | Participating                      |
| Kentucky       | January 5 <sup>th</sup> , 2010   | Participating                      |
| Maryland       | January 5 <sup>th</sup> , 2010   | Participating                      |
| Michigan       | January 4 <sup>th</sup> , 2010   | Participating                      |
| Minnesota      | January 8, 2010                  | Participating                      |
| Mississippi    | January 5 <sup>th</sup> , 2010   | Participating                      |
| Missouri       | January 5 <sup>th</sup> , 2010   | Lead                               |
| Montana        | January 7 <sup>th</sup> , 2010   | Participating                      |
| Nebraska       | January 6 <sup>th</sup> , 2010   | Lead                               |
| New Jersey     | January 5 <sup>th</sup> , 2010   | Participating                      |
| North Dakota   | January 5 <sup>th</sup> , 2010   | Participating                      |
| Ohio           | January 6 <sup>th</sup> , 2010   | Participating                      |
| Oregon         | January 6 <sup>th</sup> , 2010   | Participating                      |
| Pennsylvania   | January 8 <sup>th</sup> , 2010   | Participating                      |
| South Carolina | January 6 <sup>th</sup> , 2010   | Participating                      |
| South Dakota   | January 4 <sup>th</sup> , 2010   | Participating                      |
| Tennessee      | January 5 <sup>th</sup> , 2010   | Participating                      |
| Utah           | January 5 <sup>th</sup> , 2010   | Participating                      |
| Washington     | January 4 <sup>th</sup> , 2010   | Participating                      |
| Wisconsin      | January 6 <sup>th</sup> , 2010   | Lead                               |

| Wyoming  | January 4 <sup>th</sup> , 2010 | Participating |
|--|--------------------------------|---------------|
|  |                                |               |
| <b>Total # of states that have submitted signed MOUs for MOSAIC*</b> | <b>25</b>                      |               |

\* As of 1/8/2010

**(B)(2) – Exhibit E: Achieve Assessment Partnership confirmation letter**



January 15, 2010

Ms. Alice Seagren  
 Commissioner  
 Minnesota Department of Education  
 1500 Highway 36 West  
 Roseville, MN 55113

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Dear Commissioner Seagren:

Achieve is pleased to confirm Minnesota's participation in an assessment partnership committed to pursuing the development and implementation of summative assessments that are aligned to the common core standards, that can be used within states as part of statewide assessment systems, and that will enable comparability of results across a maximum number of states.

We have received your formal request to join the other states in this partnership and acknowledge your acceptance of the attached Statement of Principles which will guide our collective work.

Minnesota's participation in this partnership is critical to its success. We look forward to continuing our important work together in the coming months.

Sincerely,

(b)(6)

Michael Cohen  
 President

*States Committed to Assessment Partnership  
 (As of 10:00 am EST on January 15, 2010)*

- |                         |                   |                    |
|-------------------------|-------------------|--------------------|
| 1. Alabama              | 10. Illinois      | 19. New Mexico     |
| 2. Arizona              | 11. Indiana       | 20. North Carolina |
| 3. Arkansas             | 12. Kentucky      | 21. Ohio           |
| 4. California           | 13. Louisiana     | 22. Oklahoma       |
| 5. Delaware             | 14. Maryland      | 23. Pennsylvania   |
| 6. District of Columbia | 15. Massachusetts | 24. Rhode Island   |
| 7. Florida              | 16. Michigan      | 25. Tennessee      |
| 8. Georgia              | 17. Minnesota     | 26. Utah           |
| 9. Hawaii               | 18. New Hampshire | 27. Wisconsin      |



### Comparing Student Performance on Common College- and Career-Ready Standards Statement of Principles

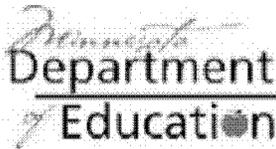
Our state is committed to an education system that prepares all of our students for success in college, careers, and life in the 21<sup>st</sup> century. We believe in setting *high* expectations for our students and schools that are firmly grounded in what it takes to be successful. We believe in setting *common* expectations across states, and are committed to working with like-minded states to adopt common standards and assessment systems anchored in college and career readiness.

Our state supports common assessments that meet the following principles:

- Aligned to the common core standards
- Anchored in college and career readiness
- Allow for comparison of student results across a maximum number of states
- Enable to the maximum extent possible benchmarking performance against NAEP and international standards
- Cover grades 3 through 8 and high school, including college/career ready measures at the end of high school
- Address three overarching goals: measuring student proficiency, ensuring accountability, and improving teaching and learning
- Enable measurement of student achievement and growth
- Are summative in nature but designed in a manner consistent with more comprehensive assessment systems that also include interim and formative assessments
- Provide valid and reliable measures of student knowledge, understanding of, and ability to apply crucial concepts through the use of a variety of item types and formats
- Leverage technology and economies of scale in order to minimize costs and create assessments that accurately measure student performance
- Provide for timely release of results to better inform practice and support decision-making
- Include the assessment of students identified with disabilities and English language learners and to the extent feasible, use universal design principles

We understand that Achieve will work with other national partners to build on the work of the common core standards and convene states to pursue a common assessment strategy that meets these principles. We are prepared to work with Achieve and its partners in as large a consortium of states as possible to explore the development and implementation of summative assessments that are aligned to the common core standards, that can be used within states as part of statewide assessment systems, and that will enable comparability of results across states. We understand that in pursuing this effort, Achieve and its partners will work closely with other consortia that have been formed to explore areas of common ground and determine whether and how efforts could be combined to achieve comparability of results.

(B)(3) – Exhibit A: *Math and Science Teacher Academy Press Release*



FOR IMMEDIATE RELEASE:  
May 28, 2008

Contact: Randy Wanke  
(651) 582-1145

## MINNESOTA LAUNCHES MATH AND SCIENCE TEACHER ACADEMY

*Nine regional Centers will provide teachers with professional development and training needed to better prepare students for 21st century opportunities*

Roseville -- The Minnesota Department of Education today announced the creation of the Minnesota Mathematics and Science Teacher Academy that will focus on improving mathematics and science instruction and learning through ongoing, quality professional development statewide.

The Academy is comprised of nine regional Teacher Centers throughout the state, each including at least one K-12 school district or education service cooperative, and one higher education institution. The Centers are located in Thief River Falls, Mountain Iron, Fergus Falls, Staples, Marshall, St. Cloud, Mankato, Rochester and Plymouth.

The Math and Science Teacher Academy is a result of Governor Pawlenty's efforts to improve teacher effectiveness, especially in the areas of math and science. Funding for the program was approved during the 2007 legislative session. Additional money was made available through a grant from the National Governors Association.

"Math and science education are central to Minnesota's efforts to prepare our students for the challenges and opportunities of the 21st century," Governor Tim Pawlenty said. "By providing teachers with the professional development needed to become more effective in the classroom, the Teacher Academy is a vital component in our goal of taking Minnesota students from nation-leading to world competing."

The nine Centers will provide training and technical assistance to help teachers successfully implement Minnesota's content standards, master the use of multiple instructional approaches to differentiate instruction and engage students, and improve skills to diagnose student learning needs using assessment of student performance.

(more)

Districts in each region will send teams of teachers to one of the nine Centers for summer training, using a train-the-trainer model. These certified trainers will then train teachers in their district and surrounding region to reach teachers across the state. Academy activities during the initial year will focus on improvement of mathematics teaching and learning. Components of each region's plan include:

- A professional development module to assist teachers—through yearlong Professional Learning Communities (PLCs)—in delivering the new algebra standards to students in grades 6-8;
- A work plan and budget describing how the 6-8 algebra professional development module and accompanying technical assistance will be delivered throughout the region;
- A commitment to deliver an additional professional development module for K-12 mathematics teachers; and,
- A committed partnership between K-12 and a Minnesota institution of higher education to build capacity for ongoing professional development in the region.

"After parents, teachers have the biggest impact on student success," Minnesota Education Commissioner Alice Seagren said. "The Math and Science Teacher Academy will help to better prepare Minnesota teachers for success in the classroom as they continue to prepare our students for success after high school."

Teacher Center representatives are attending a day-long conference at the Minnesota Department of Education in Roseville today to meet department staff, review the components of the program, share their individual plans, and begin collaborative work that includes regional planning and networking. Keynote addresses feature Dr. Eric Jolly, President of the Science Museum of Minnesota, and Dr. Judith Ramaley, President of Minnesota State University-Winona.

###

#### **Teacher Center Locations and Partner Organizations**

**Region 1 and 2 – Northwest Service Cooperative in Thief River Falls**

Partners: Bemidji State University and EdSights, LLC

Contact: Mary Klamm, 218-681-0888, [mklamm@nw-service.k12.mn.us](mailto:mklamm@nw-service.k12.mn.us)

**Region 3 – Northeast Service Cooperative in Mountain Iron**

Partners: Hibbing Community College and the University of Minnesota-Duluth

Contact: Kathy Sterk, 218-748-7627, [ksterk@nesc.k12.mn.us](mailto:ksterk@nesc.k12.mn.us)

**Region 4 – Lakes Country Service Cooperative in Fergus Falls**

Partners: Minnesota State University-Moorhead and Concordia College

Contact: Pat Anderson, 218-739-3273, [panderson@lccsc.org](mailto:panderson@lccsc.org)

**Region 5 – Freshwater Education District in Staples**

Partners: Central Lakes Community College and DePaul University

Contact: Pete Ziegler, 218-855-1231, [pziegler@ca.com](mailto:pziegler@ca.com)

**Region 6 and 8 – Southwest/West Central Service Cooperative in Marshall**

Partners: Minnesota River Valley Education District (MRVED) and Minnesota State University-Southwest

Contact: Shelley Maes, [shelley.maes@swsc.org](mailto:shelley.maes@swsc.org)

**Region 7 – Resource Training & Solutions in St. Cloud**

Partner: Augsburg College

Contact: Dr. Rebecca Koellin, [RKoellin@resourcetraining.com](mailto:RKoellin@resourcetraining.com)

**Region 9 – Minnesota State University-Mankato**

Partners: South Central Cooperative Agency, Normandale Community College, Gustavus Adolphus College and the Science Museum of Minnesota

Contact: Dr. Kathleen Foord, 507-389-1607, [kathleen.foord@mnsu.edu](mailto:kathleen.foord@mnsu.edu)

**Region 10 – Southeast Service Cooperative in Rochester**

Partners: Winona State University

Contact: Suzanne Riley, [sriley@ssc.coop](mailto:sriley@ssc.coop)

**Region 11 – Inter-District 287/Northeast Metro 916 in Plymouth**

Partners: Metro Educational Cooperative Service Unit, University of Minnesota, Hamline University and Normandale Community College

Contact: Dr. Jane Holmberg, 763-550-7152, [JHolmberg@district287.org](mailto:JHolmberg@district287.org)

**(B)(3) – Exhibit B: *AVID and Admission Possible Additional Information***

**AVID**

AVID targets students in the academic middle - B, C, and even D students - who have the desire to go to college and the willingness to work hard. These are students who are capable of completing rigorous curriculum but are falling short of their potential. Typically, they will be the first in their families to attend college, and many are from low-income or minority families. AVID pulls these students out of their unchallenging courses and puts them on the college track: acceleration instead of remediation. Not only are students enrolled in their school's toughest classes, such as honors and Advanced Placement, but also in the AVID elective. For one period a day, they learn organizational and study skills, work on critical thinking and asking probing questions, get academic help from peers and college tutors, and participate in enrichment and motivational activities that make college seem attainable. Their self-images improve, and they become academically successful leaders and role models for other students.

There are twenty districts with AVID in Minnesota. The program started at Brooklyn Center ISD #286 and in the St. Paul Public Schools five years ago. At Brooklyn Center High School, the college acceptance rate went from 40% to 75% with the first AVID graduating class. St. Paul has been so impressed with the program that they have now implemented AVID district-wide from grade school through high school. The program affects not just the AVID elective class students, but also the college-going culture of the entire school.

**Admission Possible**

**Admission Possible** is a nonprofit organization founded in Minnesota in September of 2000, dedicated to helping promising, low-income students obtain admission to college. In 2008-2009, it served 1,400 students in 19 high schools across six school districts in the Greater Twin Cities.

- Overall, 98% of the students assisted by Admission Possible have been admitted to college.
- Nearly 80% of Admission Possible students who enrolled in college are still working toward their college degree or have graduated. By comparison, only 7% of all low-income students nationwide earn a college degree by age 24 (Education Trust).

· Students in the Admission Possible program have shown an average ACT score improvement of 20%. Additional data available from the Wilder evaluation:  
<http://www.admissionpossible.org/sites/f8fbff41-1a58-4318-914c-3f89068c11cc/uploads/AdmissionPossibleSum12-04.pdf>



**(B)(3) – Exhibit D: *Raising Academic Achievement Grants***

**Raising Academic Achievement**

**Advanced Placement & International Baccalaureate**

**The Minnesota Experience**

In 1992, the Minnesota legislature established the *Advanced Placement and International Baccalaureate Program* to help provide Minnesota students with a world-class educational opportunity. Advanced Placement and International Baccalaureate were chosen because these programs, in addition to providing academic rigor, offer sound curricular design, accountability, comprehensive external assessment, feedback to students and teachers, and the opportunity for high school students to compete academically on a global level.

To ensure that advanced placement and international baccalaureate courses become available in all parts of the state and that a variety of course offerings are available in school districts, the *Advanced Placement and International Baccalaureate Program* implemented three strategies: 1) teacher training; 2) exam fee reimbursement; and 3) the establishment of a common credit policy for exam scores for the Minnesota State Colleges and Universities System.

In 1996, the state created a companion program, *Raised Academic Achievement; Advanced Placement and International Baccalaureate Program*, to raise kindergarten through grade 12 academic achievement through increased student participation in pre-Advanced Placement, Advanced Placement and International Baccalaureate Programs. *Raised Academic Achievement* sought to increase the number of students who were prepared for these courses and receive college credit by successfully completing courses or programs and achieving satisfactory scores on related exams in Advanced Placement and International Baccalaureate programs, especially students from low-income backgrounds and other disadvantaged students.

*Raised Academic Achievement* enabled schools to develop three-year plans to achieve these goals through: 1) teacher professional development; 2) development of new courses; 3) vertical alignment of curriculum and instructional practice; 4) purchase of books, materials, supplies; 5) payment of course or program fees; and 6) utilization of on-line learning options.

Many International Baccalaureate schools used the funding to develop school-wide expansion of their programs at the middle school level to prepare more students to be able to access the IB course offerings at the high school level and to create a seamless transition for students from elementary through high school. Two school districts in Minnesota offer a district-wide seamless International Baccalaureate program from Kindergarten through twelfth grade for their students.

| <b>AP Grantee</b>             | <b>Award</b> | <b>AP Grantee</b>           | <b>Award</b>     |
|-------------------------------|--------------|-----------------------------|------------------|
| Bemidji                       | 19,750.00    | Moorhead                    | 240,750.00       |
| Brainerd                      | 116,518.00   | Orono                       | 92,610.00        |
| Burnsville                    | 396,850.00   | Osseo                       | 992,898.00       |
| Centennial                    | 194,069.00   | Red Wing                    | 132,940.00       |
| Columbia Heights              | 113,529.00   | Robbinsdale                 | 545,820.00       |
| Detroit Lakes                 | 59,393.67    | Rochester                   | 563,986.00       |
| Inver Grove Heights           | 155,331.00   | Roseville                   | 720,650.00       |
| Long Prairie-Grey Eagle       | 100,272.00   | South Washington County     | 281,038.00       |
| Minneapolis - Edison          | 306,242.00   | St Cloud                    | 161,600.00       |
| Minneapolis - North           | 168,238.00   | St Paul                     | 475,880.00       |
| Minnesota Transitions Charter | 59,944.00    | <b>Total Amount Awarded</b> | <b>4,208,172</b> |

| <b>IB Grantee</b>           | <b>Total Award</b>  |
|-----------------------------|---------------------|
| Minneapolis – Patrick Henry | 234,015.76          |
| Osseo                       | 137,045.00          |
| Robbinsdale                 | 555,630.18          |
| St Paul                     | 205,612             |
| South St Paul               | 403,243.06          |
| St Louis Park               | 563,168.00          |
| <b>Total Amount Awarded</b> | <b>2,098,714.00</b> |

## The Results

The results of these programs have been inspiring as evidenced by the dramatic increases in the number of students taking AP exams and earning scores of three or higher exams since 1999 (see attached charts).

According to the College Board's AP Report to the Nation, the percentage of students in the graduating class who scored a 3 or higher on at least one AP exam has increased from 8.1% in 2000 (the first year this data is available) to 14.2% for the 2008 cohort. The national average is 15.2% and the top performing states in the country reach 23%.

In 2009, IB programs were in place in twenty-nine 'Authorized' schools and delivered the rigorous and challenging International Baccalaureate curriculum. Fourteen high schools at the Diploma Program (DP) level, eight middle schools (MYP) and nine primary schools (PYP). The fourteen DP high schools engaged 2,196 students that took a total of 4,549 exams. In addition, twenty-four schools were involved in teacher training and program development associated with the 'Application' and 'Candidate' levels and seeking

authorization by the International Baccalaureate Organization (IBO). Nine ‘Prospective’ schools were conducting feasibility studies and an additional sixteen ‘Considering’ schools were exploring the possibility of implementing IB programs in their schools. Throughout the long process of completing Application A and Application B, IB schools are developing curriculum and starting the implementation process in preparation for becoming authorized. The curriculum and culture of IB programs have generated considerable interest in this type of program.

**The Need**

While significant progress has been made, achievement gaps persist for disadvantaged students and access remains limited in some portions of the state.

To fully realize the goals of these programs, Minnesota should:

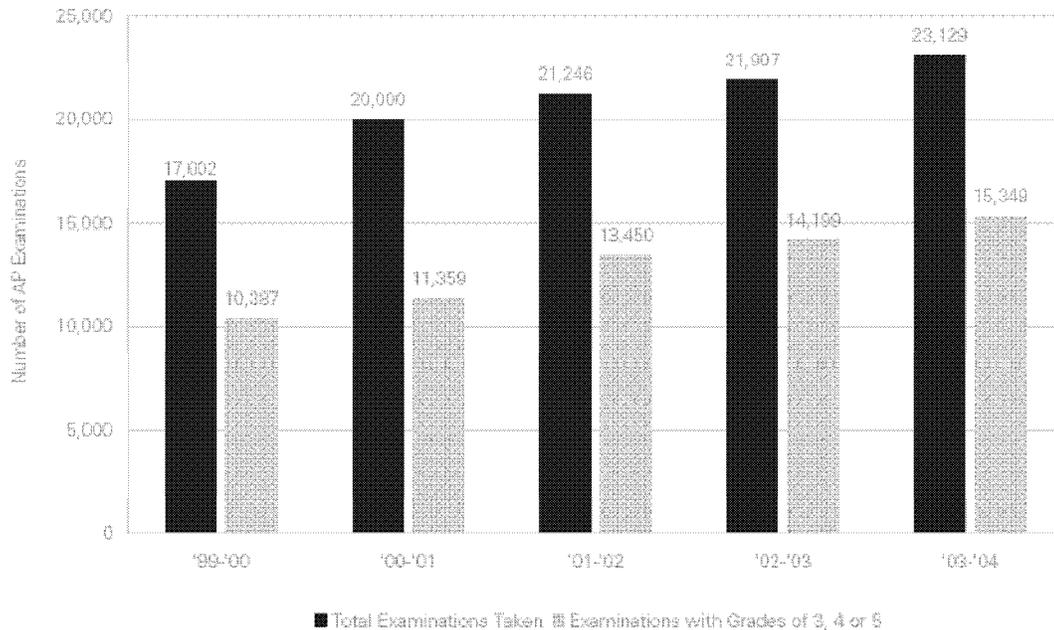
- Continue funding for the *Advanced Placement and International Baccalaureate Program*
- Reinstate funding for the *Raised Academic Achievement; Advanced Placement and International Baccalaureate Program*

For additional information:

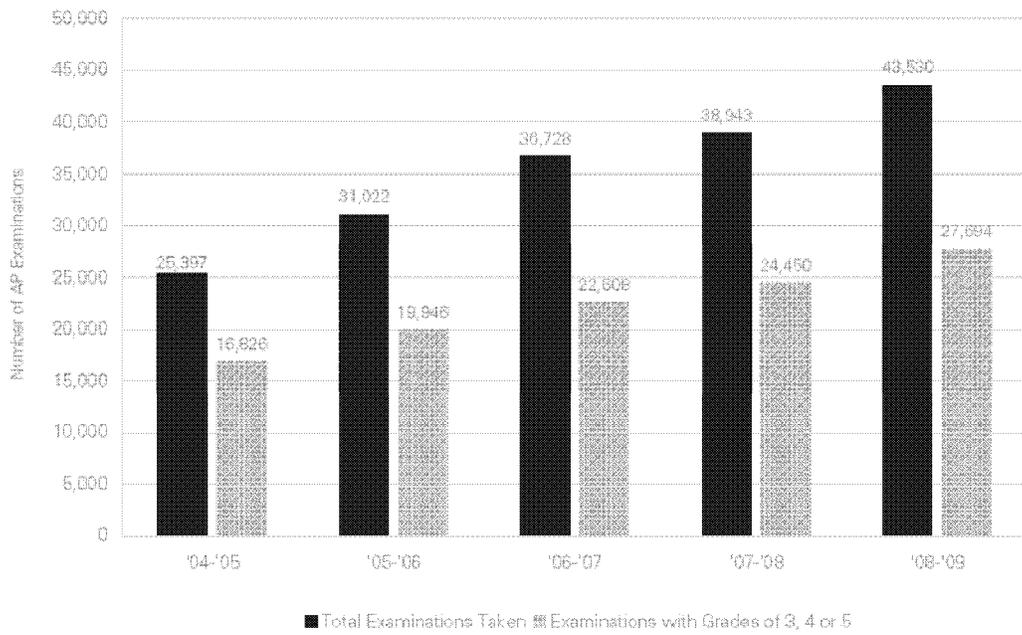
Karen Klinzing, Assistant Commissioner – Minnesota Department of Education

Tricia Renner, Director of Government Relations – The College Board

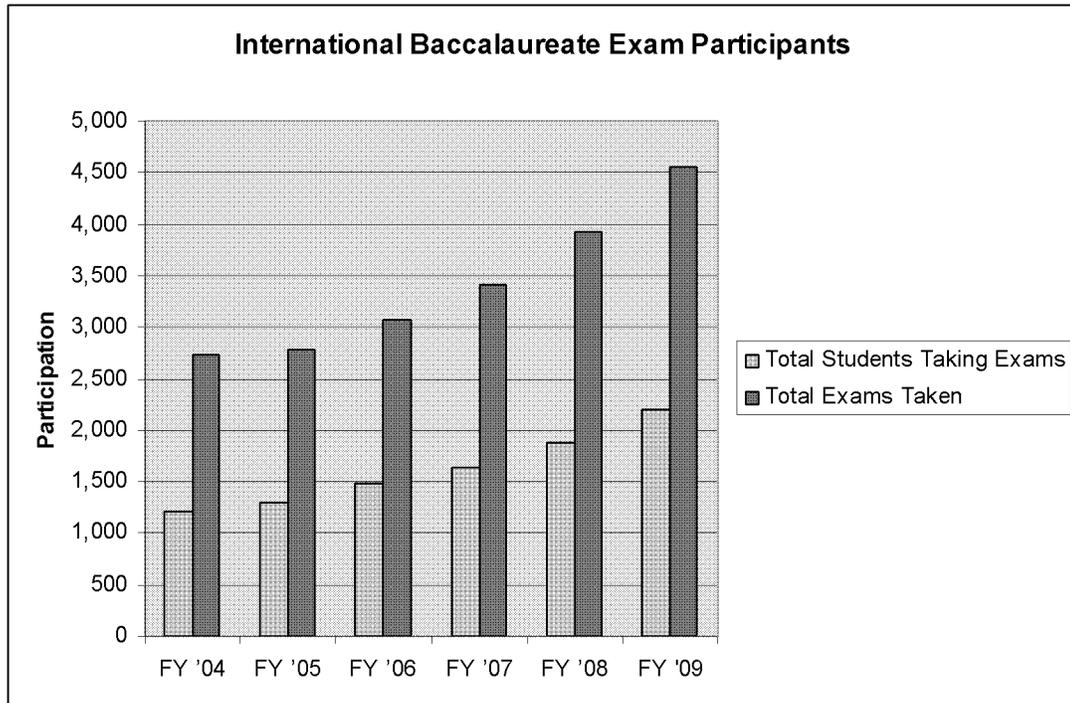
**AP: Number of Examinations & Number of Examinations with Grades of 3, 4 or 5**



**AP: Number of Examinations and Number of Examinations with Grades of 3, 4 or 5**



**International Baccalaureate Exam Participants**



Minnesota

International Baccalaureate  
Raised Academic Achievement

*Executive Summaries*

*2007-2009*

## **Minneapolis Public Schools, ISD #1**

Innovative Grant Title: Raised Academic Achievement – International Baccalaureate Programs

Site Name: Patrick Henry High School

Contact Name: Robin Krueger

Contact Phone: 612-668-2016

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### **Executive Summary**

#### **Major Initiative(s)**

Our grant included implementing the International Baccalaureate Middle Years Program (IB MYP) in grades nine and ten at Patrick Henry High School. Previously, we had a “pre-IB” program that was designed specifically as a feeder to our Diploma Program (grades 11 and 12). Students had to go through an application process in order to be considered for the program, and many applicants did not meet our criteria. Our aim in implementing IB MYP was to increase access to the IB program (in grades 9-12), focusing on increasing numbers and success of minority students and students qualifying for free and reduced-price lunch.

In 2008, we began implementation of the IB MYP and removed application requirement for grades 9 and 10 of the IB program, allowing any student who wanted to enter the IB program to do so. In 2009, all our incoming 9<sup>th</sup> graders will be enrolled in the IB MYP, and we will roll whole-school implementation to 10<sup>th</sup> grade in 2010.

In the summer of 2008, we implemented the Summer Science and Writing Institute, which targeted students who were academically capable, but underperformed during their middle school years. The institute was designed to engage students in rigorous science and writing curriculum in order to promote their academic success in the

coming school year. We also wanted to use the Institute as a means for recruiting students into the IB MYP.

### **Implementation Procedures**

In 2007, we began with sending teachers (at least one from each subject area and grade) to IB MYP level 1 training. Teachers who attended training followed up during the summer of 2008 in writing curriculum aligned to the IB MYP.

In the fall of 2008, an IB MYP Coordinator was hired (full-time) to coordinate training and professional development as well as oversee the IB MYP application process. At fall workshops in 2008, the IB MYP Coordinator provided the entire staff with an overview of the IB MYP, including the general precepts as well as the specifics of the curriculum model. After hearing more about the program, both from the coordinator, as well as the staff who had attended training, the entire staff of the school voted to transition from our Small Learning Community (SLC) model in the 9<sup>th</sup> and 10<sup>th</sup> grades (students were enrolled in one of the SLCs: IB, Open, Engineering, or Commercial and Fine Arts), and instead move to offering the IB MYP to all of our 9<sup>th</sup> and 10<sup>th</sup> grade students, with expanded implementation beginning with the class of 2013. Our 9<sup>th</sup> grade team was provided with a team preparation period (in addition to the standard personal preparation period) to work on curriculum and support student academic success for the entire 2008-09 school year.

In October, we submitted Application A, and the application was accepted in January of 2009. We continued staff training, focusing on level 1 training for some teachers, while moving on to level 2 and 3 training as staff became more familiar with the program.

In April of 2009, we hosted a two-day site visit from our assigned consultant, and followed up with continued work on application B (reflection templates). Many teachers also began 6-8 week online unit writing classes which they finished in May.

In May of 2009, we began articulation work with our proposed partner school, Northeast Middle School. Teachers met as a whole group to learn about the

expectations for partner schools, then divided into subject area groups to share unit plans, study MYP assessment criteria, and begin mapping curriculum for the entire 5-year span.

In June of 2009 teachers engaged in extended time professional development, planning for the upcoming school year through unit writing. The 9<sup>th</sup> grade teachers also attended a two-day teaming workshop in which they established norms and goals for their work in the upcoming school year. The workshop was facilitated by Paul Spies.

### **Observations**

We collected data on the demographics of students who participated in the IB MYP as well as their academic success as measured by GPA. The data begins with the 2006-07 school year, but given that the grant was not received until after the school year had already begun in 2007, full implementation did not happen until the 2008-09 school year. In coming years, we will be able to more fully understand the impact of IB MYP, particularly as we begin rolling it out to the whole school in the coming year. We will also be able to measure long-term effect in the coming years as we track student enrollment in higher-level math and science classes as well as scores on IB DP exams.

Overall participation in the program increased markedly for 9<sup>th</sup> graders in the 2008-09 school year, going from 76 to 90 students (an increase of over 18percent). At the same time, however, average GPA dropped from 3.05 to 2.89. The drop isn't dramatic, but does indicate a need to make sure that as we increase access to the program, we also increase support so that students are academically successful.

Participation broken out by ethnicity shows fewer clear trends over the 3 years. For instance, the percentage of African American students in the program in 9<sup>th</sup> grade dropped from 2006-07 to 2007-08, but then surged back up in 2008-09 for no net difference. Trends for our Asian/Pacific Islander students show steady drops in percentage of participation over the three years (although the actual number remained relatively steady). As we continue program implementation and data collection in the coming years, we will watch for trends.

Although the MCA data was not included in this report, our 2009 scores for Hispanic and American Indian students look to be markedly better for students who participated in IB, as compared to those who did not.

In the ninth grade, students qualifying for free lunch increased from 39-43percent, while reduced lunch numbers dropped by 2percent, and full price lunch dropped by 3percent. 10<sup>th</sup> grade numbers are less reliable given the large percentage (20-26 percent) who does not provide information at all.

### **Conclusions**

Overall, we do have more students entering the IB program, including a more diverse body of students. The students are largely successful in spite of a slight dip in average GPA. It appears the IB MYP is being implemented in such a way that most students are successful in the program (despite abandoning entrance requirements in the 2008-09 school year), which bodes well for the coming year as all of our freshmen become IB MYP students. More interesting will be the longer-term data as we implement the IB MYP school wide, and begin to see whether this impacts students numbers in the IB DP as well as MCA scores.

## **Osseo Public Schools, ISD #279**

Osseo-Maple Grove, ISD #279

North View IB World School

Innovative Grant Title: Raised Academic Achievement – IB Programs

Site Name: Osseo Public Schools, ISD #279

Contact Name: Peg Vickerman

Contact Phone: 763-585-7264

Contact Email: vickermanp@district279.org

### **Executive Summary**

#### **What is the project?**

Our Mind the Gap project will expand the International Baccalaureate Middle Years Program in ISD 279 from grades 7-10 to grades 6-10. Planning for the expansion took place October 2007-June 2008. Implementation of the grade six (Level I) IB MYP took place during the 2008-09 school year with 75 students. Our intention is that the Level I program will be so successful, that additional seats will be needed in subsequent years.

#### **How will our plan increase student access and participation?**

Mind the Gap will increase student access and participation in the IB MYP program by adding Level I for 75 grade six students which will result in a 5percent increase in North View MYP enrollment. The target for enrollment in Level I is 40percent economically disadvantaged students. We are mindful of ISD 279's commitment to equity and integration for all students in our district and believe this project supports efforts for a more racially and economically balanced learning community.

#### **How will our plan increase student achievement?**

A significant body of research shows that when students are involved in integrated learning opportunities, achievement increases for all students. We anticipate increased achievement for all students to hold true in Level I MYP as the diverse community of learners at North View expands. Due to the nature of MYP, for the first time grade six students will be engaged in learning through best practices common to MYP (but not often integrated in traditional elementary classrooms) including inquiry learning, differentiated instruction, cooperative learning, reflective thinking, use of the design cycle, and incorporation of the Areas of Interaction. With the placement of Level I in the junior high school setting, these grade six students will have value-added experiences that include:

- Access to instruction in Language B (French or Spanish).
- Visual arts taught by an arts specialist.
- Independent learning projects facilitated by the School wide Enrichment Model (SEM) teacher.
- New opportunities in higher math.
- Hands-on science in a science lab.

Two of the content areas in which students will have increased access over grade six students in a traditional elementary school are science and mathematics. National and state attention on Science, Technology, Engineering and Math (STEM) disciplines acknowledges the importance of academically rigorous and stimulating environments for student engagement in learning, and engaged students achieve to higher levels.

In addition to expanding the breadth of the IB MYP in ISD 279 by adding Level I, and increasing the number and diversity of students in the program, our Mind the Gap project is dedicated to student success. An essential component of student success is a smooth transition from level to level. This is especially critical for students entering at Level I since they are not only entering a new program, but a new school as well. According to *Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform* by the National Association of Secondary School Principals, “educators must understand what is required of students at every stage and ensure a smooth transition academically and socially. Too often transition programs at schools end after making sure that incoming students’ can find their way to class and their lockers.” At North View, ongoing support for the smooth transition will be provided to students through an IB Academy summer orientation, peer mentoring by trained Student Ambassadors, strong teacher-student-parent relationships, heterogeneous classes, and bridges between school and community.

These strategies are becoming part of the North View culture, and part of what every new student experiences whether they enter in Level I or higher.

## **Robbinsdale Public Schools, ISD #281**

Robbinsdale Cooper High School

Sandburg Middle School

Lakeview Elementary

Innovative Grant Title: Raised Academic Achievement – IB Programs

Site Name: Robbinsdale Public Schools, ISD #281

Contact Name: Brenda Damiani

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### **Executive Summary**

The Raised Academic Achievement Grant was instrumental in expanding the number and diversity of students in the K-12 IB Program. Targeted money was essential in this process and the district would not have been able to meet the stated goals without these targeted funds.

### **Initiatives**

The grant covered three sites with the goal of expanding the International Baccalaureate Program (IB) K-12. The Primary Years Program (PYP) was implemented at Lakeview Elementary. They expanded the breadth of courses available to students at Lakeview Elementary by providing support for Spanish language instruction, as well as by hiring a science teacher and purchasing materials to enrich the district's science curriculum for all students K-5. Lakeview offered family sessions in the media center, as well as open media time for literacy activities during the summer.

At Sandburg Middle School the major initiative was to bring the entire 6<sup>th</sup> grade into the Middle Years Program (MYP) IB Program and continue to go school-wide by adding 7<sup>th</sup> and 8<sup>th</sup> grades with each successive year. Sandburg added a Spanish teacher to cover the increased numbers of students who must, by IB mandates, take a second language. To support growing the diversity of the IB program,

Advancement Via Individual Determination (AVID) was added at grades 7 and 8. A 'summer academy' for incoming new 7<sup>th</sup> and 8<sup>th</sup> grade students joining AVID or IB in the fall was added.

At Cooper High School, the major initiative was to increase the number and diversity of students in the IB Program. An Open Access Coordinator was hired to recruit, enroll, monitor and support open access students. Additional teachers were added to offer more sections of IB courses. Cooper also offered summer bridge activities for students who needed extra support to be successful in IB courses.

All schools offered extensive professional development for teachers to support expanding the IB Program K-12. In addition, materials were purchased to expand the program.

### **Implementation Procedures**

The district printed and distributed brochures for Lakeview, as well as ordered promotional materials directly from IB, which highlights the Primary Years Program. The Primary Years Program requires that students take a second language. Grant funds were used to hire the Spanish teacher. In addition, Rosetta Stone software was purchased for school computers, to be used to enrich language instruction. A science teacher was hired to support and enrich the district's science curriculum. Students had class with the science teacher once per week in his classroom, and he was also utilized to do science-related guided reading with students in grades 3-5. Lakeview staff was also able to participate in professional development with their MYP and Diploma Program (DP) colleagues from Sandburg and Cooper. On August 29<sup>th</sup>, 2008, 125 staff from the 3 IB programs came together for a full day workshop related to the K-12 IB Continuum, led by an IB trainer from Toronto, as well as the coordinators from the 3 programs. The feedback from staff was that they felt tremendous value in working across grade levels and programs to learn about the similarities and differences in the 3 levels of IB programs, and to work together to understand the way each program functions. Staff visited other PYP schools in the Twin Cities. This was extremely helpful for staff to see how other schools implement the program, and they were able to bring ideas back to share with their colleagues at Lakeview. Schools visited were Earle Brown Elementary in Brooklyn Center, Evergreen Park World Studies Elementary in Brooklyn Park, and Highland Park Elementary in St. Paul.

Sandburg hired an AVID coordinator in 2008. The AVID coordinator and the school principal met regularly to make sure a strong process was created that would ensure the right candidates for the classes, a good site team, a seamless pathway to the well-established AVID programs at our two high schools, and a viable support system for students who would be encouraged to enter the most challenging tier or the school's IB program.

The MYP coordinator planned a Summer Academy, which was held at Robbinsdale Cooper. New 7<sup>th</sup> and 8<sup>th</sup> grade IBMYP and AVID students shared the two-week academy and learned attributes and skills inherent to both programs. Reports from students entering Application MYP (the highest tier) reported that the academy was both fun and very helpful in giving them not only the terminology, elements and practices they would need to "hit the ground running" in the fall, but that they built a small group of friends they could look forward to seeing and knowing these students were in the same boat of 'newness' to the programs.

In September of 2008, Sandburg opened its doors to an MYP that spanned the entire 6<sup>th</sup> grade. All teachers who had not been trained at this level went to official MYP training during the previous summer and throughout the year. Full-grade meetings were held every 3 weeks with the principal and coordinator to discuss issues and present ideas. The experienced Application MYP teachers acted as mentors to the new teachers. They worked during the year, using substitute pay from the grant, to write curriculum and plan activities.

Cooper High School hired a Open Access Coordinator and additional teachers to expand the IB program and increase the diversity of the program. Implementation was the result of ongoing communication between the IB coordinators, The Open Access Coordinator, the counselors, and teachers. Recruitment activities included:

- Letter home from principal to all non-IB students earning a 3.0 or higher inviting them to an evening event to hear about IB;
- Chance to sit in on IB classes;
- Promise of academic support
- Recommendations by and encouragement from teachers
- Visits in non-IB classes by IB student speakers

Support was provided for struggling students and teachers held frequent review and support sessions. Teachers reviewed their instruction and assessment practices as they pertained to students not ready for the rigor of IB. Presentations were made at the middle school in order to encourage students to register for IB courses. Summer

support activities helped prepared students that were new to the program. Teachers met in teams and participated in continuous professional development.

All schools were able to purchase instructional materials to support the expansion of the IB and AVID programs.

### **Observations**

Each school was successful in meeting the goals of the grant. PYP was fully implemented at Lakeview Elementary. MYP was expanded to all 6<sup>th</sup> grade and will expand to 7<sup>th</sup> grade this year. The AVID program was implemented successfully at Sandburg, with the AVID students registered for the most challenging courses for next year. Cooper expanded its enrollment in the IB program and increased the diversity of the program. See appendix for internal evaluation questions and data.

### **Conclusions**

All PYP students have the opportunities for second language acquisition, learning through inquiry and more in-depth science instruction. Many of Lakeview's students are from diverse backgrounds, which make opportunities such as the IB program so important for their development as global citizens and critical thinkers. The challenge will be to continue to grow and improve the program during extremely tight financial times. Families have been enthusiastic about the growth of the IBMYP into an all-school program. Where there is currently only a continuation of the application level of the MYP, there will soon be a need to expand MYP across the entire 9<sup>th</sup> and 10<sup>th</sup> grades as our middle school is the only feeder to this high school. Cooper High School has given hundreds of students a chance to learn at a more rigorous pace and to improve their self-confidence when they succeed. The grant has allowed courses to grow and expand. Textbooks are up to the standards for teaching IB and provided new ways for teachers to work with students with challenged backgrounds. Classes have been enriched by the presence of students not traditionally included in rigorous classes. They have brought new perspectives and ways of looking at academics. All programs have benefited from a strong K-12 articulation through professional development activities through the grant period.

**St. Paul Public Schools, ISD #625**

Highland Park Junior High

Highland Park Senior High

Ramsey Junior High

Central Senior High

Innovative Grant Title: Raised Academic Achievement – IB Programs

Site Name: St. Paul Public Schools, ISD #625

Contact Name: Ashley Cannaday

Contact Phone: 651-744-1303

Contact Email: Ashley.Cannaday@spps.org

**Executive Summary**

Saint Paul Public Schools (SPPS) International Baccalaureate (IB) project was developed to expand the breadth of IB courses and to increase the number and diversity of students who participate and succeed in IB courses in the district. This project focused on 1) creating two articulated IB pathways in SPPS; and 2) increasing the number of low-income students and students of color who enroll in and succeed in the IB Program in Saint Paul, specifically at Highland Park Junior High and Ramsey Junior High, both have applied to be certified as IB MYP schools. Along with these two goals, the project helped the district better understand and incorporate the IB Program.

When the grant was initiated five schools were IB-certified as IB World Schools in Saint Paul, two at the elementary level and three at the high school level. The funds provided by MDE enabled SPPS to incorporate the IB MYP into the district's curriculum by instituting the IB certification process at Ramsey Junior High and Highland Park Junior High (feeder schools into Central Senior and Highland Park Senior).

In 2009 SPPS submitted two applications for Middle Years Program (MYP). Both MYP applications are strong; one received verbal assurances that they should be authorized in the summer of 2009. If both applications are approved SPPS will have two IB pipelines that will increase the number and diversity of students completing the IB Diploma Program (DP) by providing them with the needed skills and knowledge during the Primary Years Program (PYP) and MYP years. Additionally, the grant supported the development of foundational curriculum, scope and sequence work, student and family recruitment and site reorganization.

### **Implementation Procedures**

SPPS instituted the MYP certification process at Ramsey Junior High and Highland Park Junior High. This project also will increase and better ensure student access and academic achievement through:

- Providing IB MYP professional development to teachers at both the junior high and senior high levels
- Building job-embedded communication and training between school IB PYP, MYP, and DP coordinators that will allow the development of an articulated K-12 IB curriculum between schools
- Formalizing the relationship between the Advancement Via Individual Determination (AVID) and IB MYP programs as a means of better identifying and reaching students not traditionally served by the IB Program, then providing those students with the supports necessary for success

### **Observations**

Data collected and baseline data included and observations:

- Percent and Number of Students who successfully completed pre-IB courses: by School.
- Percent and number of student who successfully completed pre-IB courses in the categories of: 1 IB course or 2 or more IB courses.
- AVID student demographics as compared with whole school demographics.
- IB course completion (2008-2009)
- Pre-IB course completion by subject area, by grade, and by school (2008-2009).

## **Conclusions**

International Baccalaureate programs now exist at all levels, K-12. The MYP candidate schools provide an important link between the elementary PYP schools and the three high school Diploma Programs sites. The “all school” nature of the PYP and MYP ensures that students of all ability levels receive the kind of background that will equip them to succeed in the DP. Support programs such as AVID provide additional support to students attending the MYP and DP schools. District structural changes will continue to support student access to and success in MYP and Diploma Programs.

The MYP articulation between partner schools has begun to be successful; however additional marketing to students and families will increase the number of students who choose IB participating schools.

**St. Louis Park Public Schools, ISD #283**

St. Louis Park Senior High

St. Louis Park Junior High

Aquila Elementary

Cedar Manor Elementary

Peter Hobart Elementary

Susan Lindgren Elementary

Innovative Grant Title: Raised Academic Achievement – IB Programs

Site Name: St. Louis Park, ISD #283

Contact Name: Robert Laney

Contact Phone: 952-928-6067

Contact Email: laney.bob@slpschools.org

**Executive Summary**

The St. Louis Park Schools had three major areas of focus for this grant. The first area of concentration was on training all elementary teachers in the Primary Years Program (PYP), providing time for elementary staff to write planners, and to prepare all four elementary schools for the final PYP authorization process. The second was to increase student participation in International Baccalaureate (IB) courses at the high school by expanding the number of IB course options in non-traditional areas and reducing class sizes so underrepresented populations would be more comfortable taking IB classes. The last area of focus centered on grades seven through tenth. We undertook an extensive exploration into the viability of implementing the Middle Years Program into our system.

Implementation proceeded at each site. The elementary schools were led by part-time PYP coordinators. All elementary teachers received initial IB training. Planners were written at all four elementary schools. All four schools submitted

Application B and are currently preparing for their authorization visits. All four will have had authorization visits by January 1, 2010.

The Senior High was led by the IB Coordinator, Bruce McLean. Courses, in non-traditional areas, were identified and offered, IB Cinema being an example. Materials were purchased for these courses and for the Media Center to support all IB courses. Class room materials were also purchased for other courses so students from underrepresented populations would be able to access them, such as calculators for IB Math.

Thirty-two teachers at grades 7 through 10 were trained in the Middle Years Program (MYP). Staff at both the Junior and Senior High Schools did an implementation analysis of MYP. Staffs in both buildings thought the program would benefit all students and were in favor of implementation.

Prior to receiving the grant we had completed a study on the PYP and had made a decision to move forward with implementation. The grant enabled us to move from about 20percent of all elementary staff members trained in PYP to all staff members trained. It also provided time for all staff members to develop and implement planners for all six areas of study.

The grant also enabled us to do a thorough study of the MYP. This wouldn't have been accomplished without the grant. Thirty-two teachers were trained in the MYP. They were able to lead thoughtful discussions about the MYP with fellow staff members. Staff consensus supports implementation of the MYP. We are currently evaluating our financial position to see if that is possible.

In 2006, our baseline year, we had 140 students take 281 IB tests at the Senior High School. In 2009, the last year of the grant, we had 214 students take 476 IB exams an increase of almost 70percent participation. This along with our participation in the Advanced Placement program, allowed us to be ranked number one in the State of Minnesota and number 102 nationally in the Newsweek magazine ranking of high schools. Additionally, in 2009, we have 81 minority students taking 167 International Baccalaureate, Advanced Placement and Honors courses at the Senior High School.

St. Louis Park Schools is looking forward to having authorized PYP programs. Based upon our experience with the Diploma Program authorization, we know there will be some concerns that we will have to address to be granted full program status. The PYP coordinators are currently planning new phases of staff training so

that we can improve what we are doing. We are also exploring ways to give teachers more time to reflect and prepare for instruction. This year we added four more early release days, district-wide, to enhance our work. At the Diploma level, the high school staff is constantly working with students to increase participation in our IB and AP programming. Our graduates have reported to us that IB and AP course work are the best preparation they could have had for their post-secondary education. One of the primary reasons for our interest in implementing MYP is to better prepare more students for the level of rigor and the development of thinking processes necessary to be successful in the Diploma Program and in AP courses. St. Louis Park Schools will continue to search for the resources required to implement MYP.

St. Louis Park Schools has been aggressive in the development of rigorous and thoughtful programming for its students. Those students that take advantage of what is offered are generally well prepared for post-secondary programming. We believe that the International Baccalaureate programs are an excellent structure for what we are trying to achieve. Our goal is to continue to improve what we are doing and to expand the programming to all of our students.

## **South St. Paul Public Schools, Special District #6**

South St. Paul Secondary  
Kaposia Education Center  
Lincoln Center Elementary

Innovative Grant Title: Raised Academic Achievement – IB Programs

Site Name: South St. Paul Public Schools – Special School District #6

Contact Name: Jane Stassen, Director of Curriculum and Instruction

Contact Phone: 651-457-9416

Contact Email: [jstassen@sspps.org](mailto:jstassen@sspps.org)

### **Executive Summary**

#### **Major Initiatives**

There were three major initiatives supported by this grant. The first was to become an International Baccalaureate Primary Years Program. We have met this goal; both of our elementary schools are authorized to offer the program. All students in the South St. Paul elementary buildings are participating in the IB curriculum. This grant has helped us to establish some key pieces for this program implementation.

The second initiative was the requirement to offer a second language to all students from the age of seven. The third initiative was to increase teachers' skills to better meet the changing needs of our students and to support the integration of the Minnesota Standards into the integrated PYP curriculum.

#### **Implementation procedures**

The process of becoming an authorized International Baccalaureate program is time-intensive and requires a great deal of professional development. We used staff meetings, weekly team meetings, professional development days, summer curriculum writing days, and off-site IB trainings to accomplish our goal. We studied the IB Standards and Practices and reflected on our building's strengths and weaknesses. Finally we had an authorization team visit and critique our efforts. We received our authorization spring 2009.

As a result of this work we now offer Spanish instruction to all of our students. We accomplished this with the support of the grant which provided money for curriculum

writing and the initial costs of the Spanish teachers. We also hired Amity Interns from Colombia who supported our Spanish teachers and worked with our students.

We were also able to offer training to all new staff and send experienced teachers to advanced training in IB practices. Over the past two years we have sent 22 teachers to training and will be sending 7 more this summer. We brought in two noted authors to work with our staff. John Barell worked on inquiry teaching strategies with the staff over the course of two days. Gary Howard visited the district several times, working with administration and teachers on culturally responsive teaching strategies.

We have almost completed the integration of the Minnesota Standards into our PYP curriculum. Science, social studies, arts, some technology standards, and some language arts standards are being taught in the PYP units of inquiry. We worked with teams of teachers over the summer to integrate these standards, revise units of inquiry, and improve unit assessments. To address the academic needs of students the district began a Literacy Initiative. The district set aside one day per month for an early release of students. The time was used for PLCs that focused on building teacher expertise in the components of reading instruction and balanced literacy. The district provided workshops for teachers on guided reading and began the purchase of books for a guided reading library. The library will be used for reading instruction and will also support the units of inquiry topics.

### **Observations**

One goal of this implementation has been to raise academic achievement for all students. At the same time that we were moving forward with the PYP initiative, we were also focusing on the academic needs of our students and their performance on the MCA-II state assessments. The PYP focuses on student achievement by making what students learn relative to their lives. This relevance is achieved through the PYP Unit Planners which assist teachers in creating units of study that have an action piece to them. Teachers have also been trained in interpreting data from the NWEA assessments and determining interventions that are appropriate for students based on that data.

**(B)(3) – Exhibit E: High School Redesign Framework**

***SYSTEMIC HIGH SCHOOL REDESIGN: BUILDING A MINNESOTA  
MODEL  
FRAMEWORK***

Governor Pawlenty’s Education Council determined a vision for the education of Minnesota students. It directs that “Minnesota’s investment in education help *all* students achieve, at a minimum, a P-14 education *that will enable them* to develop a strong work ethic, gain competitive employment, pursue lifelong learning, become engaged citizens for the 21<sup>st</sup> Century, and *enhance their quality of life.*” All of these programs are aligned with Governor Pawlenty’s and Commissioner Seagren’s call for more academic rigor and with legislative initiatives for expanding graduation requirements in math and science, providing all schools with the Educational Planning and Assessment System (EPAS) for students along with expanded access to Advanced Placement (AP), International Baccalaureate (IB), and College Level Examination Program (CLEP).

The intent of the *Systemic High School Redesign: Building a Minnesota Model Framework* is to assist high schools in achieving this vision by providing research-based information and resources to support the five core components of the initiative. Core components include:

- Rigorous and relevant course-taking for all students, especially at transition points.
- Personalized learning environment for each student, with the support of parents and other adult mentors.
- Multiple pathways to postsecondary training or college to achieve a minimum K-14 education.
- High-quality teacher and principal leadership.
- Student assessment and program evaluation data used to continuously improve school climate, organization, management, curricula and instruction.

*Systemic High School Redesign: Building a Minnesota Model Framework* is available online for all high schools to assist with their high school improvement initiatives. The framework lists ideal characteristics of the research-based five core

components for high school improvement. For each of the characteristics, the framework provides lists of possible tools to measure these characteristics, potential strategies for implementation, possible resources to explore, and advisor guidance. Supporting individual high school improvement plans is a priority, yet one redesign model does not fit all schools. We recognize how challenging it is to redesign a complex high school to educate all students for a growing global economy.

*Systemic High School Redesign: Building a Minnesota Model Framework* was developed by the Minnesota Department of Education in conjunction with NCCC (North Central Comprehensive Center)/McREL (Mid-Continent Research for Education and Learning) during the first two years of the pilot initiative. Principals involved in the pilot also contributed to the Framework.

## **Minnesota Core Components of Successful High Schools**

### **Summary of Core Components and Characteristics**

#### ***Component One: Rigorous and relevant course-taking for all students, especially at transition points***

- 1.1 All students are engaged in a rigorous, standards-based core academic curriculum
- 1.2 All students experience accelerated learning opportunities
- 1.3 Curriculum is connected to real-world contexts that build on student interests, needs and community resources
- 1.4 Structures/programs are in place to ensure that students stay on track for graduation
- 1.5 All students experience instruction that motivates and challenges them in every classroom

#### ***Component Two: A personalized learning environment for each student with the support of parents and other adult mentors***

- 2.1.1 The school intentionally fosters positive relationships among all stakeholders (staff, students, parents, community)
- 2.2 Structures, behaviors, and activities are in place to connect all students to adults within the school and within the community
- 2.3 Instruction addresses students' interests, learning styles, aptitudes and choices

- 2.4 Students are involved in decision-making about their academic development
- 2.5 The school provides students with opportunities for leadership and service in the school and the community

***Component Three: Multiple pathways to postsecondary training or college to achieve at least a K-14 education***

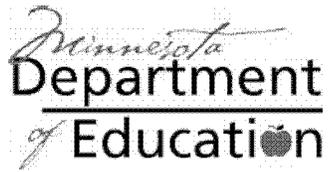
- 3.1 Partnerships between the school and postsecondary institutions provide a variety of options for postsecondary education
- 3.2 Programs that support post-secondary access are available for all students
- 3.3 Rigorous career and technical (CTE) courses are offered in high-demand fields, leading to certification or other industry-recognized credentials
- 3.4 Students are actively involved in early and ongoing academic and career guidance and planning
- 3.5 Partnerships that create opportunities for students to pursue work-based learning and internships exist between the school and area businesses

***Component Four: High-quality teacher and principal leadership***

- 4.1 Principal is an advocate and spokesperson for the school's continuous improvement efforts
- 4.2 The principal and teacher leaders monitor all aspects of the school's continuous improvement efforts
- 4.3 Structures are in place that provide all staff with opportunities to influence and exercise leadership, school activities, and policies
- 4.4 The principal and teacher leaders foster a culture of collective and collaborative responsibility for student success among all staff
- 4.5 The principal understands the change process and anticipates and manages the effects of change on stakeholders

***Component Five: Use data for improvement***

- 5.1 All staff use data to improve curriculum and instruction
- 5.2 All staff use data to improve school culture, organization and management
- 5.3 The school uses a systematic, data-driven school improvement planning process
- 5.4 Staff assess and report the impact of improvement policies and practices on all student populations to stakeholders



**HIGH SCHOOL REDESIGN:  
*CONNECTING FOR HIGH SCHOOL TO  
POSTSECONDARY SUCCESS  
INITIATIVE***

**Prepared by Angie Judd,  
High School Specialist  
January 8, 2010**

# Center for Postsecondary Success

## Minnesota Department of Education

### HIGH SCHOOL INITIATIVES

*The Minnesota Model: Connecting for High School to Postsecondary Success Initiative 2009-2010*

#### **Outcomes:**

- Increased access and use of the tools, strategies, and resources identified in the *Systemic High School Redesign: Building a Minnesota Model Framework* to increase student achievement and postsecondary success
- Increased skills for implementing strategies related to the Core Components identified in the *Systemic High School Redesign: Building a Minnesota Model Framework*
- Established networks of high school principals committed to actively participating in high school to postsecondary success initiatives to increase student achievement in all regions of the state
- Established networks of high school principals supporting one another's work related to the Core Components identified in the *Systemic High School Redesign: Building a Minnesota Model Framework* in all regions of the state.

- Established networks of high school principals sharing information about successful strategies and resources using the MDE SharePoint on-line networking site in all of the MASSP Divisions in the state
- Established networks of high school principals sharing information about successful strategies and resources with regional and state groups

**Indicators:**

- 100 % of participants in the initiative have accessed and used the *Systemic High School Redesign: Building a Minnesota Model Framework*
- 100% of participants have implemented a strategy related to one of the Core Components of *Systemic High School Redesign: Building a Minnesota Model Framework* and collected data indicating its success
- Networks of high school principals committed to actively participating in high school to postsecondary success initiatives to increase student achievement are functioning in 100% of the MASSP divisions
- Networks of high school principals are supporting one another's work related to the Core Components identified in the *Systemic High School Redesign: Building a Minnesota Model Framework* in 100% of the MASSP divisions
- Networks of high school principals are using the MDE SharePoint on-line networking site to share information about successful strategies and resources in 100% of the MASSP divisions
- Networks of high school principals are sharing information about successful strategies and resources with regional and state groups

During 2008-2009, the Minnesota Department of Education invited 4 divisions of MASSP to participate in the *Connecting for High School to Postsecondary Success* initiative with MDE and the North Central Comprehensive Center Division/Mid-Continent Research in Education and Learning (NCCC/McREL) staff. A MASSP division needed at least six high school principals in order to participate. Four MASSP divisions signed up to participate in 2008-2009: Northern, Northeast, Central, and Southwest. Thirty-three principals were involved.

The goal was to increase high school student achievement and postsecondary attainment by offering assistance to a select number of high school principals who were willing to attend trainings and support one another's work related to one of the

core components identified in the *Systemic High School Redesign: Building a Minnesota Model* initiative.

Participating principals needed to commit to four meetings during the year, focus on one core component, attend a data workshop (if not already attended), share with regional and state groups, and participate in SharePoint and the redesign framework.

Evaluations from all of the meetings were very positive and included comments such as the following:

- “This information is very important to me. As a member of the principal Academy Network (NISL), this is a good reminder of building leadership in the school system.”
- “It is always great to have time to network with colleagues and educational professionals.
- “Looking forward to working with this group, using resources provided, and planning for student achievement.”

Principals were also asked to submit reports about the results of their school improvement strategies in June. Results of initiatives related to the core components from the *Systemic High School Redesign: Building a Minnesota Model* were positive. Principals reported increasing reading comprehension, math comprehension, attendance rates, and course passing rates as well as decreasing discipline reports. Specific examples include the following:

- East High School in Duluth had more than half of the students with attendance problems, who were targeted for interventions, improve in attendance and grades.
- Denfeld High School in Duluth provided staff training on de-escalation techniques, understanding racial identity development, bully prevention and intercultural effectiveness, and the number of behavioral referrals was reduced by 551.
- Jackson County Central High School developed interventions for students who were failing classes and in need of additional support, reducing the number of targeted students failing classes from 15% to less than 1%.
- At Princeton High School, 50% of the failing ninth graders who participated in a personalized study group did not have failing grades after the intervention.

Topics, dates, and locations for the 2008-2009 meetings were as follows:

**Round 1:** “Rigorous and Relevant Course Taking for All Students”

- Oct. 14 MASSP- Southwest Division Principals, New Ulm
- Oct. 15 MASSP-Central Division Principals, Monticello
- Oct. 21 MASSP-Northeast Division Principals, Virginia
- Oct. 22 MASSP-Northern Division Principals, Thief River Falls

**Round 2:** “Personalization” and “Multiple Pathways”

- Jan. 12 MASSP- Southwest Division Principals, New Ulm
- Jan. 13 MASSP- Central Division Principals, Monticello
- Jan. 20 MASSP- Northern Division Principals, Fosston
- Jan. 21 MASSP- Northeast Division Principals, Proctor

**Round 3:** “High Quality Teacher and Principal Leadership”

- Mar. 10 MASSP-Central Division Principals, Monticello
- Mar. 13 MASSP-Northeast Division Principals, Grand Rapids
- Mar. 31 MASSP- Southwest Division Principals, New Ulm
- Apr. 8 MASSP-Northern Division Principals, Brooks

**Round 4:**

- June 22 Postsecondary Success for ALL Conference (for principals and teams)  
St. Cloud

**High School Data Workshops:** “Using Student Assessment and Program Data” workshops were provided to high school teams that hadn’t recently had a data workshop:

- Nov. 17      MASSP-Central Division Principals, Monticello
- Nov. 18      MASSP-Northern Division Principals, Thief River Falls
- Nov. 19      MASSP-Northeast Division Principals, Grand Rapids
- Nov. 21      MASSP- Southwest Division Principals, Mankato

**Additional connecting times were initiated and scheduled by Division Presidents:**

“Using Student Assessment and Program Data”

- May 13      MASSP-Northeast Division Principals, Grand Rapids
- June 10      MASSP- Southwest Division Principals, New Ulm  
Meeting and Conference Call

The work of these four divisions will continue in 2009-2010 through conference calls, WebEX presentations and discussions, one meeting with MDE staff, and meetings as needed to be set by principals in each division. Additional principals have joined the four established groups to expand the initiative.

The 2008-09 group has been expanded to now include forty-one principals from the following forty-one high schools, representing forty districts: Sibley East, Maple River, Gibbon-Fairfax-Winthrop, St. Clair, Central (Norwood), LeSueur-Henderson, Jackson County Central, Fairmont JSHS, Canby, Hutchinson, Marshall, Cass Lake-Bena ALC, Fertile-Beltrami, Marshall County Central, East Grand Forks, Waubun, Park Rapids Century, Norman County East, Climax,

Warren/Alvarado/Oslo, Tri-County, Fosston, Greenway, Nashwauk-Keewatin, Denfeld (Duluth), Virginia, East (Duluth), Proctor, Cloquet, Grand Rapids, Esko, ROCORI, Kerkhoven-Murdock-Sunberg, Princeton, Brainerd, Monticello, Pierz, Delano,

Long Prairie-Grey Eagle, Sartell-St.Stephen, and Buffalo.

In 2009-2010, principals in the remaining four MASSP divisions were invited to participate in the same training opportunity as provided in 2008-2009. To date, thirty-eight principals from Capitol, Hennepin, Southeast, and Western divisions have signed up to participate.

Topics, dates, and locations for the 2009-2010 meetings are as follows:

**Round 1:** “Using Student Assessment and Program Data”

Sept. 29 MASSP- Western Division Principals, Battle Lake

Sept. 30 MASSP- Hennepin Division Principals, MDE CC 1-2, Roseville

Oct. 1 MASSP- Capitol Division Principals, MDE CC 1-2, Roseville

Oct. 2 MASSP- Southeast Division Principals, Rochester

**High School Data Workshops (M2D3)** will be provided to high school teams that haven’t recently had a data workshop:

Oct. 27 MASSP-Western Division Principals, Fergus Falls

Oct. 28 MASSP- Capitol Division Principals, MDE CC14, Roseville

Oct. 29 MASSP- Hennepin Division Principals, MDE CC 16,  
Roseville

Oct. 30 MASSP-Southeast Division Principals, Wanamingo

**Round 2:** “High Quality Teacher and Principal Leadership”

Dec. 1 MASSP Hennepin Division Principals, MDE CC18, Roseville

Dec. 2 MASSP- Southeast Division Principals, Rochester

Dec. 3 MASSP-Western Division Principals, Battle Lake

Dec. 4 MASSP- Capitol Division Principals, St. Paul

**Round 3:** “Rigorous and Relevant Course Taking for All Students”

Mar. 2 MASSP- Capitol Division Principals, Woodbury

Mar. 3 MASSP- Southeast Division Principals, Rochester

Mar.4 MASSP-Hennepin Division Principals, MDE CC 1-2, Roseville

Mar.5 MASSP-Western Division Principals, Battle Lake

**Round 4:** “Personalization” and “Multiple Pathways”

May 4 MASSP- Capitol Division Principals, Lakeville

May 5 MASSP- Western Division Principals, Battle Lake

May 6 MASSP- Southeast Division Principals, Rochester

May 7 MASSP–Hennepin Division Principals, MDE CC 3-4, Roseville

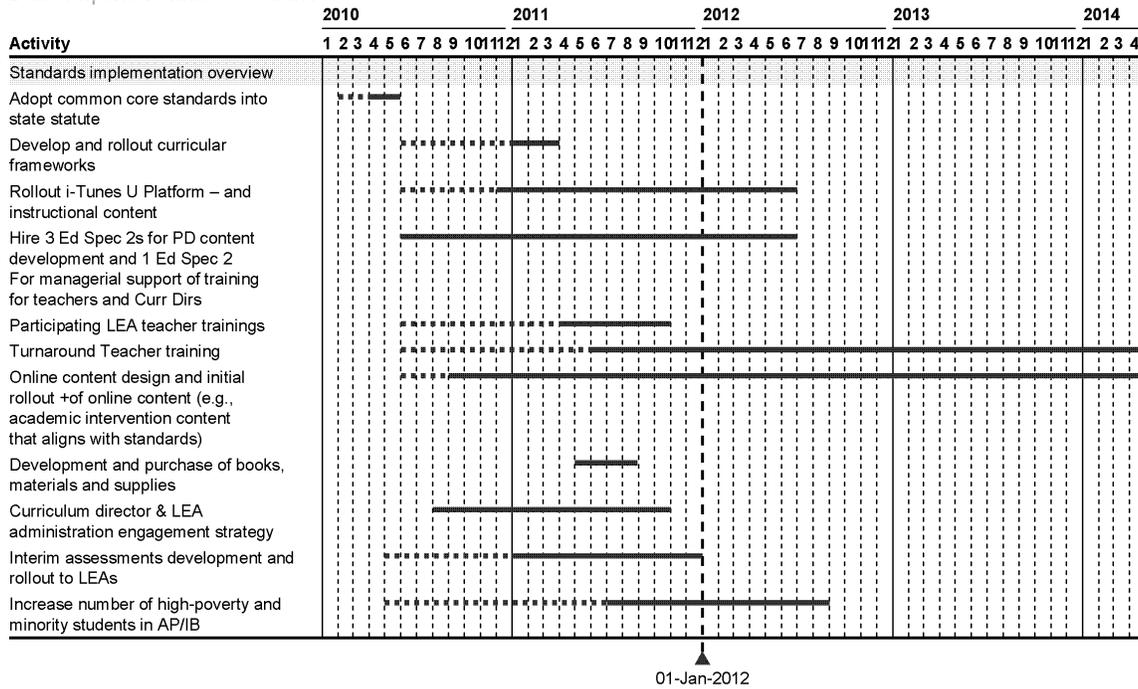
The new 2009-2010 group includes thirty-eight principals from the following thirty-five high schools, representing thirty-four districts: Battle Lake, Underwood, Bertha-Hewitt, West-Central-Area, Ashby, Parkers Prairie, Red Wing, Southland, Kasson-Mantorville, Waseca, Kenyon-Wanamingo, Lincoln/Lake City, Triton, Orono, New Prague, Waconia, Burnsville, Insight School of MN, Richfield, Eden Prairie, Shakopee, Edina, Eastview (Rosemont-Apple Valley-Eagan), Wayzata, Hopkins, Fridley, Park (South Washington County), Lakeville South, Arlington



**(B)(3) – Exhibit F: Standards and Supports Implementation timeline**

## Standards and Assessments: Support transition to enhanced standards and high-quality assessments

Draft Implementation Timeline



**(B)(3) – Exhibit G: *Interim Assessments (RFP sample Details)***

**Develop computer-based interim assessments aligned with state standards that benchmark student progress and provide rapid-time results to educators**

The State, in partnership with participating LEAs and other key stakeholders, will develop and issue an RFP to select up to three high-quality vendors with reputable products and sufficient scale to address the needs and requirements of Minnesota, to create interim assessments that align with the newly adopted common-core oriented state standards and that participating LEAs must administer up to three times each year per pupil. The RFP will state specific qualifications to participate as well as objectives the providers must meet, including, but not limited to, the following:

- RFP respondents must demonstrate a willingness and ability to customize their approach to align with Minnesota standards and special consideration will be given to incorporate innovative techniques into the assessment system to increase quality of teacher intervention
- Vendors must allow for external verification of the alignment of their assessments to Minnesota standards
- Vendors must align their assessments and reporting infrastructure with the technological infrastructure (e.g., CIF compliant) of MDE and state LEAs to allow for seamless reporting of student scores at the site, LEA and state levels and provide flexible, on-demand access to administer exams at school and teacher will
- Products must produce real time information and feature feedback capabilities to help teachers improve instruction and communicate student results more broadly
- Vendors must develop assessments that measure student progress against state standards and are capable of providing shorter-cycle result information on student achievement and progress.
- Vendors must incorporate learning progression capabilities in assessment systems
- All assessments must include appropriate psychometrics and mapping capabilities

Special consideration will be given to vendors that align assessments with the following:

- College and career readiness assessment and incorporation of 21st century skill assessments into products
- A streamlined approach to linking student assessment results, professional development and instruction strategies
- Parent and student access to data and instructional guidance based on student results

**(C)(1) – Exhibit A:** *Establishment of P-20 Education Partnership Longitudinal Data System Governance Committee*

**AMENDMENT NO. 1 TO  
BYLAWS OF THE  
MINNESOTA P-20 EDUCATION PARTNERSHIP**

The Bylaws of the Minnesota P-20 Education Partnership are hereby amended as follows:

- A. Amendment. The following section is added to Article II:

“Section 2.8 Longitudinal Data System Governance Committee. The Partnership shall establish a Longitudinal Data System Governance Committee (hereafter “LDS Governance Committee”) for the purpose of overseeing the Minnesota Longitudinal Data System developed jointly by the Office of Higher Education (“OHE”) and the Minnesota Department of Education (“MDE”).”

- B. No Other Changes. There are no changes to the Bylaws other than what is set forth herein.

**(C)(1) – Exhibit B: *Statewide Longitudinal Data System data elements***

Baseline Student Data Variable List for P-20 Longitudinal Data System

The Office of Higher Education currently has a student record data base on all students enrolled during the fall at postsecondary institutions eligible to participate in Minnesota-funded student financial aid programs. The Minnesota Department of Education has a data base on students enrolled in public schools. The P-20 Longitudinal Data System (LDS) would contain data from OHE and MDE for research. Below are baseline data variables currently collected in each agency to be used to populate the LDS and a list of recommended variables to be added in the future. Note: some of the variables listed below would only be used to match student records between OHE and MDE and would not be contained in the LDS system. The proposed structure of the LDS will contain a random anonymous identifier.

| Student Data Variables Currently Collected to be Used in the LDS  |   |
|---|---|
| Minnesota Office of Higher Education  | Minnesota Department of Education   |
| <b>Attendance Data</b><br>College attending (name)<br>Type of college (public, private, etc.)<br><br>Fiscal year of data collection<br>Term (fall enrollment only)<br>Transfer Institution Code   | <b>Attendance Data</b><br>School of attendance<br>School district (where student goes to school)<br>School type (Title I eligible, charter, alternative learning center)<br>Academic year   |
| <b>Student Demographic Data</b><br>Name (first, middle, last)<br>Birth date<br>Gender<br>Racial/ethnic origin<br>County of residence (at time of admittance)<br>State of residence (at time of admittance)<br>Citizenship/immigration status<br>MARSS Student ID Number   | <b>Student Demographic Data</b><br>Name (first, middle, last)<br>Birth date<br>Gender<br>Racial/ethnic origin<br>Resident district (where student lives)<br>Home primary language<br>MARSS Student ID Number  |
| <b>Student Enrollment Data</b><br>Student level (freshmen/sophomore/etc.)<br>Registration type (new student/continuing/transfer, etc.)<br>Enrollment status (enrolled full-time or part-time)<br>Degree/certificate seeking (yes/no)<br>MN high school of graduation/GED/did not graduate<br>Year of high school graduation | <b>Student Enrollment Data</b><br>Grade level<br>Attendance days<br>Membership days (days a student is enrolled)<br>Last location of attendance (determines student mobility)<br>Withdrawal status<br>Graduation status<br>Year of high school graduation |
| <b>Academic Performance and Testing Data</b><br>Credits taken<br>Remedial credits<br>Accumulated credits earned<br>Transfer credits earned  | <b>Academic Performance and Testing Data</b><br>MCA test results<br>ACT test scores<br>SAT test scores  |
| <b>Academic Performance and Testing Data (cont')</b><br>Major 1 (program code of 1st major)<br>Major 2 (program code of 2nd major)<br>Degree level (diploma/associate/bachelor/etc.)  | <b>Special Services</b><br>Gifted/talented participation<br>PSED participation<br>Economic indicator (free/reduced lunch)   |

Baseline Student Data Variable List for P-20 Longitudinal Data System

The Office of Higher Education currently has a student record data base on all students enrolled during the fall at postsecondary institutions eligible to participate in Minnesota-funded student financial aid programs. The Minnesota Department of Education has a data base on students enrolled in public schools. The P-20 Longitudinal Data System (LDS) would contain data from OHE and MDE for research. Below are baseline data variables currently collected in each agency to be used to populate the LDS and a list of recommended variables to be added in the future. Note: some of the variables listed below would only be used to match student records between OHE and MDE and would not be contained in the LDS system. The proposed structure of the LDS will contain a random anonymous identifier.

| Student Data Variables Currently Collected to be Used in the LDS |                                   |
|--|-----------------------------------|
| Minnesota Office of Higher Education                             | Minnesota Department of Education |
| College graduation date  | Limited English services          |
| Academic award received  | Title I student eligibility       |
| Date academic award received                                     |                                   |

| Proposed NEW Student Data Variables to be Collected |   |
|---|---|
| Minnesota Office of Higher Education                | Minnesota Department of Education   |
| Advanced standing credits granted for new students  | High school core course curriculum  |
| College GPA   | GPA   |
|   | Participation in college access programs (TRIO, Admission Possible, etc.)   |
|   | Participation in college preparatory courses (listed individually) Post Secondary Enrollment Options (PSEO), Advanced Placement (AP), International Baccalaureate (IB), College in the Schools (CIS), Concurrent Enrollment, College Level Examination (CLEP) |
|   | Class Rank  |

*Updated August 19, 2009 as agreed upon by OHE and MDE*

## **(C)(1) – Exhibit C: *Statewide Longitudinal Data System progress***

### **Excerpt from Statewide Longitudinal Data System Recovery Act grant application**

#### ***Project Narrative***

##### ***(a) Need for the Project***

The proposed grant project, *Minnesota Education Data Systems for 21st Century Learning*, builds upon initial successes of Minnesota’s current P-12 Longitudinal Data System (LDS), which tracks student enrollment, demographics and statewide assessment information over time. When fully implemented, the system improvements described in this grant proposal will transition Minnesota’s education data capacity to a fully interoperable, enterprise-level data collection, reporting and analysis system. These system improvements will incorporate solid data sharing connections across state agencies. Links among P-12 education, post secondary education, and the workforce will support the continuous improvement of statewide education services and inform policy and practice.

##### **System Improvement Goal A:** Upgrade the current Minnesota Department of Education

(MDE) data collection systems to simplify data reporting, support accountability systems, and include additional data elements to meet reporting timelines set forth in the America COMPETES Act. Local education agencies (LEAs) will report linkable student, teacher and organization information through new P-12, enterprise-level, data collection software—the Student Education Reporting and Viewing Systems (SERVS). Information collected through SERVS will be stored in the P-12 LDS.

**System Improvement Goal B:** Create a second data warehouse managed by MDE through an interagency governance structure to support accurate management and analysis of disaggregated P-20 data. The new P-20 warehouse will include data from P- 12, post secondary and the workforce in a linkable Statewide Longitudinal Educational Data System (SLEDS).

**System Improvement Goal C:** Expand data analytic tools for educational research and evaluation to improve student academic achievement, close the achievement gaps and inform decision making at the school, district and state levels. The existing analytic tool, P-12 Educator Portal, will be extended and a new tool, the P-20 Research Portal of Minnesota (P-20 RMP) for SLEDS will be created. Together these analytic portals will be a clearinghouse for education research. The work of this grant proposal extends existing system features without supplanting any current funding or policy initiatives.

##### **Minnesota’s Longitudinal Data System–Current Capabilities**

Minnesota, with funds from a 2006 IES Longitudinal Data Systems Grant, completed nine of the 12 foundational data elements required in the America COMPETES Act:

- Our MARSS ID is a randomly generated, unique P-12 student identifier.
- Student-level enrollment, demographic and program participation data are available in the P-12 data warehouse.
- Data sharing agreements and shared governance structures permit communication and data exchange between P-12 and higher education systems.
- Our web-based collection systems enforce edits at the time of collection and provide the basis for data audits by various program areas.
- We have published disaggregated student level assessment scores since 1998.

- Our annual School Report Card for individual schools and districts within the state includes information on students not tested by grade and subject.
- We began collecting selected transcript data on all high students, including GPA, class rank and non-standard passing information for students on state assessments in 2009.
- Our unique teacher identifier will make it possible to expand current systems enabling linkages between teachers, students, courses and course outcome data.
- We began publishing College Readiness Scores on each district's annual School Report Card in 2009.
- We publish a variety of statistics that address alignment and adequate preparation for postsecondary education success including participation information and the number of students considered college ready on ACT tests.

With this exceptionally strong foundation, we will make optimum use of funds requested in this grant proposal. The 2006 IES Longitudinal Data Systems Grant enabled us to develop the following features of the MDE LDS:

A best-in-class data dictionary: Minnesota's data dictionary has been shared with other states as a national model for education agencies. This common set of definitions and meta-data structures has been used department-wide for the past three years to facilitate inclusion of data in the warehouse and its use in subsequent analytics. This model, using extensible mark-up language (XML), will enable future interoperability with LEAs and simplify the process for making education data transparent.

Longitudinal warehouse: The P-12 warehouse is the core of our enterprise data infrastructure and includes analytic cubes based on the design of the National Center for Education Statistics Handbooks On-line domain data model. To date we have focused on incorporating existing P-12 data elements needed for accountability and reporting. We have developed extract, transformation and load (ETL) software for adding those data into the LDS.

A School Interoperability Framework (SIF) compliant enterprise data model: Our enterprise data model (EDM) is organized around SIF modeling objects in an XML based structure that facilitates exchanges among internal MDE applications and external LEA applications. The model supports the collection and reporting of all information associated with student, teacher and organizations. Views from these multiple perspectives eliminate the need for redundant data collection. A student perspective shows the school where a student is currently enrolled, the classes this student is taking, classes taken at any previous schools as well as current and past test scores. Those same data elements can be seen in a teacher view showing which students are currently assigned to the teacher, the courses currently teaching, the preparation institution the teacher attended as well as test results associated with students taught in prior years. With much of the design work already completed, we are positioned to quickly integrate remaining and new data sets into the enterprise data model.

Ed Facts data repository: Data is stored in the P-12 data warehouse providing a consistent, interoperable source for accountability, growth, disciplinary incidents and school finance information for Ed Facts reporting. These same data are used to validate the No Child Left Behind Consolidated Application and Minnesota's Annual Performance Report for Special Education.

Data Record Linking System (DRLS): Despite the fact that Minnesota has had unique teacher and student identifiers since 1998, our legacy stove piped systems were not interoperable. Each could have slightly different information in the identification key for the same student or teacher resulting in duplicate records when merged in the LDS. For example, a student could be reported as Dave M. Onsrud in one collection but as David O. Onsrud in a subsequent collection in another district. A unique identification number could be one digit off between two records. Are these the same or different students?

DRLS software was developed to solve this problem. It uses a series of algorithmic routines facilitating the match of unit records prior to inclusion in the warehouse. DRLS maximizes the accuracy of data transitioned into a longitudinal system by eliminating the potential for inadvertent record duplication. This is a particularly exciting tool as we look to the next phase of the LDS since many external data sets such as those from ACT and the College Board do not use the same identification keys. Without DRLS, we would be restricted to including only sets sharing our unique identifiers, thereby limiting our functional capacity. DRLS will be instrumental for successfully including postsecondary and workforce data in our P-20 LDS. With funding from this proposal, we will expand DRLS capacity with common off-the-shelf tools (COTS) from business intelligence vendors to create seamless operational linking for all P-20 data from a variety of Minnesota state agencies.

**Identity Management System:** The MDE Identity Management System (MIDMS) is an industry standard, role-based security framework designed to protect the privacy of sensitive data while providing appropriate access for approved users. The ORACLE Access Manager based architecture has a distributed security model that allows LEAs or postsecondary institutions direct control over which staff have authorization to secure web pages thus permitting parents, teachers and administrators differentiated access while allowing for maximum protection of student privacy. Our current technology supports the capacity for districts to approve and retain authorized users while maintaining the highest standard of security. With MIDMS, we can include additional early childhood, postsecondary education data and workforce data elements while preserving the privacy of individual students according to FERPA and Minnesota data practices laws.

**Analytic portal:** The Educator Portal has become a one-stop website for educators to analyze aggregate or individual student level data in the P-12 LDS. All assessment and accountability results are loaded into the portal as soon as they arrive from the testing company allowing district review, verification and approval prior to the official public release. Data in the Educator Portal answers policy and program questions using disaggregated information about schools and districts. Analysis can be performed based on gender, race ethnicity, socio-economic status and program participation. Authorized users may also access individual student unit record data. District staff can view all district data, data from a single school, or data for a specific group of students.

Analytic options for state assessment results, Minnesota Growth Model analysis, NCLB accountability, and Safe and Healthy Learners can be viewed by county, district, school or individual student while maintaining strict privacy and data security measures. It is secured by our single sign-on, role-based identity management system, and we are ready to add additional customized data analysis tools needed to engage classroom teachers in real time data analysis to impact instructional changes. This design is robust enough to include local assessment information when conforming to uniform data structures.

**Data sharing agreements and governance structures:** Our work over the past five years with the P-20 Partnership has culminated in an innovative interagency governance structure that sets a foundation for sharing significant educational data among P-12, higher education and workforce organizations. The Minnesota Legislation passed a law authorizing data exchanges between MDE and the Office of Higher Education. Data sharing agreements between the two state agencies have been signed. This places Minnesota in position to move quickly ahead to the next generation of linked data systems encompassing early childhood, P-12, postsecondary and workforce information.

### **Highlights of Minnesota's P-12 LDS System in Development**

The following capabilities of the LDS system were begun with support from our 2006 award and are in development:

**Student Roster Pilot:** The Student Roster is intended as an additional tab within the Educator Portal allowing authorized users to create a group of students for data analysis by entering the unique student identifiers into a secure web search. Researchers can then select associated data elements from the

warehouse regardless of which districts or schools the students attended at the time of data collection. For example, researchers can use this tool to compare students who take science, technology, engineering and mathematics with those who do not take similar courses. It is equally possible to create a teacher-centric view of these same data.

With input from the Data Management Steering Committee, we are ready to bring this pilot to scale statewide for immediate use in school improvement analysis and planning in the next phase of our LDS. There are substantial challenges in training educators on the appropriate use of this tool. This grant proposal includes the development of training materials, and we intend to leverage resources requested in the Race to the Top Proposal that will be allocated to professional development, including the utilization of data coaches who will work with participating schools.

**Business intelligence tools:** Information Builders, Inc. is a market leader among business intelligence tools enabling Minnesota to meet its policy initiatives by creating more on demand reports. The next phase of development will leverage this initial investment of LDS funding by providing additional custom data analytics in program specific tabs within the Education Portal or the through the publicly available School Report Card.

For a summary of the status of the capabilities and elements of Minnesota’s LDS, please refer to table below.

| LEAD Infrastructure Staff<br>MDE – Senior Architect<br><br>Dave Reeg<br><br>System Capabilities  | Describe the current status of each requirement, “completed” or “under development.”   | Relevant Project Outcomes   |
|--|--|---|
| <i>➤ Required Data System Capabilities as listed in section IV. Statewide Longitudinal Data System Requirements</i>  |  |   |
| 1- The system must enable States to examine student progress and outcomes over time, including students’ preparation to meet the demands of postsecondary education, the 21 <sup>st</sup> century workforce, and the Armed Forces. Such a system must include data at the individual student level from preschool through postsecondary education and into the workforce (e.g., employment, wage, and earnings information). | <b>Under Development</b> – The Minnesota K-12 LDS uses K-12 unit record student level assessment, enrollment, disciplinary incidents data. With funding from the 2006 LDS award we were able to create a basic infrastructure to support AYP calculations and Growth calculations. In Phase II of the LDS we will expand data on pre-school children, develop a series of college and career readiness indicators and barriers and incorporate post secondary and workforce data to create a Statewide Longitudinal Education Data System (SLEDS). Data will be generated from either the P-12 LDS or the new SLEDS warehouse. Data analytics will be provided by expanding the existing Educator portal with eight new dashboards or through a new analytic portal the P-20 Research Portal of MN for P-20 and school to work analysis. | <b>Outcome C- Analytic Portals</b><br>Housed at MDE and OET<br><b>Product 6 –Expanded Educator Portal</b> with dashboards -Start Early, Effective Teacher Prep, Shared Accountability, Q-Comp, M2DS, AP Access, VAM evaluation<br><b>Product 7 – P-20 Research Portal of MN</b> for P-20 and School to Work initiatives |
| 2- The system must facilitate and enable the exchange of data among agencies and institutions within the State and between States so that data may be used to inform policy and practice. Such a system would support interoperability by using standard data structures, data formats, and data definitions to ensure linkage and connectivity among the various types of data.   | <b>Under Development</b> – The K-12 LDS currently is defined by an enterprise data dictionary providing standard definitions. Data formats and structures vary as Minnesota currently collects data from LEAs through web based file upload or main frame batch upload. Our 3 year strategic plan which incorporates a SIF education data model involved moving all core data systems student, staff and organization (including financial) data collections to web based, XML, SIF enabled platforms allowing LEAs to provide data to us to upgrade all collection systems to web based, SIF enabled platforms creating greater interoperability. These technology upgrades will extend to the SLEDS project which will incorporate post secondary, workforce and employment furthering interagency interoperability within Minnesota   | <b>Outcome A-MDE Enterprise Data Collection System</b><br><b>Products 1-4 SERVS Infrastructure, Student, Staff and Organization</b><br><b>Outcome B- P-20 data warehouse</b> to be housed at a partner state agency OET<br><b>Product 5 – SLEDS P-20 workforce warehouse</b>  |
| 3- The system must link student data with teachers, i.e., it must enable the matching of teachers and students so that a given student may be matched with the particular teachers primarily   | <b>Under Development</b> -Since 1998 Minnesota has had unique student and teacher identifiers. What we have lacked is a way to link the two in a meaningful way. The Minnesota Common Course Catalogue currently in development is targeted for inclusion within all SERVS products includes the adoption of a state level common course catalogue will allow us to  | <b>Outcome A-MDE Enterprise Data Collection System</b><br><b>Products 1-4 SERVS Infrastructure, Student, Staff and Organization</b>   |

|  |  |   |
|--|--|---|
| responsible for providing instruction in various subjects.   | collect course taking information from students K-12 and their teachers across a variety of subjects including core and non-core areas.  |   |
| 4- The system must enable matching of teachers with information about their cert. and prep. programs, including the institutions where they received training.   | <b>Under Development-</b> SERVS Staff will incorporate all of the data elements currently collected in the legacy teacher and personnel licensure systems and add additional information linked to the teachers they graduated.  | <b>Outcome A-</b> MDE Enterprise Data Collection System<br><b>Products 1-4</b> SERVS Infrastructure, Student, Staff and Organization.   |
| 5- The system must enable data to be easily generated for continuous improvement and decision-making, including timely reporting to parents, teachers, and school leaders on the achievement of their students.    | <b>Under Development-</b> Our foundational LDS system includes core education data sets and a single sign on role based security system. We currently provide two levels of reporting: traditional public access reports in the Minnesota School Report Card and secure reports created for researchers or educators. Phase II of the LDS will leverage this capacity to include additional data elements in more user-friendly dashboards to increase accessibility.  | <b>Outcome C- Analytic Portals</b><br><b>Product 6 –Expanded</b> Educator Portal dashboard features: Start Early, Effective Teachers Prep, Shared Stakes, Q-Comp, M2D3, AP Access, VAM evaluations.   |
| 6-The system must ensure the quality and integrity of data contained in the system.  | <b>Under development-</b> Minnesota has many foundational pieces in place to ensure data quality. The enterprise data dictionary holds common definitions for all data elements across systems. Documentation for each system includes a list of acceptable values. Automated web applications have built in data validation and edit checks that prevent inaccurate data from being submitted. Training is provided by MDE staff in sponsoring program areas at critical points during the school year through a variety of formats. A monthly Data Sig is held to communicate updates and new requirements to LEA data vendors and data managers. In addition MDE provides help desk service for each data collection. | <b>Outcome A-</b> MDE Enterprise Data Collection System<br><b>Products 1-4</b> SERVS Infrastructure, Student, Staff and Organization. Including features under each product for data manager training to support LEA staff in expanded data collection and reporting efforts. |
| 7 The system must provide the ability to meet reporting  | <b>Under development-</b> Minnesota takes great pride in being able to provide EdFacts data elements from our current LDS. Upgrades to SERVS products  | <b>Outcome A – An MDE</b> Enterprise Data collection  |
| requirements, especially reporting progress on the metrics established for the State Fiscal Stabilization Fund and the reporting requirements included in the <i>EDFacts</i> data collection and reporting system. | will enhance this capacity by including new data elements from Ten Policy Initiatives that will expand the analytic capacity. The new capacities outlined in this proposal will ensure that all the assurances for the State Fiscal Stabilization Fund are met. The three system improvements described in this proposal will allow Minnesota to generate data needed to measure student success and inform teachers and principals about how to improve practices.  | <b>System</b><br><b>Outcome B - A -20</b> Education Data Warehouse<br><b>Outcome C- Analytic Portals</b> for P-12 and P-20 data   |
| <b>Twelve elements prescribed by the America Competes ACT as listed in section IV. Statewide, Longitudinal Data System Requirements.</b>   |  |   |
| 1- A unique statewide student identifier that does not permit a student to be individually identified by users of the system (except as allowed by Federal and State law)  | <b>Completed</b> Since 1998 our unique identifiers are randomly generated; student level data is only displayed through secure single sign-on analytic portals. Only authorized personnel have access to individual student data. Publically reported is not disaggregated below nine students in group and is redacted as necessary to protect student privacy.   | <b>NA – completed</b>   |
| 2-Enrollment, demographic and participation info.  | <b>Completed:</b> Since 1998 Minnesota has collected student level enrollment and demographic and program participation information. We have been able to disaggregate graduation rates for the past eleven years.   | <b>NA – completed</b>   |
| 3- Exit, transfer out, drop or completion of P-16 education programs data.   | <b>Under Development:</b> Since 1992 Minnesota has collected information about student entry and exit status including transfers in and out, drop outs. With these funds we will expand to include post secondary information.   | <b>Outcome B - A P-20</b> Education Data Warehouse<br><b>Outcome C- P-20 Portal</b>   |
| 4-The capacity to communicate with higher education data systems   | <b>Completed–</b> State statute permits the sharing of data between MDE and OHE including attendance, demographic and enrollment, academic performance, testing. Data sharing agreements between agencies have been signed and data warehouse deliverables are scheduled for completion in 2010 and 2011.  | <b>Outcome B - A -20</b> Education Data Warehouse<br><b>Outcome C- Analytic Portals</b> for P-12 and P-20 data  |
| 5-A State data audit system assessing data quality, validity, and reliability  | <b>Completed-</b> Minnesota has many foundational pieces in place to ensure data quality. The enterprise data dictionary. Automated web applications have built in data validation and edit checks that prevent inaccurate data from   | <b>NA- completed</b>  |

|  |   |  |
|--|---|--|
|  | being submitted. Training is provided during the school year through a variety of formats. A monthly Data Sig is held to communicate updates and new requirements to LEA data vendors and data managers. In addition MDE provides help desk service for each data collection.   |  |
| 6-Yearly test records of individual students under section 1111(b) of the ESEA 1965  | Completed-Minnesota publishes annual state assessment results in the School Report following state and FERPA privacy guidelines. These same results may be viewed by LEAs in unfiltered aggregate format and by individual student record within the Educator Portal.   | NA - completed   |
| 7-Information on students not tested by grade and subject.   | Completed-Minnesota publishes annual state assessment results for both students tested and not tested by grade and subject. These same results may be viewed by LEAs in unfiltered aggregate format and by individual student record within the Educator Portal.  | NA - completed   |
| 8- A teacher identifier system with the ability to match teachers to students  | Under Development-Since 1998 Minnesota has had both a unique student identifier and a unique teacher identifier. We lacked is a way to link the two in a meaningful way. The Minnesota Common Course Catalogue currently in development is targeted for inclusion within all SERVS products includes the adoption of a state level common course catalogue will allow us to collect course taking information from students K-12 and their teachers across a variety of subjects including core and non-core areas. | Outcome A-MDE Enterprise Data Collection System Products 1-4 SERVS Infrastructure, Student, Staff and Organization   |
| 9 Student-level transcript information, including information on courses completed and grades earned   | Under Development- The Minnesota Common Course Catalogue project envisioned as a feature at all four serves products will facilitate the collection of course information including grades earned as a component of an electronic transcript added to current elements including GPA, Class Rank and individual passing information based on IEPs or student learning plans for ELL students.   | Outcome A-MDE Enterprise Data Collection System Products 1-4 SERVS Infrastructure, Student, Staff and Organization   |
| 10-Student-level college readiness test scores   | Complete to date MDE has published student level ACT data including the Education Planning and Assessment System information from ENPLORE and PLAM. We are expanding this capacity with recently negotiated data sharing agreements with College Board to secure student level information  | Outcome A-MDE Enterprise Data Collection System Products 1-4 SERVS Infrastructure, Student, Staff  |
|  | on CLEP and AP exams. All data are being incorporated into the PK-12 data warehouse and used to develop a series of college readiness indicators including supports and early warning indicators to better ensure post secondary success. With funds from this grant we will assign staff to match ACT and College Board student level results to Minnesota's unique student identifiers for inclusion in the data warehouse. Additional analytic reports are envisioned once these data are incorporated.          | and Organization – Outcome C- Analytic Portals for P-12 and P-20 data. Products include expanded dashboards to incorporate data required by Minnesota's ten policy initiatives.                          |
| 11-Data that provide information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework | Under Development- MDE has negotiated an interagency data sharing agreement between P-12, public and private institutions of higher education. Additionally we have an interagency governance structure sponsored by the P-20 Council that provides policy support for this effort. With funding from this proposal we will create a P-20 data warehouse that includes information on transition from P-12 to post secondary and the types of courses taken.  | Outcome B - A P-20 Education Data Warehouse Outcome C- Analytic Portals for P-12 and P-20 data. Products include expanded dashboards to incorporate data required by Minnesota's ten policy initiatives. |
| 12-Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education   | Completed Minnesota currently provides data on how well students are prepared for post secondary success by publishing results from ACT's Educational Planning and Assessment System: ENPLORE and Plan. With funding from this proposal we will expand those elements to include data from post secondary as well.  | Outcome B - A P-20 Education Data Warehouse Outcome C- Analytic Portals for P-12 and P-20 data. In expanded dashboards   |

## Highlights of Capabilities to be added for Expanded P-12 and P-20 LDS Capacity

While Minnesota has made great progress toward the goal of a fully integrated, statewide data system, we must add capacity to meet new federal data collection requirements and ease the reporting burdens for LEAs these additional collections necessitate. We intend to pilot new automated data exchange processes with selected districts and states as we begin to collect the additional data required by the America COMPETES Act.

**Interoperable Data Exchanges:** Our long-range vision is to support SIF compliant, interoperable data exchanges to simplify the process of reporting and collecting new data elements.

**District Pilot:** With over 500 districts ranging in size from 10 to 40,000 students, the sophistication of data management capacity varies greatly. Some districts will prefer to manage data in-house with web-based submissions via SERVS. Others will prefer more state of the art, automated processing. With funding from this grant proposal, we will conduct a SIF pilot with two of the larger districts in the state and two data management vendors to determine the feasibility of bringing this effort to scale statewide.

**Multi- State Pilot:** The lessons learned from the Minnesota SIF pilot will inform a seven-state SIF Pilot. Minnesota is partnering with Missouri, Iowa, Kansas, Nebraska, North Dakota and South Dakota to

implement a secure, SIF standards-based, student record exchange solution dependent upon a state student ID management system. The Student Locator Framework (SLF) provides seamless interoperability among student information systems installed at each district and the state ID management systems. As students enroll in districts, student IDs are automatically created by the state ID management systems, stored in each state's student information system and transmitted back to local districts over a secure SIF transport. These seven states are collaborating to leverage each other's work in the area of student re-enrollment in and graduation from K-12 systems to improve local data quality. There is also interest within the group to develop an educator locator.

America COMPETES Act: These three elements of the America COMPETES act must be implemented to meet the application requirements for this grant proposal:

- Ability to link teachers to courses to students.
- End of course completion information including student grades earned by course
- Data regarding student transition from P-12 to postsecondary including remediation information

*Linking teachers to courses to students:* Based on work done by the National Center for Education Statistics on the Secondary School Course Classification System: School Codes for the Exchange of Data (SCED), we are creating a universal index of all courses taught in Minnesota schools. The Minnesota Common Course Catalogue (MCCC) is scheduled for completion in 2011 and will allow teachers to be linked to students through courses using currently existing unique teacher and student identifier codes.<sup>7</sup>

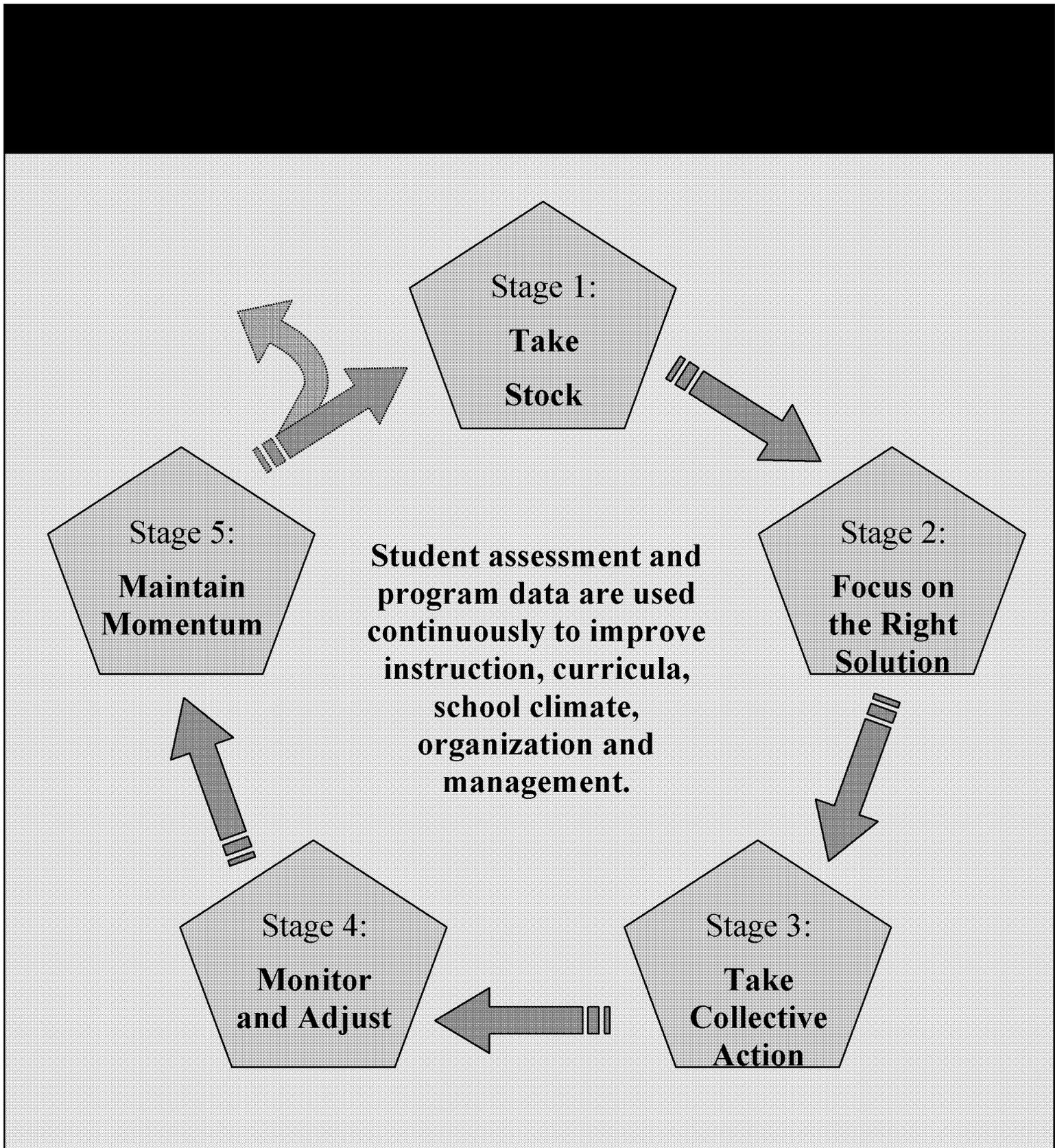
Beginning in the summer of 2010, school districts will access the MCCC web site and identify which MCCC course descriptions best match the local courses the district offers. Once districts have identified the MCCC course numbers for their local offerings, they will specify the Carnegie units, level of rigor and sequence for each course. This information will be reported to MDE in the expanded SERVS data collection systems identified in System Improvement Goal A listed on page one of this proposal.

Student data will include courses taken, the specific course section, the time of day courses were taken, and grades earned. Staff records identify specific courses taught through a unique course number associated with a unique teacher identifier. This information will include section numbers for courses and the period of day each section is taught. School organization data collections will include numbers for all courses and sections offered at the site including the periods of the day when specific sections are offered. This information will be combined in the P-12 LDS allowing students to be linked to teachers for a variety of research and evaluation purposes. Analysis will be conducted through expanded dashboards in the Educator Portal identified in System Improvement Goal C listed on page one of this proposal.

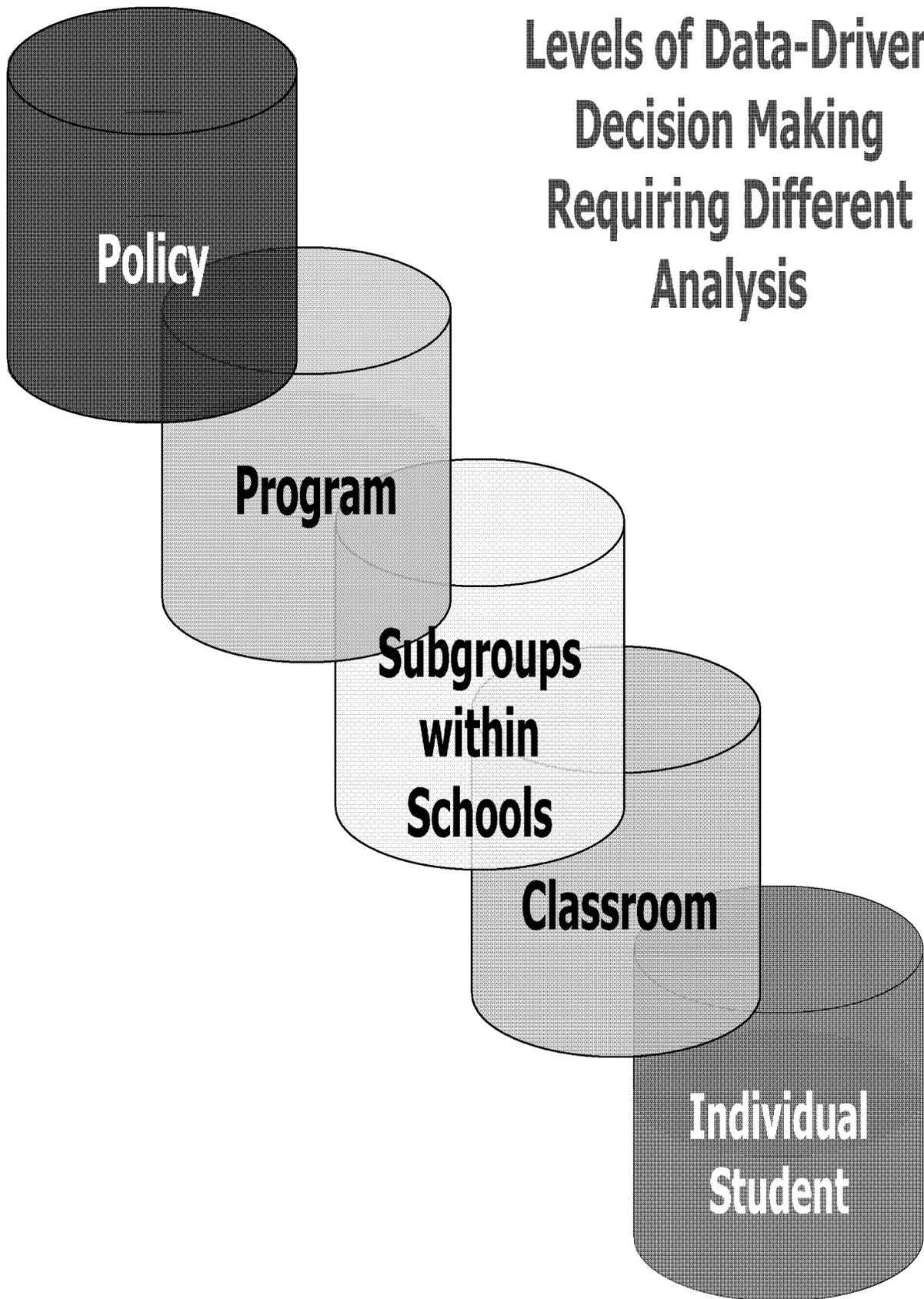
*Course Completion Information:* End of course completion information as well as other transcript elements will be collected in the new enterprise student data collection system, SERVS Student. Districts currently report GPA, class rank and a series of non-standard scores on large scale assessments, such as Pass Individual for special education students as well as three-year LEP exemption status for students who are new to English speaking classrooms. This information will be expanded to include courses taken, grades earned and other information generated from the MCCC project. Focus groups will identify further transcript elements to be included in the SERVS Student collection.

*Student Transitions from P-12 to Post Secondary:* Our vision for the Minnesota P-20 data system requires establishing links across a variety of state agency data sets. These cross-agency connections will be accomplished in a new P-20 Statewide Longitudinal Data Warehouse (SLEDS) that will incorporate data from different sources as approved by the SLEDS governing body. P-12 data will come from MDE. Post secondary data will be coordinated through the Office of Higher Education (OHE). Data about the workforce and labor will come from the Department of Employment and Economic Development (DEED). The SLEDS warehouse will be hosted by the Office of Enterprise Technology (OET) at the

State Data Center. Service level agreements between MDE, OHE, DEED and OET will facilitate the joint data management responsibilities and secure access to this anonymized research data.



# Levels of Data-Driven Decision Making Requiring Different Analysis





$M^2D^3$

## Minnesota Model for Data-Driven Decisions

### *STAGE 1: Take Stock*

*Outcome:*

**Create a SMART goal focusing on student achievement.**

(**S:** Specific & Strategic; **M:** Measurable; **A:** Attainable; **R:** Results-based; **T:** Time-bound)

*Process:*

1. Organize and review student achievement data trends for **all** students.
  - a. Analyze MCA-II results and compare to state trends over at least three years.
  - b. Analyze and compare other district achievement tests results over at least three years, if available, and compare to national expectations, if appropriate.
2. Display data using multiple representations to understand and clarify trends.
3. Select content area and measure of student achievement to be the focus of goal.
4. Write a SMART goal including necessary components (see MDE WebEx tutorial on schoolwide SMART goals at <https://mde.webex.com/mde/k2/e.php?AT=RINF&recordingID=8622887>).

### *STAGE 2: Focus on the Right Solutions*

*Outcome:*

**Identify student achievement deficits/gaps related to the goal content area and the corresponding research-based strategies for decreasing the identified deficits/gaps.**

*Process:*

1. Conduct in-depth analysis of student achievement data for goal content area.
  - a. Analyze MCA-II data by grade, subscores (e.g., strands/substrands, item type), subgroups and cohorts.
  - b. If available, analyze other student achievement data to triangulate results.
  - c. Identify academic strengths and deficits/gaps by grade, subgroup and cohort.
2. Gather, organize and analyze program/process data.
  - a. Analyze fidelity of implementation of well-defined program(s) or process(es) (i.e., stage of implementation, consistency of data, efficacy of supports) related to selected content area.
  - b. Analyze data from indicators of student engagement.
  - c. Identify implementation strengths (what facilitates) and deficits (what constrains).
3. Gather, organize and analyze perception data.
  - a. Analyze differences in perceptions of different groups (e.g., staff, students, parents, community) by program/grade/content as appropriate for data.
  - b. Identify perceived strengths and deficits by program/grade/content as appropriate.
4. Summarize patterns of strengths and deficits/gaps across all data.
  - a. Determine what is working well and needs to continue.
  - b. Determine any deficit/gap which needs attention and can be impacted.
5. Generate hypotheses about cause of identified deficits/gaps.
6. Identify research-based strategies to decrease identified deficits/gaps.

### ***Stage 3: Take Collective Action***

#### ***Outcome:***

**Develop and implement an action plan for a selected research-based strategy to improve identified deficits/gaps.**

#### ***Process:***

1. (Optional) Finalize student achievement SMART goal by obtaining consensus of staff.
  - a. Share SMART goal from stage 1 with all staff.
  - b. Discuss attainability of goal.
  - c. Develop consensus on final SMART goal.
2. Review and select a research-based strategy to implement.

- a. Generate hypotheses about the impact of each potential research-based strategy on improving a deficit/gap in student achievement.
  - b. Discuss and evaluate feasibility of implementation of each potential research-based strategy.
    - i. Identify how each potential research-based strategy integrates with other current initiatives (assess fit).
    - ii. Identify costs of implementation and availability of funds (assess availability of resources).
    - iii. Analyze readiness and capacity to implement core features of each research-based strategy.
  - c. Select best research-based strategy using strength of impact, feasibility, resources, readiness and capacity evidence.
  - d. Ensure buy-in and commitment by all stakeholders to implement the selected strategy.
3. Create an action plan for implementing the selected strategy.
    - a. Identify tasks, individuals responsible and timelines (who, what, when, how)
    - b. Identify plan for ongoing data to be collected on effectiveness of the strategy including process data and student achievement data.
  4. Provide ongoing support to staff for implementation of the selected strategy.
    - a. Align professional development plan with action plan and implement training activities.
    - b. Allocate appropriate resources for implementation of plan including leadership.
    - c. Support collection, display and analysis of ongoing data – both process data and student achievement data.

#### ***Stage 4: Monitor and Adjust***

##### ***Outcome:***

**Identification of adjustments needed to increase effectiveness of the strategy to improve identified deficit/gap related to the goal.**

##### ***Process:***

1. Review implementation process identified in action plan for fidelity (i.e., stage of implementation, consistency of data, efficacy of supports).
2. Assess impact on teachers, students and other stakeholders including student achievement data and perception data.
3. Evaluate ongoing buy-in of all stakeholders.

4. Revise, refine or develop a new strategy based on data if necessary.

### ***Stage 5: Maintain Momentum***

#### ***Outcome:***

**Increase site capacity and team efficacy in sustaining the effective strategy.**

#### ***Process:***

1. Evaluate achievement of SMART goal.
2. Embed selected strategy in the learning culture of classroom and school with fidelity based on adjustments which resulted in positive improvement of a deficit/gap.
3. Identify structure to educate new staff in the future to implement strategy with fidelity.
4. Plan for providing ongoing resources and leadership necessary to sustain the strategy.

**(D)(1) – Exhibit A: Minn. Stat. § 122A.24 - Alternative Certification Legislation for Teachers**

**Current authorizing language for Alternative Preparation for Licensing Teachers**

***Minn. Stat. § 122A.24: Alternative Preparation Licensing for Teachers***

**Subdivision 1. Requirements.**

- (a) A preparation program that is an alternative to the postsecondary teacher preparation program as a means to acquire an entrance license is established. The program may be offered in any instructional field.
- (b) To participate in the alternative preparation program, the candidate must:
  - (1) have a bachelor's degree;
  - (2) pass an examination of skills in reading, writing, and mathematics as required by section 122A.18;
  - (3) have been offered a job to teach in a school district, group of districts, or an education district approved by the Board of Teaching to offer an alternative preparation licensure program;
  - (4)(i) have a college major in the subject area to be taught; or  
(ii) have five years of experience in a field related to the subject to be taught; and
  - (5) document successful experiences working with children.
- (c) An alternative preparation license is of one year duration and is issued by the Board of Teaching to participants on admission to the alternative preparation program.
- (d) The Board of Teaching must ensure that one of the purposes of this program is to enhance the school desegregation/integration policies adopted by the state.

**Subd. 2. Characteristics.**

The alternative preparation program has the following characteristics:

- (1) staff development conducted by a resident mentorship team made up of administrators, teachers, and postsecondary faculty members;
- (2) an instruction phase involving intensive preparation of a candidate for licensure before the candidate assumes responsibility for a classroom;
- (3) formal instruction and peer coaching during the school year;
- (4) assessment, supervision, and evaluation of a candidate to determine the candidate's specific needs and to ensure satisfactory completion of the program;
- (5) a research based and results oriented approach focused on skills teachers need to be effective;

- (6) assurance of integration of education theory and classroom practices; and
- (7) the shared design and delivery of staff development between school district personnel and postsecondary faculty.

Subd. 3. Program approval.

- (a) The Board of Teaching must approve alternative preparation programs based on criteria adopted by the board.
- (b) The board shall permit demonstration of licensure competencies in school-based and other nontraditional pathways to teacher licensure.

Subd. 4. Approval for standard entrance license.

The resident mentorship team must prepare for the Board of Teaching an evaluation report on the performance of the alternative preparation licensee during the school year and a positive or negative recommendation on whether the alternative preparation licensee shall receive a standard entrance license.

Subd. 5. Standard entrance license.

The Board of Teaching must issue a standard entrance license to an alternative preparation licensee who has successfully completed the school year in the alternative preparation program and who has received a positive recommendation from the licensee's mentorship team.

Subd. 6. Qualified teacher.

A person with a valid alternative preparation license is a qualified teacher within the meaning of section 122A.16.

**(D)(1) – Exhibit B: *Alternative Certification – Board of Teaching Rules***

**Board of Teaching rules for approval of Alternative Preparation for Licensing Teachers**

***Minnesota Rule 8700.7600 Subparts 5c, 5d and 5e***

Subp. 5c. Approval of experimental teacher preparation programs.

The Board of Teaching shall approve requests for experimental programs when all criteria under subpart 5d have been met.

Subp. 5d. Criteria for exemptions.

An institution shall submit to the Board of Teaching a proposal for an experimental program that includes:

- A. a statement of goals and objectives;
- B. a description of the proposed program, that includes:
  - (1) evidence that the proposed program will serve as a model for possible replication;
  - (2) evidence that the proposed program reflects current research in teacher education;
  - (3) evidence that the proposed program has an ongoing research and development component;
  - (4) evidence that the proposed program has been designed to be significantly different in content and delivery from the currently approved program;
  - (5) evidence that the proposed program provides opportunities for candidates enrolled in the program to know and apply current research on educational effectiveness;
  - (6) evidence that the proposed program provides opportunities for candidates enrolled in the program to have regular and systematic field experience and student teaching in schools that demonstrate knowledge and use of current research on educational effectiveness;
  - (7) evidence that the proposed program has been collaboratively designed, implemented, and evaluated to ensure that elementary and secondary teachers participate with teacher education faculty in the preparation of teachers;
  - (8) evidence that the proposed program provides opportunities for teacher education faculty to enhance effective teaching behaviors through staff

development opportunities and that faculty are enabled and supported in the change process; and

(9) evidence that the candidates must successfully complete the academic knowledge components of the program;

C. a description of the annual evaluation procedures to be used to demonstrate attainment of the goals and objectives; and

D. identification of any Board of Teaching rules from which the institution seeks exemption.

Subp. 5e. Five-year review of experimental teacher preparation programs.

Five years from the date of the approval of an experimental teacher preparation program under subparts 5c and 5d, the Board of Teaching shall approve, disapprove, or modify continuation of the program without experimental status according to the criteria of subpart 5d.

**(D)(1) – Exhibit C: Current Alternative Preparation Programs**

**Teach for America**

*Excerpt from press release, June 23, 2009*

**TEACH FOR AMERICA EXPANDING TO TWIN CITIES, BRINGING 120 DEDICATED TEACHERS TO HIGHEST-NEED SCHOOLS IN THE NEXT THREE YEARS**

National Nonprofit Joins Local Effort to Expand Educational Opportunity for Students in Twin Cities Public Schools

MINNEAPOLIS, June 23, 2009—Teach For America announced today that it will expand to the Twin Cities, outlining plans to bring 40 top college graduates to teach in the area's highest-need schools for each of the next three years. The organization will place teachers in traditional and charter public schools in Minneapolis and Brooklyn Center, and charter public schools in St. Paul.

Teach For America is the national corps of outstanding college graduates who commit to teach for at least two years in under-resourced schools and become lifelong leaders in the pursuit of educational equity. Teach For America's charter Twin Cities corps will be part of a national incoming corps of 4,100, selected from an applicant pool of more than 35,000. These applicants included 11 percent of all Ivy League seniors, 11 percent of graduating seniors at Macalester College, 8 percent of those at Carleton College and 3 percent of those at the University of Minnesota. Incoming Teach For America teachers earned an average GPA of 3.6, almost 90 percent held leadership positions on their college campuses, and one-quarter received Pell Grants.

"Minneapolis Public Schools strives to provide all of our students with the excellent education they deserve, and we are pleased that Teach For America will join us in this effort," said Minneapolis Public Schools Superintendent Bill Green. "Bringing in these outstanding teachers will help accelerate our efforts to close the achievement gap."

"Our students' ability to succeed greatly depends on the quality of the teachers," said Brooklyn Center Schools Superintendent Keith Lester. "Our new Teach For America teachers will contribute both a high level of quality to instruction for our students and a high level of dedication to them and their learning. Their example will benefit our students, staff, and community. They will help us make a difference."

Teach For America decided to expand to the Twin Cities based on the community's compelling vision of how the organization's presence will help to close student achievement gaps; the existence of a feasible alternate route to teacher certification which was made possible by the leadership of the Minnesota Board of Teaching; the school districts' commitment to placing a critical mass of corps members across the range of subject areas and grade levels; and community support that will enable Teach For America to fund the new site in a sustainable way. The expansion to the Twin Cities is part of Teach

For America's 2010 growth plan, which calls for 7,500 corps members to be teaching in more than 33 regions by next year.

"I am pleased that Teach For America will bring some of our nation's top college graduates into Minnesota's classrooms," said Governor Tim Pawlenty. "Our children's future success depends on the education they receive today, and innovative programs like Teach For America will help us ensure that our students are well-prepared to meet the challenges ahead."

A broad coalition of supportive community groups, corporations, local philanthropists, and the leaders of Minneapolis Public Schools, Brooklyn Center Schools, and area charter schools made the Twin Cities an ideal location for Teach For America. The Medtronic Foundation and the General Mills Foundation are the founding investors in Teach For America's Twin Cities site, each pledging \$600,000 over three years. Instrumental in bringing Teach For America to Minnesota, Medtronic is also a national corporate sponsor of Teach For America, providing total support of \$1.4 million. Additional support in the Twin Cities is being provided by the McKnight Foundation, the Minneapolis Foundation, the Robins, Kaplan, Miller & Ciresi Foundation for Children, the Frey Foundation, the Carlson Family Foundation, Best Buy, TCF Bank, the Saint Paul Foundation, the Bigelow Foundation, the George Family Foundation, the Carolyn Foundation and Mr. Steve Mahle.

"Ensuring that every child has a full opportunity to succeed in the classroom is one of the most important investments we can make in our community," said David Etzwiler, vice president of community affairs and executive director of the Medtronic Foundation.

"Teach For America's teachers are deeply committed to helping all students succeed, with a proven track record wherever they are deployed. We support Teach For America's national math and science initiative to inspire the next generation of innovators, and we are thrilled to be a part of bringing the organization to our hometown to help close a widening achievement gap."

"The General Mills Foundation is proud to help bring Teach for America to the Twin Cities," said Ellen Goldberg Luger, executive director of the General Mills Foundation and vice president of General Mills, Inc. "We're pleased to support the important work this group of dedicated teachers will bring to our schools. We look forward to the positive impact Teach for America's teachers will have on our students, schools and communities."

"As a community foundation with a long history of working to strengthen our public education system and creating opportunities for all of our children to succeed, we are pleased to help bring Teach For America into our schools," said Sandra Vargas, president and CEO of the Minneapolis Foundation. "High-quality teaching is one of the most critical elements of student success, and we're excited to find new ways to bring high-performing teachers into the classroom."

Teach For America's local university partner will be Hamline University. All area Teach For America corps members will enroll at the university to obtain their state teaching certification, and they will have the opportunity to pursue a master of arts degree in teaching. Teach For America selected Hamline because of the university's deep

commitment to and history of fostering innovation in education and for its focus on preparing teachers for urban schools.

"As a university that is committed to social justice and service, we are thrilled to partner with Teach For America and support their mission to end educational inequity," Hamline University President Linda N. Hanson said. "We look forward to welcoming these teachers into our university and our community's classrooms."

"We're excited to build on the ongoing efforts here in the Twin Cities to expand educational opportunities for all children," said Matthew Kramer, president and chief program officer of Teach For America. "We're also grateful for the broad-based support we have received under the leadership of Superintendents Green and Lester, and for the generosity of the philanthropic community, led by Medtronic, General Mills, the McKnight Foundation, and the Minneapolis Foundation, which will enable us to establish a new pipeline of talented teachers and education leaders for the region. On a personal note, as a longtime resident of the Twin Cities, I'm happy that some of our corps members will have the opportunity to call the cities home."

A growing body of rigorous research demonstrates that Teach For America corps members are highly effective in the classroom. An Urban Institute study published in 2008 and updated this year found that high school students taught by Teach For America teachers outperformed their peers, even those taught by fully certified teachers. The updated study is available at [www.caldercenter.org/upload/TFA\\_final\\_v-March-2009.pdf](http://www.caldercenter.org/upload/TFA_final_v-March-2009.pdf).

In the 2009-10 school year, Teach For America's network will include more than 7,300 corps members in 35 regions, including the Twin Cities, and some 17,000 alumni across the country working from every professional sector to level the playing field for children and families in low-income communities. The Twin Cities are home to more than 100 Teach For America alumni. Nationally, about two-thirds of Teach For America alumni remain in education, where they are starting schools, serving as principals and district administrators, and winning accolades in the classroom, including 2007 teacher of the year awards in two states and the 2005 National Teacher of the Year Award.

Daniel Sellers will serve as the executive director of Teach For America-Twin Cities. Sellers, a graduate of South High School in Minneapolis and Gustavus Adolphus College, joined Teach For America as a corps member in Eastern North Carolina. During his first year in the classroom, he increased the percentage of his students who passed the North Carolina state standardized math exam from 40 to 75. The following year, he led 97 percent of his students to pass and was a finalist for Teach For America's Sue Lehmann Excellence in Teaching Award.

"I'm incredibly excited to be a part of bringing Teach For America to my hometown," Sellers said. "I am pleased to welcome our first group of corps members to the Twin Cities and I look forward to working with them as they do whatever it takes to help their students succeed."

About Teach For America

Teach For America is the national corps of outstanding recent college graduates who commit to teach for at least two years in urban and rural public schools and become lifelong leaders in expanding educational opportunity. In the 2008-09 school year, 6,200 corps members are teaching in over 1,600 schools in 29 regions across the country while more than 14,000 Teach For America alumni continue working from inside and outside the field of education for the fundamental changes necessary to ensure educational excellence and equity. For more information, visit [www.teachforamerica.org](http://www.teachforamerica.org).

### **Twin Cities Teaching Fellows**

*Description from website <http://www.twincitiesteachingfellows.org/>*

We need dedicated, diverse new educators to close the achievement gap in the Twin Cities.

Twin Cities Teaching Fellows seeks outstanding professionals and graduates to make a difference in the lives of the students in the Twin Cities. This highly-selective program is designed to recruit and train driven individuals, like you, who want to end the achievement gap by becoming successful teachers in our highest-need public schools.

Students in Saint Paul, Minneapolis and their surrounding regions bring a huge variety of experiences and backgrounds into the classroom. A significant percentage of students in the Twin Cities are English Language Learners: Saint Paul Public Schools serve a sizable population of Hmong students, Minneapolis is home to many East African families, and both districts celebrate an abundance of Spanish-speakers. In total, Minneapolis and Saint Paul students speak more than 123 languages and dialects. The substantial new immigrant student population in the area opens amazing opportunities for our children and community, but also presents an urgent challenge for educators to ensure both these students' language acquisition and content mastery.

We know that all students can perform at high academic levels, and we know that all students deserve the highest quality education. Yet, in Minnesota, only 36% of eighth grade students who are living in poverty are proficient in math. Fellows will address inequities in education by working determinedly to ensure academic success for all of their students. Dramatic change does not happen overnight, but Teaching Fellows' perseverance each day will make a critical difference in student learning and success.

There is no one profile of an ideal Twin Cities Teaching Fellows candidate. Fellows may be fresh out of a successful college career and ready to leverage their academic success into a successful teaching career. Fellows may be professionals with years of experience in the non-profit world or the private sector who are ready to change careers to teach where they can make the most difference. As a Fellow, you will become part of a powerful network of educational leaders, working with other progressive educators in the Twin Cities to improve the quality of education for all students... starting in your classroom.

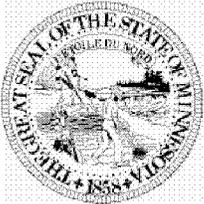
This year, the Teaching Fellows program will offer 30 - 50 dedicated new teachers the opportunity to join this challenging and selective route into the classroom. Candidates will benefit from a streamlined application and selection process and, if selected, will have the opportunity to participate in an intensive Training Institute in summer 2010 before entering

their classrooms as full-time teachers in the fall. Fellows will pursue licensure at Hamline University while teaching full-time. Most may be eligible for the added benefit of an AmeriCorps Education Award that will help defer the cost of licensure coursework. Review the Licensure section for more information. Fellows who secure full-time teaching positions will earn a full-time teachers' salary and benefits once they begin in the classroom in the fall.

We are looking for outstanding candidates who are committed to ending the achievement gap to teach math, science, bilingual elementary education and special education. You have the ability to leverage your experience, knowledge, and record of achievement to work with the diverse children of the Twin Cities to set the course for their academic success. Open a world of opportunities for Minneapolis and Saint Paul students.

**(D)(1) – Exhibit D: Board of Teaching Proposed Rules Amendments**

**Board of Teaching Approved Recommendation**



**MINNESOTA BOARD OF TEACHING**

**TO: Members, Board of Teaching**  
**FROM: Karen Balmer**  
**DATE: October 14, 2009**  
**RE: Rulemaking Initiative**

**RECOMMENDATION: That the Board of Teaching launch a rulemaking initiative to revise and update Minnesota Rule 8700.7600, as certified by the Authorizing Resolution dated November 13, 2009, signed by the Chairman of the Board of Teaching.**

**Proposal / Timeline**

- Launch a revision process for MN Rule 8700.7600, which governs both institutional (unit) approval and program approval for each individual licensure program.
- Target an effective date of September 1, 2010, to align with the launch of the redesigned program approval process, currently known as PEPER.

**Background / Context**

The rule governing institutional and program approval was last reviewed in 1999-2000. The current rule provides for institutional approval, program approval, and “experimental” approval.

| <b>CURRENT APPROVALS</b>              |            |
|---------------------------------------|------------|
| Number of approved institutions       | 32         |
| Number of approved licensure programs | 685        |
| Traditional                           | <u>625</u> |

|                     |    |
|---------------------|----|
| Related services    | 42 |
| “Experimental”      | 2  |
| Alternative PEPER * | 16 |

*\* Note: Includes 1 approval submitted for 14 world language programs, 1 approval submitted for 7 CTE programs.*

**Rationale for Rulemaking Initiative**

Given a number of recent initiatives and policy discussions, our current rule is in need of being reviewed and updated. The rule does not address the current landscape of teacher preparation in Minnesota, and we have reached a critical juncture where it is clear that our rule no longer relates well to the work of either the Board of Teaching or those that prepare teachers for Minnesota licensure.

There are a number of policy issues and questions to be addressed in the proposed rulemaking initiative, including:

**1. Innovation and Flexibility:**

**How can the Board of Teaching appropriately address the desire for additional innovation and flexibility within our higher education institutions?**

The rule currently provides only two options for program approval: traditional or “experimental.” No clear, consistent, or objective parameters are provided for approval as an “experimental” program; the rule is silent in terms of measuring the success of these programs against other programs, and it provides no objective basis for Board approval or denial. However, we know that many colleagues in our higher education institutions are moving forward with innovative ideas. For example, the Bush Foundation is providing a rare opportunity for many of our institutions to develop mold-breaking programs. Other faculty members are at work on innovative partnerships developing programs such as Mandarin Chinese. Yet our rule does not sufficiently address an approval process or ongoing approval mechanisms for programs like these.

**How can the Board of Teaching engage continued discussions around alternative pathways to licensure and provide an appropriate framework for both approving these programs and measuring their success against other types of programs?**

The alternative pathways discussion is not a new one in Minnesota; we currently have a handful of alternative routes, but we have not applied a clear and consistent process for approving these programs. As evidenced by our current standards-based licensure structure, which allows for flexibility in the delivery of the standards at the institutional level, the Board of Teaching is

committed to cultivating a climate where innovation is fostered. Our current rule does not have the capacity to recognize innovation through alternative pathways in a meaningful way.

**2. Data-driven Continuous Improvements: How can the rule reflect the redesigned program approval structure, which shifts our focus from program inputs to demonstrations of candidate competence, as required by MS 122A.09, Subdivision 4d?**

The rule should establish an environment where, while there may be various types of program approvals, there are a common slate of assessments to allow for robust analysis of these programs to inform policy and continuing program approvals. The Board of Teaching has approved a conceptual framework for a redesigned program approval process which relies heavily on candidate competence measures. These measures will allow the Board of Teaching to gather data and conduct analyses and inquiries that will inform both practice at the institutional level and policy at the state level.

**3. Cohesion and Alignment: How can the rule ensure that the Board of Teaching approval processes are efficient, responsive, and clear, and that the sum total of the data gathered in these processes is meaningful and used for the purpose of continuous improvement?**

Specific questions to be addressed:

- Duration of approval (for both programs and institutions)
- Relationship between the requirements for initial approval and ongoing approval (for both programs and institutions)
- Relationship between the requirements for program and institutional approval
- Alignment with external accrediting bodies such as NCATE and TEAC
- Approval process for related service programs (school social worker, school nurse, school counselor, school psychologist, speech-language pathologist)

**4. Regulatory Considerations: How can the Board of Teaching ensure that the institutions and programs approved under this rule are effectively meeting the requirements set forth, using data to inform approval status?**

The current rule allows for four responses by the Board of Teaching for each program or institution under review:

Grant initial approval

Grant continuing approval

Grant conditional approval

### Discontinue the institution or program

Because of significant federal funding implications for higher education institutions who receive a “conditional approval” designation, the practice has generally been to approve institutions and programs. In cases where weaknesses are identified, language such as “met with weakness” has been used rather than denying approval. However, future program approvals will have clearly articulated benchmarks for success; while the Board of Teaching may wish to provide some intermediate step such as a probationary period prior to denying approval, the grounds for denial will not be arbitrary or unclear.

The initiatives described above are neither fads nor fleeting discussions. They represent critical policy dialogues and in order to allow the Board of Teaching to engage these policy matters in a meaningful way, our rules must reflect their consideration. Therefore, a rulemaking initiative is recommended with the following goals as the primary commitment:

- a) *Provide criteria to serve as the basis for approving innovative or alternative programs*
- b) *Provide clarity and consistency in the measures used to assess the quality of all licensure programs*
- c) *Apply common measures to all programs for the purpose of ongoing program approval*
- d) *Design a cohesive system where:*
  - *initial approval of licensure programs recognizes and fosters innovation*
  - *ongoing approval of licensure programs relies heavily on measures of candidate competence*

*redundancies between institutional and program approval processes are eliminated*

**(D)(1) – Exhibit E: *Alternative Certification Legislation for Principals***

**Current authorizing language for Alternative Preparation for Licensing Administrators**

***Minn. Stat. § 122A.27 Alternative Preparation Licensing for Administrators***

Subdivision 1. Requirements. (a) A preparation program that is an alternative to a graduate program in education administration for public school administrators to acquire an entrance license is established. The program may be offered in any administrative field.

(b) To participate in the alternative preparation program, the candidate must:

- (1) have a master's degree in an administrative area;
- (2) have been offered an administrative position in a school district, group of districts, or an education district approved by the commissioner of education to offer an alternative preparation licensure program;
- (3) have five years of experience in a field related to administration; and
- (4) document successful experiences working with children and adults.

(c) An alternative preparation license is of one year duration and is issued by the commissioner of education to participants on admission to the alternative preparation program.

Subd. 2. Characteristics. The alternative preparation program has the characteristics enumerated in this subdivision:

- (1) staff development conducted by a resident mentorship team made up of administrators, teachers, and postsecondary faculty members;
- (2) an instruction phase involving intensive preparation of a candidate for licensure before the candidate assumes responsibility for an administrative position;
- (3) formal instruction and peer coaching during the school year;
- (4) assessment, supervision, and evaluation of a candidate to determine the candidate's specific needs and to ensure satisfactory completion of the program;
- (5) a research-based and results-oriented approach focused on skills administrators need to be effective;
- (6) assurance of integration of education theory and classroom practices; and
- (7) the shared design and delivery of staff development between school district personnel and postsecondary faculty.

Subd. 3. Affiliation with a postsecondary institution. An alternative preparation program at a school district, group of schools, or an education district must be affiliated with a postsecondary institution that has a graduate program in educational administration for public school administrators.

Subd. 4. Approval for standard entrance license. The resident mentorship team must prepare for the commissioner of education an evaluation report on the performance of the alternative preparation licensee during the school year and a positive or negative recommendation on whether the alternative preparation licensee shall receive a standard entrance license.

Subd. 5. Standard entrance license. The commissioner of education must issue a standard entrance license to an alternative preparation licensee who has successfully completed the school year in the alternative preparation program and who has received a positive recommendation from the licensee's mentorship team.

Subd. 6. Qualified administrator. A person with a valid alternative preparation license is a qualified administrator within the meaning of section 122A.16.

**(D)(1) – Exhibit F: *Teacher Supply and Demand Survey***

**Current authorizing language requiring reporting on teacher supply and demand**

***Minn. Stat. § 127A.05 subd 6***

*Commissioner of Education*

**Subd. 6. Survey of districts.**

The commissioner of education shall survey the state's school districts and teacher preparation programs and report to the education committees of the legislature by January 15 of each odd-numbered year on the status of teacher early retirement patterns, the teacher shortage, and the substitute teacher shortage, including patterns and shortages in subject areas and regions of the state. The report must also include how districts are making progress in hiring teachers and substitutes in the areas of shortage and a five-year projection of teacher demand for each district.

***2009 Teacher Supply and Demand Survey excerpt***

*Purpose and Executive Summary*

The Educator Licensing Division of the Minnesota Department of Education contacted Minnesota public school districts and charter schools, the Minnesota Board of Teaching, the

Minnesota Association of Colleges for Teacher Education (MACTE), and Special Education

Policy staff to collect and analyze data relating to the perceived supply and demand of Minnesota teachers.

This report summarizes the findings and highlights perceived teacher shortage areas and trends as measured by the data collected.

1. Supply and demand factors. Minnesota teacher supply and demand 1. is influenced by several factors including but not limited to the number of individuals who complete a teacher preparation program, teacher candidates who request initial licensure, individuals who currently possess teacher licensure (un-expired licenses), teachers currently employed as teachers in Minnesota public schools, new teachers who leave teaching within their first five years, teachers who have reached retirement age but continue to teach (in either retired or non-retired status) and teachers who have retired and no longer teach.

2. Study limitations. Much of this report includes data reported by districts to the Minnesota Department of Education in the Staff Automated Reporting (STAR) system. Data may not be consistently reported by Minnesota superintendents or administrative designees due to different interpretations.

3. 2009 Teacher Supply and Demand Survey. Minnesota superintendents or administrative designees were asked to complete the 2009 Teacher Supply and Demand Survey. The survey was sent to 548 school districts and charter schools. Of the 548 districts, 329 (60%) of the districts responded to the survey.

4. Perceived teacher shortage areas and surplus areas. Superintendents or administrative designees responding to the survey identified the following teacher shortage areas, which are listed from their perceptions as most to least critical: Mathematics, Physics, Chemistry, Emotional Behavioral Disorders (EBD), Science 5- 8, Mathematics 5-8, Special Education Early Childhood, Earth and Space Science, Spanish and Deaf and Hard of Hearing. The respondents identified Physical Education, Social Studies, Health, Vocal and Instrumental Music, Visual Arts and Communication Arts and Literature as surplus areas. Superintendents or administrative designees identified shortages in the following related service positions: Speech Pathology, Superintendent, School Psychologist, Business Manager and School Nurse.

5. The United States Department of Education teacher shortage areas. The United States Department of Education identified shortage areas for purposes of teacher loan forgiveness in accordance with 34 CFR 682.210 (a) (6). These shortage areas in Minnesota include: Bilingual/Bicultural Education, English as a Second Language, Keyboarding, Mathematics, Science, Special Education, World Languages and Work Based Learning.

6. Correlation between perceived shortage areas and the United States Department of Education teacher shortage areas. There is a strong correlation between the perceived shortage areas identified by Minnesota superintendents or administrative designees and those identified by the United States Department of Education.

7. Teacher preparation programs in Minnesota. According to Minnesota Association of Colleges for Teacher Education's (MACTE) 2007 Measures of Teacher Quality in Minnesota (MTQM), 4,307 licensure candidates were prepared in Minnesota. These candidates were enrolled in 86 undergraduate and 75 graduate programs.

8. Perceived teacher shortage areas correlated with the number of special permissions (actual data). Perceived shortage areas identified by participating superintendents or administrative designees generally correlated with the number of special permissions requested and granted by the Minnesota Board of Teaching.

9. Un-expired licenses (actual data). There was a decrease in the number of unexpired teaching licenses in Physics, Mathematics, Earth and Space Science, Work Based Learning and Learning Disabilities. The number of un-expired teaching licenses increased in Chemistry, Emotional Behavioral Disorders (EBD), Developmental Disabilities (DD), and Science 5-8.

10. Retirements (actual data). There was an increase in the number of retirements in Physics, Chemistry, Mathematics, and Science 5-8. There was a decrease in the number of retirements in Emotional Behavioral Disorders (EBD), Special Education – Early Childhood, and Deaf and Hard of Hearing.

11. Initial licenses (actual data). There was an increase in the number of initial licenses granted in Physics, Chemistry, Mathematics, Special Education-Early Childhood and Emotional Behavioral Disorders (EBD). The number of initial license granted in Deaf and Hard of Hearing and Science 5-8 decreased.

12. Initial licenses to individuals prepared in Minnesota and out-of-state (actual data). Between 2002 and 2008, the number of teachers prepared out-of-state decreased by 30%. The number of teachers prepared in Minnesota increased by 3.5% from 2002 to 2008. The supply of Developmental Disabilities teachers and Work Based Learning teachers has experienced the greatest increase in the number of initial licenses being granted. Developmental Disabilities experienced a 338% increase and Work Based Learning experienced a 319% increase.

13. Actual Minnesota teacher retirements. From 2002 through 2007, annual teacher retirements averaged 2.3%. In 2008 the rate of retired teachers rose to 4.8% which is an increase of 52% .

14. Board of Teaching Licensure data (actual data). In 2008 the Minnesota Board of Teaching issued a total of 8,768 special permissions, an increase of 11% over 2007. This included an 18% increase in the number of permissions for community experts and a 27% increase in the number of permissions granted for limited licenses. There was a 3% decrease in the number of total variances granted in 2008 and a 10% decrease in the number of waivers granted.

15. Additional special permissions (actual data). Despite being identified as teacher surplus areas, 80 special permissions were granted in 2008 for Physical Education and Health, 51 special permissions were granted for Vocal and Instrumental Music, 34 special permissions were granted for Visual Arts and 69 special permissions were granted for Communication Arts and Literature.

16. District report about substitute teacher shortage. Data collected from 329 out of 548 (60%) Minnesota superintendents or administrative designees indicated that during the 2007-2008 school year, 71% reported having success securing substitute teachers and 12% reported being extremely successful in finding substitute teachers. Fifty percent of Minnesota Superintendents or administrative designees reported that they would not have a problem securing substitute teachers during the 2008-2009 school year.

*Full text of report available at:*

<http://education.state.mn.us/MDE/groups/communications/documents/report/036669.pdf>

## **(D)(2) – Exhibit A: Minnesota Growth Model**

### **Background**

The Minnesota State Legislature has specified what is defined in Minnesota statute as a Growth-based value-added model for reporting reading and mathematics achievement gains for Minnesota public school students in grades 3 through 8. Using the Minnesota Comprehensive Assessment-SeriesII, achievement growth provides a picture of how our schools and districts are helping students grow in their mastery of Minnesota's academic standards.

The Minnesota Growth Model uses the difference between a student's achievement scores at two distinct points in time and compares that difference to the growth of other students who started from the same point. Specifically, this norm-based metric is calculated in the following way:

1. Find students who scored about the same scale score in a particular grade and subject, using two years' worth of data in the analysis.
2. Link the students' results in Year 1 to their Year 2 results in that subject.
3. Determine the average performance on Year 2 for this group of students.
4. Determine the variability of that average performance by establishing three target ranges (low, medium and high) using one-half the standard deviation above and below the mean as the division between those ranges.
5. Repeat this process for each scale score value in each subject.

In setting these initial ranges, our Analysis showed that the targets measure growth towards proficiency: students annually making their high target would be very highly likely to achieve or maintain proficiency, and students annually failing to make the high or middle target would be very highly likely to never achieve or lose proficiency.

Achievement growth for schools and districts is summarized on the Minnesota School Report Card using State growth norms on continuously enrolled students who were tested during the 2006 and 2007 spring administrations of the MCA-II and MTELL assessments. Growth is summarized for each district and school in Minnesota by the 9 subgroups defined under 2001 No Child Left Behind Federal legislation and also by gender.

### **Rationale for the Report Card Growth Model**

The main purposes of reporting achievement growth at a school district and school level are to document the effectiveness of educational efforts by schools and districts across Minnesota and to highlight accelerated progress for subgroups of students who traditionally have not demonstrated accelerated growth in reading and math achievement. Schools and districts with large numbers of students making accelerated growth will be recognized and invited to participate in studies of effective reading and math educational efforts. Citizens of Minnesota can all learn from these "beat the odds" schools.

Use of a growth model which tracks individual student achievement gains across time is superior to “attainment” models (Meyer, 2003) which report average scores or percentage of students proficient on different cohorts of students from year to year. The typical attainment model will report the percentage of students proficient in 3rd grade one year compared to the percentage of students proficient in 3rd grade the next year. The problems with the “attainment model” are many. Robert Meyer, director of the Value-Added Research Center at the University of Wisconsin has clearly articulated the four main problems as follows:

- 1) The average or percent proficient at a particular point in time is **contaminated by factors other than school performance**. In particular, prior student achievement and the effects of student, family and community effects on student academic growth confound the simple comparison of one third grade class to another. For example, each third grade cohort may have significant differences in the quality and quantity of quality preschool and home life experiences.
- 2) The attainment score **reflects information about school performance with tends to be out-of-date**. For example, different 3rd grade cohorts may have had prior instruction in first and second grade which was differentially effective or ineffective. Perhaps a fabulous second grade teacher retired before the second cohort arrived in second grade and they received instruction from a poorly trained substitute teacher.
- 3) The attainment score may be **highly contaminated due to student mobility**. For example, one third grade cohort may include only students who speak English as the primary language at home while the next cohort may include large numbers of new immigrants from countries where English is not the primary language.
- 4) The attainment score **fails to localize** the (pinpoint) school performance to a particular grade level. This is particularly true in the upper grades where, for example, the average 8th grade math score fails to distinguish the 6th and 7th grade effects from the instruction at 8th grade.

The Minnesota Growth-based value-added system addresses each of the problems delineated by Meyer. By comparing individual student longitudinal growth to typical gains in the Minnesota growth norms, factors other than school performance are minimized. For example, the quality of early childhood experiences are reflected in the prior year. Evaluation of the effects of 4th grade instruction are not contaminated by prior experiences since the prior experiences are “captured” in the 3rd grade score. Information about school productivity is localized to the particular grade level using a pretest-posttest evaluation

design. Gains from 3rd to 4th grade can be separated from 2nd grade effects. Student mobility is controlled by creating growth norms on continuously enrolled students and analyzing scores for students who have stayed in the same school/district from October to April of the school year in question.

Controlling for these confounding variables makes the The Minnesota Growth-based value-added system much more fair and accurate in measuring the productivity of schools and districts throughout the State. Using a simple achievement growth model rather than more sophisticated linear modeling makes the results much easier to for student, families and the general public to understand. Using the data from the Education Report Card, district will be able to simultaneously evaluate school performance on two dimensions: growth and attainment.

**Reporting**

Each schools’ aggregated growth is reported publicly on the MDE website as part of the school’s report card (sample below):

**Math**

| <b>Growth Over the 2008-09 School Year</b> |   |  |  |
|--|---|--|--|
| <b>2008 Status</b>                         | <b>Low</b>  | <b>Medium</b>  | <b>High</b>  |
| <b>Proficient</b>                          | 8%<br>41 students were proficient but made low growth     | 26%<br>137 students continued to grow                      | 37%<br>198 students made exceptional growth                        |
| <b>Not Proficient</b>                      | 4%<br>23 students were not proficient and made low growth | 8%<br>41 students were not proficient but made some growth | 17%<br>91 students were not proficient but made exceptional growth |

[View Math by Grade Level](#)

[View Math by Subgroup](#)

[View State Growth](#)

## Reading

| Growth Over the 2008-09 School Year |   |  |  |
|-------------------------------------|---|--|--|
| 2008 Status                         | Low   | Medium   | High   |
| <b>Proficient</b>                   | 16%<br>81 students were proficient but made low growth    | 33%<br>168 students continued to grow                      | 32%<br>163 students made exceptional growth                        |
| <b>Not Proficient</b>               | 3%<br>15 students were not proficient and made low growth | 6%<br>29 students were not proficient but made some growth | 11%<br>56 students were not proficient but made exceptional growth |

[View Reading by Grade Level](#)

[View Reading by Subgroup Growth](#)

[View State](#)

**(D)(2) – Exhibit B: *Quality Compensation for Teachers Program Details***

***Development and Components***

Quality Compensation for Teachers (Q Comp) was proposed by Governor Tim Pawlenty and was enacted by the Minnesota Legislature in July 2005. It is a voluntary program, based on the Charlotte Danielson model, that allows local districts and exclusive representatives of the teachers to design and collectively bargain a plan that meets the five components of the law. The five components under Q Comp include: Career Ladder/Advancement Options, Job-embedded Professional Development, Teacher Evaluation, Performance Pay, and an Alternative Salary Schedule.

Minnesota believes that effective teachers, with strong instructional practices can improve student achievement. The Q Comp program is a professional development model that promotes the restructuring of school systems by utilizing teacher leaders and providing teachers with time to meet in collegial teams to discuss instructional practices, student achievement data, and student work. The collaborative work of the teachers is to set goals for school-wide and individual student achievement, to improve instructional practices, and work with teacher instructional leaders to improve student achievement. The program includes a peer evaluation process for every teacher that is based on skills, responsibilities and student academic improvement. Teachers are rewarded and paid based on their performance, not just seniority.

While the program name implies compensation is the main facet of this initiative, what is most important is how teachers demonstrate quality performance to earn the compensation.

At least three elements determine performance:

1. Schoolwide student achievement gains on the state assessment, locally selected standardized assessments or both
2. Classroom or individual measures of student achievement
3. Objective teacher evaluation by a team of trained evaluators

There are five components that work together in a Q Comp plan:

1. **Career Ladders/Advancement Options for Teachers:** This component focuses on providing interested and qualified teachers with the opportunity to take on leadership roles in the district and share their expertise with their colleagues while still retaining a primary role in student instruction.
2. **Job-Embedded Professional Development:** This component focuses on aligning professional development with schoolwide student achievement goals on a standardized assessment and providing teachers with time for collaboration and collegiality during the school or teacher contract day. This time should be provided on either a once weekly or once every other week basis.

3. **Teacher Evaluation/Observation:** This component focuses on helping teachers to show continuous growth and improvement in instructional skills through formative teacher evaluation/observation focused on a rubric and provided by a team of evaluators/observers. This process must occur at least three times per year for all teachers and must include at least two different evaluators/observers.
4. **Performance Pay:** This component focuses on the performance bonuses awarded to teachers based on attaining various performance indicators. At least 60% of any compensation increase must be based on the following three performance factors:
  - a. **Schoolwide** student achievement gains on a standardized assessment
  - b. Measures of **student achievement** such as classroom, grade level, or team goals
  - c. **Teacher evaluation/observation** results
5. **Alternative Salary Schedule:** This component focuses on reforming the traditional “steps and lanes” salary schedule so that any permanent base salary increases for teachers are based on performance factors rather than longevity/continued performance. At a minimum the salary schedule must be revised so that no teacher receives an increase in base salary unless specific performance indicators are met.

The components are individually designed by the union and the district. While the statute gives a foundation to the program, it remains flexible so that any organization can make it work within existing structures. Also, as a district implements the plan and learns more, revisions can be made to an approved plan so that it better meets the needs of the organization.

MDE created the School Improvement Division to support the professional development needed. This division has grown to meet the demands of the growing program and offer the support needed to organize the program and lead districts to the best possible outcomes. To help in this effort, an Advisory Committee was established. This group of representatives from established Q Comp districts, unions, other educational organizations and MDE discuss implementation issues and influence decisions. Also, a larger networking group has begun to meet so all participants have a chance to communicate and improve their implementation efforts.

**(D)(2) – Exhibit C: Quality Compensation for Teachers**  
*legislation - Minn. Stat. § 122A.414 Alternative Teacher Pay*

**Minn. Stat. § 122A.414 Alternative Teacher Pay**

***Subdivision 1. Restructured pay system.*** A restructured alternative teacher professional pay system is established under subdivision 2 to provide incentives to encourage teachers to improve their knowledge and instructional skills in order to improve student learning and for school districts, intermediate school districts, and charter schools to recruit and retain highly qualified teachers, encourage highly qualified teachers to undertake challenging assignments, and support teachers' roles in improving students' educational achievement.

**Subd. 1a. Transitional planning year.**

(a) To be eligible to participate in an alternative teacher professional pay system, a school district, intermediate school district, or site, at least one school year before it expects to fully implement an alternative pay system, must:

(1) submit to the department a letter of intent executed by the school district or intermediate school district and the exclusive representative of the teachers to complete a plan preparing for full implementation, consistent with subdivision 2, that may include, among other activities, training to evaluate teacher performance, a restructured school day to develop integrated ongoing site-based professional development activities, release time to develop an alternative pay system agreement, and teacher and staff training on using multiple data sources; and

(2) agree to use up to two percent of basic revenue for staff development purposes, consistent with sections 122A.60 and 122A.61, to develop the alternative teacher professional pay system agreement under this section.

(b) To be eligible to participate in an alternative teacher professional pay system, a charter school, at least one school year before it expects to fully implement an alternative pay system, must:

(1) submit to the department a letter of intent executed by the charter school and the charter school board of directors;

(2) submit the record of a formal vote by the teachers employed at the charter school indicating at least 70 percent of all teachers agree to implement the alternative pay system; and

(3) agree to use up to two percent of basic revenue for staff development purposes, consistent with sections 122A.60 and 122A.61, to develop the alternative teacher professional pay system.

(c) The commissioner may waive the planning year if the commissioner determines, based on the criteria under subdivision 2, that the school district, intermediate school district, site or charter school is ready to fully implement an alternative pay system.

**Subd. 2. Alternative teacher professional pay system.**

(a) To participate in this program, a school district, intermediate school district, school site, or charter school must have an educational improvement plan under section 122A.413 and an alternative teacher professional pay system agreement under paragraph (b). A charter school participant also must comply with subdivision 2a.

(b) The alternative teacher professional pay system agreement must:

(1) describe how teachers can achieve career advancement and additional compensation;

(2) describe how the school district, intermediate school district, school site, or charter school will provide teachers with career advancement options that allow teachers to retain primary roles in student instruction and facilitate site-focused professional development that helps other teachers improve their skills;

(3) reform the "steps and lanes" salary schedule, prevent any teacher's compensation paid before implementing the pay system from being reduced as a result of participating in this system, and base at least 60 percent of any compensation increase on teacher performance using:

(i) schoolwide student achievement gains under section 120B.35 or locally selected standardized assessment outcomes, or both;

(ii) measures of student achievement; and

(iii) an objective evaluation program that includes:

(A) individual teacher evaluations aligned with the educational improvement plan under section 122A.413 and the staff development plan under section 122A.60; and

(B) objective evaluations using multiple criteria conducted by a locally selected and periodically trained evaluation team that understands teaching and learning;

(4) provide integrated ongoing site-based professional development activities to improve instructional skills and learning that are aligned with student needs under section 122A.413, consistent with the staff development plan under section 122A.60 and led during the school day by trained teacher leaders such as master or mentor teachers;

(5) allow any teacher in a participating school district, intermediate school district, school site, or charter school that implements an alternative pay system to participate in that system without any quota or other limit; and

(6) encourage collaboration rather than competition among teachers.

**Subd. 2a. Charter school applications.**

For charter school applications, the board of directors of a charter school that satisfies the conditions under subdivisions 2 and 2b must submit to the commissioner an application that contains:

(1) an agreement to implement an alternative teacher professional pay system under this section;

(2) a resolution by the charter school board of directors adopting the agreement; and

(3) the record of a formal vote by the teachers employed at the charter school indicating that at least 70 percent of all teachers agree to implement the alternative teacher professional pay system, unless the charter school submits an alternative teacher professional pay system agreement under this section before the first year of operation.

Alternative compensation revenue for a qualifying charter school must be calculated under section 126C.10, subdivision 34, paragraphs (a) and (b).

**Subd. 2b. Approval process.**

(a) Consistent with the requirements of this section and sections 122A.413 and 122A.415, the department must prepare and transmit to interested school districts, intermediate school districts, school sites, and charter schools a standard form for applying to participate in the alternative teacher professional pay system. The commissioner annually must establish three dates as deadlines by which interested applicants must submit an application to the commissioner under this section. An interested school district, intermediate school district, school site, or charter school must submit to the commissioner a completed application executed by the district superintendent and the exclusive bargaining representative of the teachers if the applicant is a school district, intermediate school district, or school site, or executed by the charter school board of directors if the applicant is a charter school. The application must include the proposed alternative teacher professional pay system agreement under subdivision 2. The department must review a completed application within 30 days of the most recent application deadline and recommend to the commissioner whether to approve or disapprove the application. The commissioner must approve applications on a first-come, first-served basis. The applicant's alternative teacher professional pay system agreement must be legally binding on the applicant and the collective bargaining representative before the applicant receives alternative compensation revenue. The commissioner must approve or disapprove an application based on the requirements under subdivisions 2 and 2a.

(b) If the commissioner disapproves an application, the commissioner must give the applicant timely notice of the specific reasons in detail for disapproving the application. The applicant may revise and resubmit its application and related documents to the commissioner within 30 days of receiving notice of the commissioner's disapproval and the commissioner must approve or disapprove the revised application, consistent with this subdivision. Applications that are revised

and then approved are considered submitted on the date the applicant initially submitted the application.

**Subd. 3. Report; continued funding.**

(a) Participating districts, intermediate school districts, school sites, and charter schools must report on the implementation and effectiveness of the alternative teacher professional pay system, particularly addressing each requirement under subdivision 2 and make annual recommendations by June 15 to their school boards. The school board or board of directors shall transmit a copy of the report with a summary of the findings and recommendations of the district, intermediate school district, school site, or charter school to the commissioner.

(b) If the commissioner determines that a school district, intermediate school district, school site, or charter school that receives alternative teacher compensation revenue is not complying with the requirements of this section, the commissioner may withhold funding from that participant. Before making the determination, the commissioner must notify the participant of any deficiencies and provide the participant an opportunity to comply.

**Subd. 4. Planning and staff development.**

A school district that qualifies to participate in the alternative teacher professional pay system transitional planning year under subdivision 1a may use up to two percent of basic revenue that would otherwise be reserved under section 122A.61 for complying with the planning and staff development activities under this section.

**History:**

1Sp2001 c 6 art 2 s 54; 1Sp2003 c 9 art 2 s 8; 1Sp2005 c 5 art 2 s 40; 2009 c 96 art 2 s 26

**(D)(2) – Exhibit D: *Outside Evaluation of Q Comp***

**Hezel Associates evaluation of Q Comp, published January 2009 (emphasis added)**

***Executive Summary***

During the summer of 2008, the Minnesota Department of Education contracted with

Hezel Associates, LLC, to conduct an external evaluation of the Q Comp implementation. The evaluation team has adopted a formative-summative approach to the investigation of Q Comp impact and sustainability. This approach has allowed us to study how Q Comp works and whether it works as intended and also to determine any preliminary impact that Q Comp has had on outcomes at various levels (e.g., district, school, teacher, student) while implementation occurs. This final evaluation report describes the research activities undertaken to date; findings, commendations and recommendations that have resulted from our research; and suggestions for further research in the future.

Hezel Associates' framework for the evaluation of Q Comp was designed to determine whether the system is understandable, fair and credible, appropriately linked to desired behaviors and improved student performance and an efficient investment of resources. To do this, the Hezel team has considered each of Q Comp's components individually as well as in concert with one another: career ladder/advancement options, job-embedded professional development, teacher evaluation, performance pay, and alternative salary schedule.

A key component of the evaluation is assuring that we have sought multiple types of data from multiple sources. Our methods and findings sections detail these activities and learnings, and sustain our commendations and recommendations for the future of Q Comp. Here, we present the commendations and recommendations for Q Comp that we have been able to cull from our efforts during the fall of 2008 to the winter of 2009, organized by statewide and site-specific aspects of program implementation and impact.

**A. COMMENDATIONS**

**1. Statewide implementation of Q Comp**

- The perception of Q Comp's impact on schools has overall been quite positive.
- Teachers, mentors, and coaches share a common view that the financial gains behind Q Comp are not a driving motivator for program participation.
- Minnesota's teachers seem to be more supported in their role of improving students' educational achievement since Q Comp's inception, compared to non- Q Comp teachers, though we cannot link these trends statistically.
- Q Comp emphasizes all teachers growing professionally, which is consistent with MDE's goals for the school improvement process.

*Q Comp Summative Evaluation Final Report for Public Release*

- The flexible nature of Q Comp has been helpful to empowering local districts and schools with resources they can use to undergo the school improvement process.

## **2. Districtwide implementation of Q Comp**

- **The perception that instructional practices have improved under Q Comp is widespread within Q Comp schools.**
- Schools that have implemented Q Comp tend to view the program as an integration of each of the five components, and not simply a performance pay system.
- Onsite and meaningful professional development that is integrated into teachers' schedules under Q Comp facilitates teachers' participation in regular and more substantive, as well as school improvement, activities.
- **Teachers are sharing and collaborating around student needs and instructional practices more than they ever have since Q Comp was implemented.**
- **Participating schools praise Q Comp for providing a unifying focus and framework for collaborating around instruction, planning and professional development.**
- Teachers attribute greater consistency in the way that expectations for students are set and in the teaching strategies that are being used to their participation in Q Comp.
- **Generally, observations in Q Comp schools are viewed as constructive, whereas in non-Q Comp schools, observations are perceived to be more evaluative.**
- In some Q Comp schools, there has been an overall shift from administrative decision making to teacher decision making, which administrators and teachers view favorably.
- Teachers from Q Comp schools are generally familiar with their career ladder systems, or believe this information is widely available and easily accessible.
- When Q Comp is implemented in schools, the following set of conditions best predict student achievement to increase: (1) When school administrators feel that their teachers consider Q Comp to be successful in their school, (2) When teachers feel that someone other than the principal is responsible for conducting Q Comp teacher evaluations/observations, (3) When standards-based lessons are *not* the main topic of professional development activities and discussions, but other topics are addressed, (4) When teachers feel that the addition of multiple career paths in their school will encourage them to remain in the teaching profession longer.
- **There is a significant and positive relationship between the number of years a school has been implementing Q Comp and student achievement and the number of years a school is in Q Comp with student academic achievement.**

*Q Comp Summative Evaluation Final Report for Public Release*

## **B. RECOMMENDATIONS**

### **1. Statewide implementation of Q Comp**

- Target audiences for Q Comp awareness campaigns should include both districts and schools.

- o Strategy: Provide information about the variety of ways that districts and schools have designed programs to meet the requirements of specific elements of Q Comp.
- o Strategy: Better utilize the Q Comp informational conference offered by MDE each January.
- o Strategy: Provide information about what Q Comp does – and does not – involve.
- o Strategy: Encourage districts and schools that are interested in Q Comp participation to speak with or observe a school site that is already successfully participating.
- o Strategy: Highlight the benefits of Q Comp participation to school and district administrators.
- o Strategy: Indicate that changes in culture and thinking can be positive.
- o Strategy: Increase publicly available success stories about Q Comp implementation and impact.

## **2. Districtwide implementation of Q Comp**

- Monitor and respond to teachers' experiences with Q Comp.
- Show teachers how to manage the aspects of Q Comp that are viewed as cumbersome.
- Support each district in clarifying how Q Comp complements other district initiatives.

*Full report available at:*

<http://education.state.mn.us/mdeprod/groups/Communications/documents/Report/036790.pdf>

**(D)(2) – Exhibit E: *Randi Weingarten Praise of Q Comp***

**“What Matters Most,” published in *The New York Times*, March 8, 2009**

In his address to Congress last month, President Obama let it be known that despite the tough economic times, education was going to remain front and center in his agenda, saying: “In a global economy where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity, it is a pre-requisite.”

The President’s speech made clear he has a firm grasp of the challenges we face, and we look forward to working with him to identify both the programs that work and the promising new ideas that can shape the best policies to improve our schools.

Unfortunately, the debate over education policy often ends up in a vacuum, producing a series of fads whose proponents rarely take into account how the latest fad will indeed work on the ground, or how it fits into the larger and more complex puzzle of school improvement. That is why teacher voices are so important.

Take teacher quality — the issue of the day in education circles. Columnists are writing about it and school leaders are touting its importance. It is important. But so are the issues of how to attract, retain and support great teachers and great teaching. We can’t talk about teacher quality without talking about finding an appropriate way to define and measure it. And it’s hard to measure a teacher’s performance when we haven’t done such a great job figuring out how to measure student performance. And how, really, can we assess our progress as a nation without a common set of academic standards? Simply making everything in public education about whether a child does well once a year on the state’s math or English test really doesn’t do the trick.

These issues are interconnected. And the best way to ensure success is to make sure that new policies are developed from the ground up, with teacher input, thus ensuring that we never forget to ask the question “what happens next?” We know from experience that new policies that are sufficiently broad-based and are formulated and implemented with teachers rather than imposed on them have a much greater chance of success.

Take, for example the innovative teacher compensation program being tried in Minnesota. The team that put together “Quality Compensation for Teachers” or “Q Comp” used input from teachers in its design from the beginning and unlike traditional “merit pay,” which trades higher student test scores for individual teacher bonuses, Q Comp is a refreshingly holistic approach that includes things like a career ladder, job-embedded professional development and a wide array of teacher evaluations using numerous criteria — the kinds of components that both identify and grow good teaching.

A new independent evaluation of Q Comp shows that it is working. The findings show that teachers are supported and are sharing and collaborating around student needs more than ever. The most important finding, however, is the following: “There is a significant and positive relationship between the number of years a school has been implementing Q Comp and student achievement.”

This is an exciting time to be an educator. We have a president who owes a great deal of his success to his education and whose roots as a community organizer taught him the importance of listening to the folks “on the ground” when developing policies. In just six short weeks in office, he has fought for and achieved an unprecedented level of investment in our schools. We look forward to working closely with him to implement a full range of comprehensive education reform measures that call upon the deep experience of teachers as we make America’s public schools the best they can possibly be.

*Link available at: <http://www.edwize.org/a-real-opportunity-for-our-schools>*

**(D)(2) – Exhibit F: *Sample quotes from Q Comp participants***

***Sample Q Comp Quotes from Teachers, Principals, and Superintendents***

1/7/08

**“Our faculty is thrilled to receive Q Comp,”** said Becky Meyer, Academy of Agriculture and Science director. **“Our highly skilled staff is eager to learn and grow from the professional development opportunities Q Comp will provide. We look forward to our continued growth as a learning community.”**

1/11/08

**“Seven Hills Classical Academy has benefited from self-embedded professional development since we opened our doors in September of 2006,”** said Margaret O’Brien, Seven Hills Classical Academy director. **“The additional support that our teaching community is receiving via the Q Comp award encourages a greater investment on their part in setting and meeting individual professional development goals. We, as a community, firmly believe that this investment will result in a payoff that is already taking the form of substantially increased academic and personal success and achievements for every learner.”**

2/4/08

**“We are confident the Q Comp program will enable our teachers to enhance their skills,”** said Birch Grove Co-directors Lisa M. Hoff and Diane Blanchette. **“It will also provide valuable professional development opportunities for the staff.”**

5/12/08

**“Paideia Academy is thrilled to be receiving Q Comp,”** said Paideia Director Jill Godtland. Q Comp **“will allow our educators to meet collectively to review and discuss best practices and the latest educational research as well as to provide data-driven instruction to our students. Our teachers are anxious to get started.”**

5/21/08

**“Chisago Lakes School District’s staff are excited to become part of the Q-Comp process,”** said Mike McLoughlin, Chisago Lakes superintendent. **“We believe our plan has the potential to increase student achievement, enhance professional practice, and increase staff communication. We will be introducing teacher peer review, professional learning communities and a strong mentorship program, all of which are aimed at enhancing classroom instruction and student achievement. These are exciting times at Chisago Lakes Area Schools.”**

10/21/08

Windom Spanish Dual Immersion School, Minneapolis Public Schools

**“Q Comp schools have shown real and significant gains in student achievement,”** said Minneapolis Superintendent Dr. William Green. **“Q Comp’s focus on improving teacher quality and instructional practice pays off in real gains for all students.”**

10/21/08

**“Edina Public Schools is excited to access the support of the state’s Q Comp initiative to advance our District’s drive to maximize student achievement,”** said Edina Superintendent Ric Dressen. **“Our District’s plan will focus on providing teachers with additional coaching and training to improve their instruction. This initiative will also enhance teacher performance and accountability by aligning targeted goals with teacher compensation. We are pleased to be joining the ranks of the state’s Q Comp districts.”**

11/13/08

**“North Branch Area Public Schools is excited about the new learning opportunities the Q Comp Program will offer licensed staff and students,”** said Superintendent Deb Henton, Ed.D. **“We are confident that the implementation of Q Comp will lead to higher levels of student achievement and staff collaboration in our school district. More time to learn together equals even higher levels of success!”**

12/10/08

**“The Mahtomedi School Board and administration see significant value in the implementation of a teacher-directed quality compensation plan in Mahtomedi Schools,”** said Superintendent Mark Wolak. **“The essential components for continuous improvement practices are evident in our schools. From the classroom to the board room, staff use data to make decisions to improve instructional practice and to improve our overall school system.**

**“Insights gained by teams at all levels in the district raise standards for professional practice and help us function as a great learning organization,”** Wolak said. **“With the adoption of a Q-Comp plan, teachers have increased opportunities to grow professionally through shared leadership, mentoring and coaching. We are proud of the commitment our teachers make to continuous improvement and student growth.”**

12/11/08

**“As CVA enters its second decade, Q Comp funding supports will continue the development of the school as a high quality charter school,”** said David Alley, CVA director. **“Its "hybrid" program for grades 3-8 is truly unique – offering on-site learning three days each week and online learning two days each week.”**

1/8/09

**“Whether it’s the Best Academy’s extended day, extended year, or STEM focus, every action item we present to our board has student moral, academic, and social achievement in mind,”** said Eric Mahmoud, Best Academy Founder and Chief Executive Officer. **“The Q-Comp plan has increased the incentive for teachers to grow**

**professionally through pay for performance, teacher advancement opportunities and high quality staff development opportunities.”**

1/8/09

**“Harvest Prep has had ten years of academic, moral and social successes for African American children, with more than 40 percent of our students making exceptional growth in reading and math on the MCA II,”** said Dr. Callie Lalugba, Principal. **“The Q-Comp plan allows our school to target teacher advancement opportunities and high-quality staff development opportunities that will continue to improve on our success.”**

**"It's going to make me a better teacher."**

*Hopkins West Junior High social studies teacher Kim Campbell  
(Star Tribune, September 14, 2005)*

**"The quality of this will help us attract and retain teachers."**

*Bob Nystrom, president of the Burnsville Education Association (Star Tribune, June 14, 2006)*

**"Q Comp will help provide opportunities for teachers to continue to grow and improve in their teaching and learning process. "**

*Brainerd Superintendent Gerald Walseth*

**"It has been remarkable to see the work that the teachers have done around this [Q Comp] and it has also proven to be the best staff development tool she has seen since she has been with the district."**

*Debbie Ondov, Hopkins School District staff development coordinator (Hopkins Sun, May 25, 2006)*

**"Nancy Goudge, president of the local teachers' union said Q Comp is about providing opportunities to invest in the future."**

*Bemidji Pioneer, June 13, 2006*

**"We are very pleased to have our Q Comp plan approved. It will afford us a wonderful opportunity to recognize and reward some of the powerful and creative work our teachers are doing, which in turn will impact student achievement."**

*North St. Paul-Maplewood-Oakdale School District Superintendent Patty Phillips.*

**"Every child wins with this plan."**

*Osseo School District Superintendent Susan Hintz*

**"The collaborative efforts of our teachers and administrators to help teachers do a better job in the classroom through peer leadership will make St. Louis Park a better place to teach, to learn and to live. "**

*St. Louis Park School District Superintendent Debra Bowers*

**"I have great confidence that together we can use this program to better meet the educational needs of our students."**

*Albert Lea School District Superintendent David Prescott*

**"What is nice about Q Comp is that it causes collaboration between every system in the district. This creates a synthesized system for Hopkins to work on improving student achievement and equity among learners. "**

*Hopkins School District Interim Superintendent John Schultz (Hopkins Sun, May 25, 2006)*

**(D)(2) – Exhibit G:** Minn. Stat. § 122A.40 subd 5 (*related to Employment; Contracts; Terminations*)

**Minn. Stat. § 122A.40 subd 5**

***Subd. 5. Probationary period.***(a) The first three consecutive years of a teacher's first teaching experience in Minnesota in a single district is deemed to be a probationary period of employment, and after completion thereof, the probationary period in each district in which the teacher is thereafter employed shall be one year. The school board must adopt a plan for written evaluation of teachers during the probationary period. Evaluation must occur at least three times each year for a teacher performing services on 120 or more school days, at least two times each year for a teacher performing services on 60 to 119 school days, and at least one time each year for a teacher performing services on fewer than 60 school days. Days devoted to parent-teacher conferences, teachers' workshops, and other staff development opportunities and days on which a teacher is absent from school must not be included in determining the number of school days on which a teacher performs services. Except as otherwise provided in paragraph (b), during the probationary period any annual contract with any teacher may or may not be renewed as the school board shall see fit. However, the board must give any such teacher whose contract it declines to renew for the following school year written notice to that effect before July 1. If the teacher requests reasons for any nonrenewal of a teaching contract, the board must give the teacher its reason in writing, including a statement that appropriate supervision was furnished describing the nature and the extent of such supervision furnished the teacher during the employment by the board, within ten days after receiving such request. The school board may, after a hearing held upon due notice, discharge a teacher during the probationary period for cause, effective immediately, under section 122A.44.

(b) A board must discharge a probationary teacher, effective immediately, upon receipt of notice under section 122A.20, subdivision 1, paragraph (b), that the teacher's license has been revoked due to a conviction for child abuse or sexual abuse.

(c) A probationary teacher whose first three years of consecutive employment are interrupted for active military service and who promptly resumes teaching consistent with federal reemployment timelines for uniformed service personnel under United States Code, title 38, section 4312(e), is considered to have a consecutive teaching experience for purposes of paragraph (a).

(d) A probationary teacher must complete at least 60 days of teaching service each year during the probationary period. Days devoted to parent-teacher conferences, teachers' workshops, and other staff development opportunities and days on which a teacher is absent from school do not count as days of teaching service under this paragraph.

**(D)(2) – Exhibit H: Board of Teaching Tiered Licensure  
Workshop Series**



MINNESOTA BOARD OF TEACHING

**TO:** Members, Board of Teaching  
**FROM:** Karen Balmer  
**DATE:** October 28, 2009  
**RE:** Workshop Session: Licensure Structure

The goals that you have set for this year fall into three broad categories:

*Recruitment*  
*Licensing Requirements*  
*Continuous Improvement*

One of the specific goals under Continuous Improvement is "License Renewal." The critical question that you have identified for this goal area is:

*How can we ensure that our license renewal structure promotes meaningful ongoing professional development for Minnesota teachers?*

In this workshop we will begin tackling this question by accomplishing the following:

- I. Summarize Minnesota's current licensure structure
- II. Explore examples of licensure structures in other states
- III. Discuss critical policy questions
  - a. What should an initial license represent? (i.e. symbolic, legal, practical)
  - b. What should a renewed license represent?
  - c. What do we know about the professional growth and development of teachers, and how should that be tied to a licensure structure and requirements?
  - d. Should we expect all teachers to follow the same professional development trajectory? Should we expect all teachers to hold the same license or sequence of licenses?
- IV. Identify assumptions and core values to serve as a foundation for further discussions; identify data and research needs; identify critical questions and unresolved issues; prioritize next steps.

These are complex questions and issues that we will certainly not resolve within the span of our workshop session. My hope is to lay a foundation for future discussions and to begin engaging stakeholders with us in this important work. We will have a number of guests joining us for this initial discussion, including:

MDE

Karen Klinzing  
John Melick

Teacher Support Partnership

Misty Sato, University of MN, Twin Cities  
Garnet Franklin, Education Minnesota  
Debbi Luedtke, MDE  
Lori Bird, MN State University, Mankato

College Readiness Consortium

Kent Pekel, University of Minnesota, Twin Cities



## MINNESOTA BOARD OF TEACHING

### LICENSURE STRUCTURE WORKSHOP SESSION

November 13, 2009

#### Characteristics

- Input model (ie: clock hours or masters degree) vs. evaluative / performance-based / output model (ie: Nat'l Board Certification, student growth, goals) as the basis for licensure
- Group vs. one-on-one mentoring
- QComp model – ie: career ladder
- Capacity to respond to teacher needs (based on student needs)
- International models – ie: lesson study in Singapore, school day / year

#### Considerations

- Mentee needs / early career needs as the focus
- Mentor needs and identification of mentors
- Determination of appropriate roles
  - Mentors
  - Evaluators (should not be the mentors)
  - State / Board of Teaching
  - Local committees
- Common standards / expectations
  - Mentoring / induction
  - Evaluation
  - Licensure
- Continuity of support
- Reality of young / new teacher placements (assignments) in MN schools

#### Implications

- Resources: funding, time
- State laws, re: probationary status and tenure
- State role vs. local control
- Application of a system / structure / process for:
  - teachers new to MN
  - teachers with interrupted service

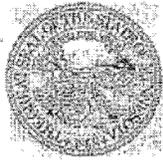
#### What is the role of the Board of Teaching???

*ie: To shape the license renewal requirements to ensure performance-based outcomes that promote the ongoing development of Minnesota teachers.*

An initial MN license represents:

The first renewal of a MN license represents:

Subsequent renewals of a MN license represents:



MINNESOTA BOARD OF TEACHING

**TO:** Members, Board of Teaching  
**FROM:** Karen Balmer  
**DATE:** December 9, 2009  
**RE:** BOT Workshop: Licensure Structure

During the regular Board meeting, you will hear about MDE's draft application for Race To The Top (RTTT). One of the proposals in the application relates to a tiered licensure system in Minnesota. After hearing about MDE's proposal, you will have an opportunity to dialogue with Karen Klinzing and other stakeholders in a workshop setting.

We'll use the attached discussion questions as a guide; I am also sending the questions that we sought to tackle at our last workshop and the notes from the discussion.



## MINNESOTA BOARD OF TEACHING

### LICENSURE STRUCTURE DISCUSSION

December 18, 2009

*Follow-up Discussion, including Race to the Top Application Considerations*

If we were to enact a tiered licensure structure in Minnesota ...

*What is the purpose of each of the tiers?*

- Who is the target population?
- What is expected of each group of teachers:
  - to practice (in general)?
  - to demonstrate growth – to maintain the license?
  - to demonstrate growth – to earn a “higher” license?
- How many tiers are necessary?
  - Consideration of all types of preparation (ie: alternative)

*What measures should be applied to demonstrate growth for each tier?*

- Types of measures: input vs. output
- How does Q Comp relate?
- How does induction fit?
- Where does student achievement fit?

**(D)(2) – Exhibit I: Minn. Stat. § 122A.18 – Board to Issue Licenses**

**122A.18 BOARD TO ISSUE LICENSES.**

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**Subdivision 1. Authority to license.**

(a) The Board of Teaching must license teachers, as defined in section 122A.15, subdivision 1, except for supervisory personnel, as defined in section 122A.15, subdivision 2.

(b) The Board of School Administrators must license supervisory personnel as defined in section 122A.15, subdivision 2, except for athletic coaches.

(c) Licenses under the jurisdiction of the Board of Teaching, the Board of School Administrators, and the commissioner of education must be issued through the licensing section of the department.

**Subd. 2. Teacher and support personnel qualifications.**

(a) The Board of Teaching must issue licenses under its jurisdiction to persons the board finds to be qualified and competent for their respective positions.

(b) The board must require a person to successfully complete an examination of skills in reading, writing, and mathematics before being granted an initial teaching license to provide direct instruction to pupils in prekindergarten, elementary, secondary, or special education programs. The board must require colleges and universities offering a board approved teacher preparation program to provide remedial assistance that includes a formal diagnostic component to persons enrolled in their institution who did not achieve a qualifying score on the skills examination, including those for whom English is a second language. The colleges and universities must provide assistance in the specific academic areas of deficiency in which the person did not achieve a qualifying score. School districts must provide similar, appropriate, and timely remedial assistance that includes a formal diagnostic component and mentoring to those persons employed by the district who completed their teacher education program outside the state of Minnesota, received a one-year license to teach in Minnesota and did not achieve a qualifying score on the skills examination, including those persons for whom English is a second language. The Board of Teaching shall report annually to the education committees of the legislature on the total number of teacher candidates during the most recent school year taking the skills examination, the number who achieve a qualifying score on the examination, the number who do not achieve a qualifying score on the examination, the distribution of all candidates' scores, the number of candidates who have taken

the examination at least once before, and the number of candidates who have taken the examination at least once before and achieve a qualifying score.

(c) A person who has completed an approved teacher preparation program and obtained a one-year license to teach, but has not successfully completed the skills examination, may renew the one-year license for two additional one-year periods. Each renewal of the one-year license is contingent upon the licensee:

(1) providing evidence of participating in an approved remedial assistance program provided by a school district or postsecondary institution that includes a formal diagnostic component in the specific areas in which the licensee did not obtain qualifying scores; and

(2) attempting to successfully complete the skills examination during the period of each one-year license.

(d) The Board of Teaching must grant continuing licenses only to those persons who have met board criteria for granting a continuing license, which includes successfully completing the skills examination in reading, writing, and mathematics.

(e) All colleges and universities approved by the board of teaching to prepare persons for teacher licensure must include in their teacher preparation programs a common core of teaching knowledge and skills to be acquired by all persons recommended for teacher licensure. This common core shall meet the standards developed by the interstate new teacher assessment and support consortium in its 1992 "model standards for beginning teacher licensing and development." Amendments to standards adopted under this paragraph are covered by chapter 14. The board of teaching shall report annually to the education committees of the legislature on the performance of teacher candidates on common core assessments of knowledge and skills under this paragraph during the most recent school year.

**Subd. 2a. Reading strategies.**

(a) All colleges and universities approved by the Board of Teaching to prepare persons for classroom teacher licensure must include in their teacher preparation programs research-based best practices in reading, consistent with section 122A.06, subdivision 4, that enable the licensure candidate to know how to teach reading in the candidate's content areas. These colleges and universities also must prepare candidates for initial licenses to teach prekindergarten or elementary students for the assessment of reading instruction portion of the examination of licensure-specific teaching skills under section 122A.09, subdivision 4, paragraph (e).

(b) Board-approved teacher preparation programs for teachers of elementary education must require instruction in the application of comprehensive, scientifically based, and balanced reading instruction programs that:

(1) teach students to read using foundational knowledge, practices, and strategies consistent with section 122A.06, subdivision 4, so that all students will achieve continuous progress in reading; and

(2) teach specialized instruction in reading strategies, interventions, and remediations that enable students of all ages and proficiency levels to become proficient readers.

(c) Nothing in this section limits the authority of a school district to select a school's reading program or curriculum.

**Subd. 2b. Reading specialist.**

Not later than July 1, 2002, the Board of Teaching must adopt rules providing for the licensure of teachers of reading.

**Subd. 3. Supervisory and coach qualifications; code of ethics.**

The commissioner of education must issue licenses under its jurisdiction to persons the commissioner finds to be qualified and competent for their respective positions under the rules it adopts. The commissioner of education may develop, by rule, a code of ethics for supervisory personnel covering standards of professional practices, including areas of ethical conduct and professional performance and methods of enforcement.

**Subd. 4. Expiration and renewal.**

(a) Each license the Department of Education issues through its licensing section must bear the date of issue. Licenses must expire and be renewed according to the respective rules the Board of Teaching, the Board of School Administrators, or the commissioner of education adopts. Requirements for renewing a license must include showing satisfactory evidence of successful teaching or administrative experience for at least one school year during the period covered by the license in grades or subjects for which the license is valid or completing such additional preparation as the Board of Teaching prescribes. The Board of School Administrators shall establish requirements for renewing the licenses of supervisory personnel except athletic coaches. The State Board of Teaching shall establish requirements for renewing the licenses of athletic coaches.

(b) Relicensure applicants who have been employed as a teacher during the renewal period of their expiring license, as a condition of relicensure, must present to their local continuing education and relicensure committee or other local relicensure committee evidence of work that demonstrates professional reflection and growth in best teaching practices. The applicant must include a reflective statement of professional accomplishment and the applicant's own assessment of professional growth showing evidence of:

- (1) support for student learning;
- (2) use of best practices techniques and their applications to student learning;
- (3) collaborative work with colleagues that includes examples of collegiality such as attested-to committee work, collaborative staff development programs, and professional learning community work; or
- (4) continual professional development that may include (i) job-embedded or other ongoing formal professional learning or (ii) for teachers employed for only part of the renewal period of their expiring license, other similar professional development efforts made during the relicensure period.

The Board of Teaching must ensure that its teacher relicensing requirements also include this paragraph.

(c) The Board of Teaching shall offer alternative continuing relicensure options for teachers who are accepted into and complete the National Board for Professional Teaching Standards certification process, and offer additional continuing relicensure options for teachers who earn National Board for Professional Teaching Standards certification. Continuing relicensure requirements for teachers who do not maintain National Board for Professional Teaching Standards certification are those the board prescribes, consistent with this section.

**Subd. 5. Effective date.**

Nothing contained herein shall be construed as affecting the validity of a permanent certificate or license issued prior to July 1, 1969.

**Subd. 6. Human relations.**

The Board of Teaching and the commissioner of education shall accept training programs completed through Peace Corps, VISTA, or Teacher Corps in lieu of completion of the human relations component of the training program for purposes of issuing or renewing a license in education.

**Subd. 7. Limited provisional licenses.**

The Board of Teaching may grant provisional licenses, which shall be valid for two years, in fields in which licenses were not issued previously or in fields in which a shortage of licensed teachers exists. A shortage is defined as a lack of or an inadequate supply of licensed personnel within a given licensure area in a school district that has notified the Board of Teaching of the shortage and has applied to the Board of Teaching for provisional licenses for that district's licensed staff.

**Subd. 7a. Permission to substitute teach.**

(a) The Board of Teaching may allow a person who is enrolled in and making satisfactory progress in a board-approved teacher program and who has successfully completed student teaching to be employed as a short-call substitute teacher.

(b) The Board of Teaching may issue a lifetime qualified short-call substitute teaching license to a person who:

(1) was a qualified teacher under section 122A.16 while holding a continuing five-year teaching license issued by the board, and receives a retirement annuity from the Teachers Retirement Association, Minneapolis Teachers Retirement Fund Association, St. Paul Teachers Retirement Fund Association, or Duluth Teachers Retirement Fund Association;

(2) holds an out-of-state teaching license and receives a retirement annuity as a result of the person's teaching experience; or

(3) held a continuing five-year license issued by the board, taught at least three school years in an accredited nonpublic school in Minnesota, and receives a retirement annuity as a result of the person's teaching experience.

A person holding a lifetime qualified short-call substitute teaching license is not required to complete continuing education clock hours. A person holding this license may reapply to the board for a continuing five-year license and must again complete continuing education clock hours one school year after receiving the continuing five-year license.

**Subd. 7b. Temporary limited licenses; personnel variances.**

(a) The Board of Teaching must accept applications for a temporary limited teaching license beginning July 1 of the school year for which the license is requested and must issue or deny the temporary limited teaching license within 30 days of receiving the complete application.

(b) The Board of Teaching must accept applications for a personnel variance beginning July 1 of the school year for which the variance is requested and must issue or deny the personnel variance within 30 days of receiving the complete application.

**Subd. 8. Background checks.**

(a) The Board of Teaching and the commissioner of education must request a criminal history background check from the superintendent of the Bureau of Criminal Apprehension on all applicants for initial licenses under their jurisdiction. An application for a license under this section must be accompanied by:

(1) an executed criminal history consent form, including fingerprints; and

(2) a money order or cashier's check payable to the Bureau of Criminal Apprehension for the fee for conducting the criminal history background check.

(b) The superintendent of the Bureau of Criminal Apprehension shall perform the background check required under paragraph (a) by retrieving criminal history data as defined in section 13.87 and shall also conduct a search of the national criminal records repository. The superintendent is authorized to exchange fingerprints with the Federal Bureau of Investigation for purposes of the criminal history check. The superintendent shall recover the cost to the bureau of a background check through the fee charged to the applicant under paragraph (a).

(c) The Board of Teaching or the commissioner of education may issue a license pending completion of a background check under this subdivision, but must notify the individual that the individual's license may be revoked based on the result of the background check.

#### **Subd. 9. Teacher licenses.**

The Board of Teaching, upon request by the affected person, shall issue teacher licenses under the licensure rules in place on July 31, 1996, to a person who enrolled in an accredited teacher preparation program by January 1, 2000, who satisfactorily completes the requirements for licensure under those rules, who meets the requirements of subdivision 8, and who applies for licensure by September 1, 2003.

#### **History:**

Ex1959 c 71 art 6 s 5; 1969 c 435 s 1,3; 1973 c 749 s 2,3; 1975 c 271 s 6; 1976 c 222 s 12,27,208; 1977 c 347 s 20; 1978 c 706 s 37; 1980 c 345 s 2,3; 1982 c 448 s 1; 1983 c 314 art 7 s 28; 1Sp1985 c 12 art 7 s 21; art 8 s 19; 1987 c 398 art 7 s 29; 1989 c 246 s 2; 1989 c 251 s 3-5; 1990 c 375 s 3; 1992 c 499 art 8 s 8-12; 1993 c 224 art 7 s 17; art 8 s 7; 1993 c 374 s 27; 1994 c 647 art 8 s 14; 1995 c 212 art 4 s 64; 1995 c 226 art 3 s 6; 1Sp1995 c 3 art 16 s 13; 1996 c 412 art 9 s 7,8; art 13 s 19; 1Sp1997 c 4 art 5 s 16,17; 1998 c 397 art 8 s 9-13,101; art 11 s 3; 1998 c 398 art 5 s 55; 1999 c 241 art 5 s 2; art 9 s 8; 2001 c 1 s 1; 2001 c 68 s 1; 1Sp2001 c 6 art 2 s 7; art 7 s 3,4; 1Sp2001 c 13 s 4,5; 2003 c 130 s 12; 1Sp2003 c 9 art 10 s 4; 1Sp2005 c 5 art 2 s 35; 2009 c 59 art 6 s 3; 2009 c 96 art 2 s 19,20

**NOTE:** The amendment to subdivision 4, by Laws 2009, chapter 96, article 2, section 20, is effective May 17, 2009, and applies to licensees seeking relicensure beginning July 1, 2012. Laws 2009, chapter 96, article 2, section 20, the effective date

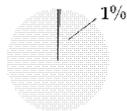


(D)(2) – Exhibit J: PAR in The New Teacher Project Report on MPS

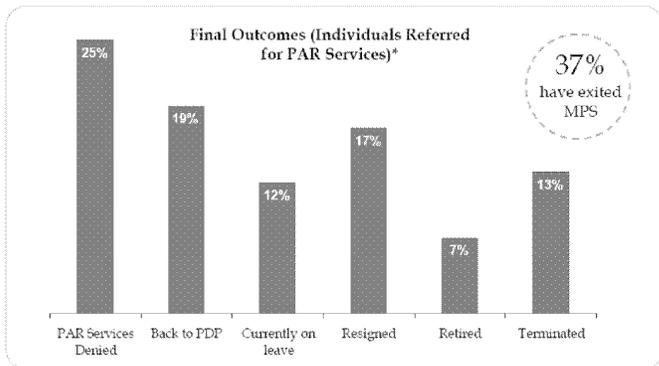
“Strengthening School Staffing in Minneapolis Public Schools,” The New Teacher Project, May 2009



PAR rigorously addresses one component of a comprehensive assessment system, but has not yet been supported to reach all teachers.



1 percent of all tenured teachers have received/are receiving PAR services over the last four years (182 teachers).



\*Does not include individuals with pending outcomes.

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32

Full report available at: [http://www.nttp.org/publications/other\\_publications.html](http://www.nttp.org/publications/other_publications.html)

**(D)(2) – Exhibit K: *Education Week* article from November 12, 2009 on Peer Assistance and Review**

**EDUCATION WEEK**

Published Online: November 12, 2009  
Published in Print: November 19, 2009, as **Judging Their Peers**  
Includes correction(s): November 13, 2009

**Peer Review Undergoing Revitalization**

**An old concept that calls for teachers to assess their own is gaining traction as evaluation comes under the spotlight.**

**By Stephen Sawchuk**

Rockville, Md.

Around a conference table, six people finger binders stuffed with teaching standards, sheets on which to record teachers' practices, and handbooks outlining when materials need to be submitted. For good reason: They are now immersed in the intensive period of documenting in writing whether the teachers they counsel have improved over the course of the year. Ultimately, their findings will help determine whether their teacher "clients" remain employed.

The job's downside—lots of paperwork—contrasts with its high point: helping teachers reach their potential.

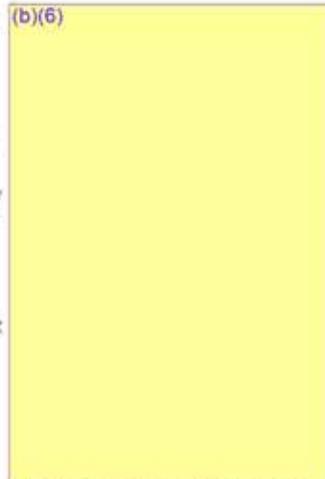
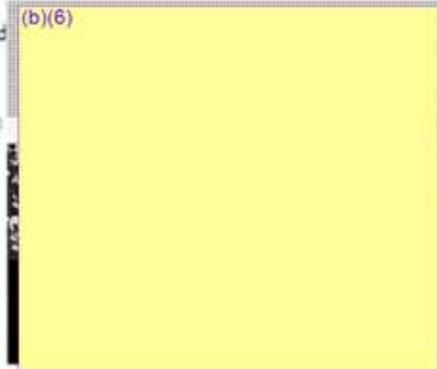
"The best part is when you get thankful e-mails and phone calls, when they are just so happy that they've tried something new out and seen that it works," said Greg Barnes, one of the educators gathered here.

But Mr. Barnes is not a young principal learning how to evaluate his teaching force for the first time. Instead, like the others assembled here at the headquarters of the Montgomery County Education Association, he is a top instructor who now works full time as a "consulting teacher." In that role, he provides intensive professional development to teachers who have not met evaluation standards. After a year of providing assistance, consulting teachers serve as key witnesses before a joint union-management board that recommends whether the district should renew the contract of each novice, or in the case of veterans, begin dismissal procedures.

Established in the 142,000-student Montgomery County, Md., district in 1999, peer assistance and review—or "peer review," as it is occasionally called—is actually an old idea. In 1981, the then-president of the Toledo Federation of Teachers, Dal Lawrence, helped create the first PAR program. Almost 30 years later, only a handful of districts have followed the schools in that Ohio city with their own variations.

But spurred on by new assistance primarily from the American Federation of Teachers, more districts are coming on board, even as the state of the nation's long-ignored, but much-criticized teacher-evaluation instruments rockets to

[Back to Story](#)



Dal and Francine Lawrence helped pioneer peer assistance and review as leaders of the teachers' union in Toledo, Ohio.  
—John Zich for Education Week

the top of the national education agenda.

Teacher experts are of two minds about the program's continuing expansion. Supporters believe that the stars have finally aligned to boost support for peer assistance and review.

"The fact that PAR is getting another look is a silver lining in this whole focus on evaluation," the president of the AFT, Randi Weingarten, said. "It is suggesting to the world that we're really trying to figure out how to better support, nurture, and evaluate teachers."

But other observers say that the program, which is intended for select subpopulations—novices and struggling veterans—should be more closely linked to an overall teacher-quality strategy for all teachers, including compensation reform.

"Peer review is an incomplete approach. It's a more collaborative way of doing what districts have been trying to do for decades—to detect incompetence," said Timothy Daly, the president of the New Teacher Project. The New York City-based group, which trains and places new teachers, released an influential report recently on teacher evaluations. "We would argue that doesn't even come close to achieving the goals a good evaluation system should attempt to reach," he said.

**"I don't see any unresolvable conflict between this program and the responsibility of the union to protect people from unfair treatment or unfair dismissals."**

**Dal Lawrence, 1984**

### Rocky Road

In what amounts to a bit of historical irony, the 1981 "Toledo Plan" presaged the current conversation about teacher effectiveness. It was among the first efforts to set forth teaching standards, predating both the certification process of the National Board for Professional Teaching Standards and the development, in 1996, of consultant Charlotte Danielson's widely replicated Framework for Teaching.

But in spite of the flexibility that districts have to design PAR programs, the concept of teachers' participation in the performance reviews of other teachers has never been an easy sell. The late AFT President Albert Shanker quickly embraced the concept, but it was viewed with suspicion by union affiliates and, until the late 1990s, by the National Education Association.

Now, with such concerns seemingly on the wane, PAR appears to be experiencing a small renaissance. In 2008, the AFT passed a resolution at its biennial convention calling on each district to explore peer review.

Just this year, affiliates in Anderson, Ind., and St. Louis have signed on to institute PAR. Detroit and New Haven, Conn., are now considering the idea. And in October, the AFT dedicated a chunk of its \$3.3 million Innovation Fund to support new programs in New York state and Rhode Island.

Since assuming the AFT presidency in July 2008, Ms. Weingarten has been a vocal advocate.

"Randi put peer review on the front burner," said Francine Lawrence, the president of the Toledo Federation of Teachers and the wife of Dal Lawrence. "She dedicated resources at AFT national to it."

Susan Moore Johnson, a professor at the Harvard

### Peer Review in Seven Select Districts

Defining the number of PAR programs today is difficult. Some use a system of assistance, but don't have an evaluative component. Others consist of just an intervention program for struggling tenured teachers or a program for novices. In general, researchers and unions agree that true programs contain a strong professional-development component and factor the results into employment decisions. Beyond that, the details—including how "consulting teachers" are selected, the length of their terms, and the composition of the PAR panel—differ greatly.

Graduate School of Education and the primary researcher of an extensive, Web-based study of seven districts' PAR systems, also attributes the renewed interest in peer review to teachers' concerns about "value added" growth measures based on student test scores.

"Unions are legitimately concerned that a teacher doesn't get information back from a value-added score that tells him or her about what to do to improve his or her teaching practice," she said.

Meanwhile, Kate Walsh, the president of the National Council on Teacher Quality, a Washington-based policy organization, views the uptick in programs through a political lens.

"I'm assuming [the AFT] doesn't want to be portrayed as a union that says no to everything," Ms. Walsh said. "This is one of their positive solutions."

### Scrutinizing PAR

As the number of programs grows, the scrutiny about what they accomplish also seems likely to become more intensive. The debate over the merits of PAR programs is a complex one.

Marcia Reback, the president of the Rhode Island Federation of Teachers and Health Professionals and the chairwoman of an AFT task force on PAR, points to the long-standing nature of the programs as a sign of district officials' esteem.

"When you think about the fact that budgets are as tight as they are and that superintendents are willing to invest in the personnel to do this work, it's compelling," she said.

According to Ms. Moore Johnson, union stewardship was a central element of the seven PAR programs her team studied, as was a clear articulation of teaching standards and the consulting teachers' responsibilities. Those factors have kept the evaluation process consistent in PAR districts over time, she said.

"PAR assures evaluation will not be overlooked, at least with the groups of teachers who were included in the process," she said.

Here in Montgomery County, the consulting teachers underscore PAR's focus on teacher improvement. Britt Waterfield describes PAR as a process that helps teachers become more reflective about their own teaching and that produces stronger learning gains. Most teachers, adds Theresa N. Robinson, ultimately come to see visits from their PAR teacher not as a punishment or a burden to be endured, but a valued resource.

"They'll start to call you up and say, 'I really could use some feedback on my fifth period,'" Ms. Robinson said.

### Expedient Dismissal?

Union officials also are proud of what they say is PAR's rigorous process for counseling out of the profession teachers who can't or won't improve.

| COUNT  |            |                   |
|--------|------------|-------------------|
| Toledo | Cincinnati | Montgomery County |
| 1,852  | 2,357      | 9,371             |
| AFT    | AFT        | NEA               |

SOURCE: A User's Guide to Peer Assistance and Review, Harvard Graduate School of Education, Project on the Next Generation of Teachers.



Albert Shanker, left, then the president of the United Federation of Teachers, meets with aides and teachers during the 1968 New York City teachers' strike. He promoted peer review, but only a few affiliates and districts adopted the program.  
—Bob Gomley/Time Life Pictures/Getty Images

But whether those rates are sufficient is a more difficult question. No national data state definitively what percentage of teachers in a given year should be dismissed for poor performance. A widely cited 1997 study by Pamela D. Tucker, now a professor at the University of Virginia, found that principals in Virginia estimated that 5 percent of the teachers in their schools were incompetent. A handful of other surveys have come to similar conclusions, but the question remains open.

The most recent data obtained by Ms. Moore Johnson and her team—although drawn from fragmented union and district sources in some cases—suggest that annual nonrenewal rates for novices in the cities studied range from no nonrenewals in Cincinnati to a 9.7 percent rate in Syracuse, N.Y. For veteran teachers, intervention programs' rates are typically much lower.

The numbers can't be directly compared with overall district dismissal rates—usually less than 1 percent of the teaching force—because a majority of PAR programs cover only a small, specific population of teachers, not the total in the district.

Julie Sanders, a 7th grade teacher in Montgomery County, is a strong believer in the idea behind PAR, which she calls a "get-well plan" for teachers, but she isn't convinced that it adequately captures everyone who needs help.

"It would overwhelm the system," Ms. Sanders said. "I think [the PAR panelists] probably need to get rid of a lot more people than they actually do."

And because of rigorously enforced timelines and the extensive documentation required to refer a teacher to peer assistance and review, some principals continue to use the "excessing" process to rid their buildings of poor-quality instructors, Ms. Sanders said. (Teachers who are removed from schools as a result of program changes, but still are employed by the district, are deemed "excessed.")

That is a place where administrators need to be held accountable on making better use of the system, said Ms. Lawrence, the Toledo union president.

"It isn't an easy thing to say to a teacher, 'You have performance problems and you need to be referred to assistance,' " she said. "But that's part of what being a manager means."

Phillip Gainous, the vice president of the Montgomery

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## Staying and Going

To calculate dismissal rates in PAR, Harvard professor Susan Moore Johnson and her team of researchers collected statistics from district and union data sources—not an easy task because of poor recordkeeping and definitions that don't always line up. (A district may deem the disposition of a teacher who left the district rather than face dismissal after a poor PAR review a "resignation," rather than a "dismissal.")

## Outcomes for Teachers in the Novice Program

### CINCINNATI

Year: 2007-08  
Total novices: 40  
Nonrenewed: 0 (0.0%)  
Granted 2nd year of PAR: N/A

### MINNEAPOLIS

Years: 2005 to 2008  
Total novices: 85 to 194 per year

### MONTGOMERY COUNTY, MD.

Year: 2007-08  
Total novices: 445  
Nonrenewed: 16 (3.6%)  
Granted 2nd year of PAR: 32 (7.2%)  
Resigned: N/A

### ROCHESTER, N.Y.

Year: 2006-07  
Total novices: 426  
Left district: 30 (7.0%)

### SYRACUSE, N.Y.

Year: 2007-08  
Total novices: 62  
Nonrenewed: 6 (9.7%)

### TOLEDO, OHIO

Year: 2007-08  
Total novices: 98  
Left district (nonrenewed or resigned): 9 (9.2%)

Note: The data represent results after one year.

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County Association of Administrators and Supervisory Personnel and the co-chairman of the Montgomery County district's PAR panel, thinks that the referral process is gradually improving. Principals are gradually coming to view PAR not as a hammer, he said, but as a genuine route to improvement.

"We are not at 100 percent, but we are well on our way there," he said.

Consulting teachers agree that striking the right balance between being, in Ms. Weingarten's words, "good for kids and fair to teachers," is not easy.

For instance, although the PAR panel in Montgomery County almost always takes its lead from the reports of consulting teachers, Mr. Barnes said he had witnessed a few cases in which the panel granted a second year of intervention to a teacher he believed was not meeting standards. The phenomenon appears to be rare, but it nonetheless worries those who believe PAR sometimes extends an already lengthy dismissal process.

"It does not take a full year to decide whether someone is struggling in their job, let alone two," said Ms. Walsh of the nctq. "I think the cost is too great to children's learning to always be giving the teacher the benefit of the doubt."

But Doug Prouty, the president of the Montgomery County Education Association, an NEA affiliate, and the co-chairman of the district's PAR panel, noted that the program—unlike those in other districts—sets limits on how long a teacher can receive intervention support.

"We don't give people forever," said Mr. Prouty. "It lessens the impact of PAR because the message you send is that it isn't about improvement, it's about maintenance."

Both Mr. Prouty and the consulting teachers point out that the district's other in-school support networks have been improving, so that teachers who are not covered by PAR or are not scheduled for an evaluation that year receive help that aligns with PAR. Although the quality of such support still varies depending on the school building, the district has won kudos from national experts for instituting those measures.

### **Moving Forward**

As the national conversation about teacher effectiveness continues, it is an open question how well peer review will

## **Outcomes for Teachers in the Intervention Program**

### **CINCINNATI**

(teachers on staff: 2,357)  
 Year: 2007-08  
 Teachers referred to intervention: N/A  
 Teachers in intervention: 5  
 Dismissed: 0  
 Resigned/retired: 1  
 Extra year of intervention: 0  
 Successful return to classroom: 0

### **MINNEAPOLIS**

(teachers on staff: 2,250)  
 Years: 2004 to 2008  
 Teachers referred to intervention: 183  
 Teachers in intervention: N/A  
 Left district: 68  
 Extra year of intervention: 45  
 Successful return to classroom: 70

### **MONTGOMERY COUNTY, MD.**

(teachers on staff: 9,371)  
 Year: 2007-08  
 Teachers in intervention: 9  
 Dismissed: 7  
 Resigned/retired: 0  
 Extra year of intervention: 2  
 Successful return to classroom: 0

### **ROCHESTER, N.Y.**

(teachers on staff: 2,861)  
 Years: 2001 to present  
 Teachers referred to intervention: 13  
 Teachers in intervention: 4  
 Dismissed: 1  
 Resigned/retired: 1  
 Successful return to classroom: 2

### **SAN JUAN, CA.**

(teachers on staff: 2,267)  
 Years 2005 to 2008  
 Teachers referred to intervention: 12  
 Teachers in intervention: 10  
 Dismissed: 1  
 Resigned/retired: 3  
 Successful return to classroom: 4

### **TOLEDO, OHIO**

(teachers on staff: 1,852)

fit into newly emerging systems.

Federal officials, for their part, seem open to peer evaluation as one component of a teacher-evaluation system. "I'm a big fan of peer evaluation," U.S. Secretary of Education Arne Duncan said at a recent Washington forum. "Great teachers helping great teachers, colleague to colleague and peer to peer, is what it's all about."

But Mr. Daly of the New Teacher Project questions whether PAR programs meet the standards for evaluation outlined in the Obama administration's \$4 billion competitive-grant program for states under the Race to the Top Fund. The program would reward states that evaluate teachers annually in part on student test scores, establish at least four

different performance ratings, and link results to compensation and career-ladder initiatives. Most PAR programs are not set up to connect those functions, Mr. Daly said.

"The next thing you'd have to do is use the information for more than just dismissals," he said. "I think absolutely PAR could be used as part of a larger [teacher-quality] system, but there are a lot of things that have to be filled in here."

To Ms. Lawrence, PAR serves as the groundwork for other such initiatives. "It is the fundamental collaborative initiative between union and management," she said. "All of our other collaborative ventures stem from that."

The core features of the PAR model could be expanded beyond its current population of teachers, she and researchers like Ms. Moore Johnson argue.

Such a proposal would raise challenges of both finances and capacity. Though PAR can replace other support initiatives, it requires release time for consulting teachers and the hiring of replacement teachers.

For some proponents, the benefits outweigh the costs. "Meaningful evaluation systems are expensive," said Ms. Weingarten of the AFT. "[PAR] means basically taking the entire notion of mentoring, induction, observation, support, and end-of-the-year evaluations and putting them all together."

Ms. Reback of Rhode Island says affiliates in her state will use their AFT Innovation Fund dollars to embed PAR into a much more comprehensive evaluation system for teachers at all levels. A lot rides on what they manage to come up with, she acknowledges.

**"This notion of limited peer selection and review represents a very unusual, nontraditional role for teachers. ... But if we are truly talking about professionalism—not having someone stand over us making rules, telling us what to do, of gaining some control of our own activity—then we had better look very closely at the Toledo program and others like it."**

**Albert Shanker, 1984**

Year 2007-08

Teachers referred to intervention: N/A

Teachers in intervention: 7

Dismissed or resigned: 1

Extra year of intervention: 6

Successful return to classroom: 0

Note: The data represent results after the intervention ended.

SOURCE: *A User's Guide to Peer Assistance and Review*, Harvard Graduate School of Education, Project on the Next Generation of Teachers.

"We are under a microscope; we have to succeed," she said. "We don't have any choice."

But here in Montgomery County, teachers and administrators remain convinced that peer assistance and review is on the right track. There is less suspicion about PAR among teachers about the system and a better system of referrals, the consulting teachers say. Most of all, says consulting teacher James L. Berry, they want PAR to continue to evolve.

"The philosophy of peer review," Mr. Berry said, "is the only thing here that's etched in stone."

*Coverage of policy efforts to improve the teaching profession is supported by a grant from the Joyce Foundation, at [www.joycefdn.org/Programs/Education](http://www.joycefdn.org/Programs/Education).*

Vol. 29, Issue 32, Pages 20-23

**(D)(3) – Exhibit A: State Report Card – Minnesota Growth Model**

**Select results**

**Statewide Growth Model Results**

The Minnesota Growth Model sample school's report card  
State's report card:

**Math**

|                       | <b>Growth Over the 2008-09 School Year</b>                   |  |   |
|-----------------------|--|--|---|
| <b>2008 Status</b>    | <b>Low</b>   | <b>Medium</b>  | <b>High</b>   |
| <b>Proficient</b>     | 18%<br>60781 students were proficient but made low growth    | 28%<br>94744 students continued to grow                        | 20%<br>68763 students made exceptional growth                         |
| <b>Not Proficient</b> | 9%<br>30669 students were not proficient and made low growth | 13%<br>44472 students were not proficient but made some growth | 11%<br>36900 students were not proficient but made exceptional growth |

[View Math by Grade Level](#)

[View Math by Subgroup](#)

## Reading

| Growth Over the 2008-09 School Year |  |  |   |
|-------------------------------------|--|--|---|
| 2008 Status                         | Low  | Medium   | High  |
| <b>Proficient</b>                   | 18%<br>62074 students were proficient but made low growth    | 29%<br>98094 students continued to grow                        | 24%<br>81040 students made exceptional growth                         |
| <b>Not Proficient</b>               | 7%<br>22473 students were not proficient and made low growth | 12%<br>39430 students were not proficient but made some growth | 10%<br>34663 students were not proficient but made exceptional growth |

[View Reading by Grade Level](#)

[View Reading by Subgroup](#)

*Minneapolis Public Schools*: Growth Model Results

**Math**

|                       | <b>Growth Over the 2008-09 School Year</b>                   |   |  |
|-----------------------|--|---|--|
| <b>2008 Status</b>    | <b>Low</b>   | <b>Medium</b>   | <b>High</b>  |
| <b>Proficient</b>     | 14%<br>1623 students were proficient but made low growth     | 19%<br>2220 students continued to grow                        | 14%<br>1562 students made exceptional growth                         |
| <b>Not Proficient</b> | 19%<br>2199 students were not proficient and made low growth | 21%<br>2350 students were not proficient but made some growth | 13%<br>1509 students were not proficient but made exceptional growth |

[View Math by Grade Level](#)

[View Math by Subgroup](#)

[View State Growth](#)

## Reading

|                       | <b>Growth Over the 2008-09 School Year</b>                   |   |  |
|-----------------------|--|---|--|
| <b>2008 Status</b>    | <b>Low</b>   | <b>Medium</b>   | <b>High</b>  |
| <b>Proficient</b>     | 14%<br>1585 students were proficient but made low growth     | 20%<br>2262 students continued to grow                        | 18%<br>2091 students made exceptional growth                         |
| <b>Not Proficient</b> | 14%<br>1567 students were not proficient and made low growth | 21%<br>2363 students were not proficient but made some growth | 14%<br>1546 students were not proficient but made exceptional growth |

[View Reading by Grade Level](#)

[View Reading by Subgroup Growth](#)

[View State](#)

*St. Paul Public Schools: Growth Model Results*

**Math**

| <b>Growth Over the 2008-09 School Year</b> |  |   |  |
|--|--|---|--|
| <b>2008 Status</b>                         | <b>Low</b>   | <b>Medium</b>   | <b>High</b>  |
| <b>Proficient</b>                          | 17%<br>2343 students were proficient but made low growth     | 21%<br>2859 students continued to grow                        | 13%<br>1795 students made exceptional growth                         |
| <b>Not Proficient</b>                      | 15%<br>2092 students were not proficient and made low growth | 19%<br>2667 students were not proficient but made some growth | 15%<br>2050 students were not proficient but made exceptional growth |

[View Math by Grade Level](#)

[View Math by Subgroup](#)

[View State Growth](#)

## Reading

| Growth Over the 2008-09 School Year |  |   |  |
|-------------------------------------|--|---|--|
| 2008 Status                         | Low  | Medium  | High   |
| <b>Proficient</b>                   | 16%<br>2285 students were proficient but made low growth     | 21%<br>2907 students continued to grow                        | 16%<br>2194 students made exceptional growth                         |
| <b>Not Proficient</b>               | 14%<br>1912 students were not proficient and made low growth | 20%<br>2810 students were not proficient but made some growth | 13%<br>1832 students were not proficient but made exceptional growth |

[View Reading by Grade Level](#)

[View Reading by Subgroup Growth](#)

[View State](#)

(D)(4) – Exhibit A: Star Tribune Cover Story “How to Build a Better Teacher”

**Star Tribune** Date: Friday, December 04, 2008  
Location: MINNEAPOLIS, MN  
Circulation (DMA): 345,252 (16)  
Type (Frequency): Newspaper (D)  
Page: A1, A10  
Keywords: Archbishop Bush Foundation

**\$40 million** grant from the Bush Foundation to overhaul the way teachers are trained

**2,500 teachers** from Minnesota will be trained annually under the Bush Foundation plan

**14 universities** in Minnesota, North and South Dakota will guarantee their graduates' abilities

# MILLIONS TO BUILD A BETTER TEACHER

(b)(6)

Photo by EYEDOLL/SHOOTSTOCK • khuskasa@startribune.com

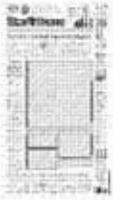
Katy Brunkitt, who is two years into getting her teaching certificate, made a big goal as a part of her lesson about symmetry for an elementary math and science teaching class at Hamline University. Under a Bush Foundation plan, schools will recruit people to be teachers.

- \$40 million from the Bush Foundation aims to transform how Minnesota trains its educators.

By JEAN HOPFENSBERGER • hopjean@startribune.com

**M**innesota's teacher training is about to undergo its most significant overhaul in decades, fueled by a \$40 million Bush Foundation grant announced Thursday.

Roughly half of the state's teachers are expected to retire or leave the profession within the next 10 years — creating an



Page 1 of 4

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Amount: 16590 (75)  
474.713  
For more on this, please visit startribune.com

opening to vastly change how the next generation is trained to step into these classrooms and boost student achievement, said foundation president Peter Hutchinson.

"Today, [education] students mainly go to class, take notes and read books. That's got to change," he said. The infusion of money will be used to aggressively market the teaching field to the state's best and brightest, and to provide less training in university classrooms and more inside local schools, guided by mentor teachers.

The \$40 million is the biggest single investment the St. Paul-based foundation has ever made, Hutchinson said.

Under the plan, 14 universities in Minnesota, North and South Dakota will guarantee that the 3,500 teachers they graduate each year will be able to lift student test scores in their classrooms in one year, every year. Currently, thousands of Minnesota students fail to meet that basic benchmark.

"When the history of our college is written, this will be considered a historic moment," said Jean Quam, dean of the University of Minnesota College of Education and Human Development. "To be able to rewrite curriculum, and be given funds to do it, is remarkable."

At St. Cloud State University, "the way we teach hasn't changed much since our institution was founded in 1869," said President Earl Potter. "For our entire history, we've prepared people using a standard model, and then handed them off to schools, never knowing whether they've been successful." A collaboration between universities and colleges, local schools and a philanthropic foundation to track and affect teacher effectiveness "is unprecedented," he said.

What happens next will likely be watched closely by educators around the nation.

### Targeted recruiting

A key to success will be attracting the right students to the teaching profession, said Susan Heegaard, a Bush Foundation vice president.

Instead of simply waiting to see who applies, schools of education at colleges will begin recruiting people with specific skills or backgrounds. That could include mid-career professionals working in math or science, and individuals with cultural and racial backgrounds that reflect Minneso-

ta's growing student population, she said.

Achievement gaps have been persistent in Minnesota between minority and majority students. But research shows those gaps melt away when students consistently experience effective teaching, Hutchinson said.

The plan has drawn praise from groups ranging from the Minnesota Board of Teaching to education scholars to the state's teachers union. They particularly endorse the goal of making curriculum more relevant to the needs of today's students and continuing support for fresh graduates with teaching degrees.

Some question whether it's realistic to guarantee that a freshly graduated teacher will be able to lift the academic achievement of every student in the class.

"Who are the people in the schools who will be supervising the [new] teachers?" asked Joe Nathan, director of the Center for School Change at the University of Minnesota. He recalled that as a student teacher, he was assigned to a classroom headed by an athletic coach who was not an ideal mentor. Bright stars among student teachers could find themselves disillusioned if they land in the wrong setting, he warned. He asked if there would be rewards for making progress, and consequences for not making progress.

Hutchinson said that teachers would be placed in schools prepared to support them and that mentors would be trained. At this point, there are no plans for rewards and consequences, he said, but that could change.

Starting salaries for teachers in the metro area are about \$30,000 to \$39,000 a year, said Tom Doohar, president of Edu-

cation Minnesota, a union representing about 70,000 teachers. Doerber said that he supports the Bush plan, but that "if you elevate the standards, you need to elevate the pay."

Karen Bulmer, executive director of the Minnesota Board of Teaching, believes the experiment will result in new, innovative teaching in Minnesota classrooms. She hopes to take lessons learned — good and bad — and translate them into state teaching license standards, she said.

Meanwhile, Linda Hanson, president of Hamline University, said the initiative is one more example of Minnesota's national leadership in education. "It's unparalleled," she said, "and it's the Minnesota way of doing things."

## THE BUSH FOUNDATION PLAN CALLS FOR:

**Targeted recruitment:** Of special interest are potential teachers with math, science or technology skills, as well as people with diverse cultural and racial backgrounds.

**New curriculum:** Teachers in training will spend more time inside schools and less time in university classrooms, typically working with trained mentors.

**Help for new teachers:** Universities pledge to support their graduates three to five years after they earn their degrees, with mentors and other training.

**Evaluation:** The effectiveness of the newly hired teachers will be evaluated, based on their students' test scores.

**14 university and college partners:** The University of Minnesota Twin Cities, Minnesota State Universities at St. Cloud, Mankato, Winona and Moorhead, the University of South Dakota-Vermillion, Valley City State University in North Dakota and North Dakota State University in Fargo. Private colleges are the University of St. Thomas, Hamline University, Bethel University, Augsburg College, St. Catherine University and Concordia University.

IAN HOFFENBERGER

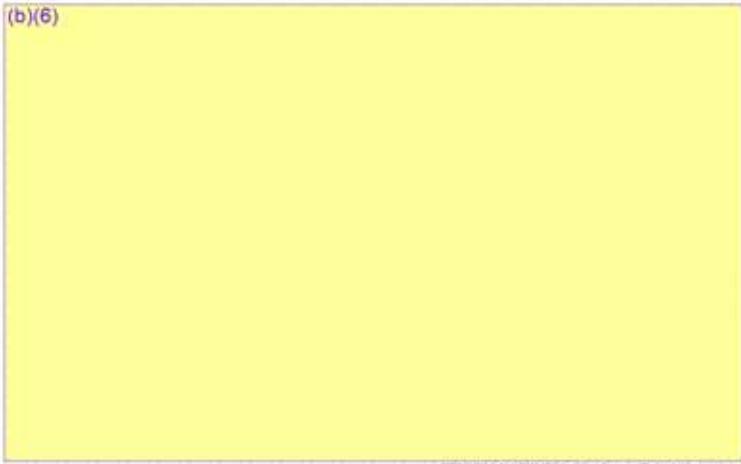
ian.hoffenberger • 612-671-4511

(b)(6)



Hamline Assistant Prof. Bill Lindquist talked to his teaching class about how to engage students to think beyond the obvious.

(b)(6)



RYAN BELL HARRISS • [rharriss@startribune.com](mailto:rharriss@startribune.com)

Minazula Godfred, a French student teacher, looked through a kaleidoscope made by fellow student Katy Brukardt at Hamline University, which is one of the 14 universities receiving a \$40 million grant.

**(D)(4) – Exhibit B: *Bush Foundation Teacher Preparation Program Grantmaking Press release, December 3, 2009***

**UNIVERSITIES TO TRANSFORM TEACHER-PREPARATION PROGRAMS  
AND GUARANTEE TEACHER EFFECTIVENESS**

**Bush Foundation to Invest \$40 Million in 10-Year Initiative**

(Saint Paul, MN – December 3, 2009)—Fourteen higher-education institutions and the Bush Foundation today announced a partnership focused on transforming teacher-preparation programs in Minnesota, North Dakota and South Dakota. Collectively, the institutions will produce at least 25,000 new, effective teachers<sup>1</sup> in the next 10 years. This number represents virtually all of the new teachers that will be needed in the three states in the next decade.

In addition, the institutions are guaranteeing the effectiveness of teachers who graduate from their redesigned programs. To accomplish this goal, the institutions will transform how they recruit, prepare, place and support new teachers and how they work with their K-12 partners.

The Foundation plans to invest more than \$40 million over the next decade in the 14 universities and in related activities to support their success. The institutions working in partnership with the Bush Foundation are:

Augsburg College\*

North Dakota State University\*\*

Bethel University\*

St. Catherine University\*

Concordia University, St. Paul\*

St. Cloud State University

Hamline University\*

University of St. Thomas\*

Minnesota State University, Mankato

University of South Dakota

University of Minnesota

Minnesota State University Moorhead\*\*

Valley City State University\*\*

Winona State University

\* As part of the Twin Cities Teacher Collaborative

\*\* As part of the North Dakota and Minnesota Partnership

“Over nine months, these universities and colleges participated in a rigorous planning process during which they completed detailed proposals for redesigning their teacher-preparation programs,” said Susan Heegaard, vice president and educational achievement team leader for the Bush Foundation. “In each case, the universities are taking a bold, courageous stance in guaranteeing the effectiveness of the teachers they train.” According to Heegaard, the

Foundation’s investment will enable the partner institutions to develop and implement their redesigned programs, starting with the 2010-11 academic year.

“Our nation’s ability to lead in the global arena hinges upon how well we educate our youth, and that effort depends largely on the strength of our teachers,” said Dr. Judith A. Ramaley, president of Winona State University. “Regional universities are the backbone of education. With these resources, we can drive teacher preparation to a new level.”

Each institution will launch a unique strategy that plays to the institution’s strengths, while challenging the status quo to ensure the teachers they prepare will be highly effective. Innovative concepts include targeted recruiting of high-caliber students representing diverse groups, integration of co-teaching strategies, creation of residency programs to provide teacher candidates with full-year immersion experiences, deep partnerships with K-12 school districts and ongoing support to new teachers through in-person and online mentoring programs.

“We are excited and honored to participate in supporting this vision of re-imagining teacher preparation by harnessing the collective effort of many higher-education institutions,” said Dr. Linda Hanson, president of Hamline University, which is part of the Twin Cities Teacher Collaborative comprised of six private higher-education institutions. “To truly transform how teachers are trained requires greater collaboration and commitment than we’ve ever experienced.”

“As part of their agreement with the Bush Foundation, each of the schools has agreed to guarantee that its program will produce effective teachers,” Heegaard added. “The key to the guarantee is that they each will partner with the K-12 schools where their graduates will teach, and each university will provide continued support to the teachers for several years after graduation. This type of guarantee has never been offered before that we know of.”

Heegaard noted that delivering on that guarantee will require the universities to act on four fronts—recruiting those most likely to succeed as effective teachers, training them to be effective instructors, placing them in schools led by administrators who will support them in those first critical years in the classroom and then providing new teachers with ongoing support.

“It’s critical that we support all efforts to effectively train our teachers,” said Dr. Rick Melmer, dean of the School of Education at The University of South Dakota. “By creating this program through the Bush Foundation, it shows that we are not just committed to improving the quality of our teachers, but it also demonstrates an investment in the future of our state’s education system.”

Peter C. Hutchinson, Bush Foundation president, noted that this initiative is a critical part of achieving the Foundation's goal over the next 10 years of increasing by 50 percent the number of students in Minnesota, North Dakota and South Dakota, from pre-kindergarten through college who are on track to earn a degree after high school, and of eliminating disparities among diverse student groups.

“Research has shown that while many factors play a role in educational success, effective teaching makes a bigger difference than any other in-school variable,” Hutchinson said. “Research also shows that when students consistently experience effective teaching, there are

no achievement gaps. By forming partnerships with institutions who are willing to ensure that children across these three states will have effective teachers, we believe that over the decade we can significantly raise the achievement of every student and reduce disparities among student groups.”

According to University of Minnesota President Dr. Robert H. Bruininks, “Ensuring that our schools have the best teachers in the country is critical to meeting the region's employment needs going forward. In order to be competitive in the global economy, all students need to graduate from high school prepared for some form of post-secondary education. I am very excited that the University of Minnesota will play a strong role in revamping the teacher-education curriculum to improve teaching and learning—for all students—throughout the state and region.”

The Foundation and its higher-education partners are fortunate to have the input of a talented field of national experts on education throughout the planning phase and will continue to rely on them for guidance during the next 10 years. Members of the Advisory and Review Committee are listed on a separate page at the end of this release. To support the work of its education partners, the Bush Foundation also is working with Rob Meyer of the Value-Added Research Center (University of Wisconsin-Madison) to develop assessment tools and reporting mechanisms that teachers, schools and higher-education institutions can use to measure effectiveness and improve performance.

The Foundation's efforts to increase educational achievement are part of its strategic Goals for a Decade, launched in 2008, which also includes work to develop courageous leaders and engage entire communities in problem-solving and to support the self-determination of the 23 Native nations that share geography with Minnesota, North Dakota and South Dakota.

For more information on this initiative, go to Teacher Effectiveness Initiative page. You can learn more about the partner institutions on our Educational Achievement Partnerships page.

**[http://www.bushfoundation.org/News/pdf\\_files/12032009\\_ED.pdf](http://www.bushfoundation.org/News/pdf_files/12032009_ED.pdf)**

**(D)(4) – Exhibit C: Carnegie Corporation praise of Bush Foundation Teacher Preparation Initiative**



NEWS RELEASE

**For Further Information:**

Carnegie Corporation of New York  
Office of Public Affairs  
(212) 207-6273

**Carnegie Corporation’s Vartan Gregorian Applauds Bush Foundation’s Teacher Preparation Program**

New York, New York, December 4, 2009 -- Vartan Gregorian, President of Carnegie Corporation of New York, offered his support for the Bush Foundation’s new partnership to transform teacher preparation programs at 14 institutions of higher education in Minnesota, North Dakota and South Dakota. The Minnesota-based foundation yesterday announced a \$40 million initiative aimed at producing at least 25,000 new, effective teachers over the next 10 years. Read the Bush Foundation’s [announcement](http://www.bushfoundation.org/education/TEInitiative.asp). (<http://www.bushfoundation.org/education/TEInitiative.asp>)

Commenting on the Bush Foundation’s partnership, Vartan Gregorian said, “Erik Erikson once remarked that human beings are the teaching species and I strongly agree. Our teachers bear an extraordinary moral, social, and historical responsibility for instructing today’s students who tomorrow, will be leading our nation into its future. If we really want to continue to improve student achievement we have no choice but to improve teaching—and the Bush Foundation’s new partnership is an important step toward that goal.”

Gregorian continued, “The Bush Foundation’s new teacher-preparation partnership is a direct response to one of the nation’s most critical education challenges: preparing excellent and effective teachers who can serve students in both high-needs rural and urban schools. Highly trained and deeply knowledgeable teachers are at the heart of education reform.”

In education, the Corporation works to create pathways to opportunity for many more students by promoting systemic change and innovation in secondary and higher education. The foundation places a priority on pursuing its work in collaboration with other donors.

“The new multi-state partnership inspires, encourages, and supports the professional men and women who are shaping our next generation,” said Michele Cahill, Vice-President, National Programs and Program Director, Urban Education at Carnegie Corporation. “After all, we now know, after extensive research based on thousands of student records in schools across the country, that the teacher is the single most important factor in pupil performance.”

Cahill added, “I am especially pleased that the 14 institutions of higher education partnering with the Bush Foundation will guarantee that the teachers produced by their re-designed programs will be effective. To accomplish this goal, these 14 colleges and universities have committed to radical changes in the way they recruit, place, support, and, with their K-12 partners, retain top talent.”

In addition, said Cahill, “These proposed new practices represent a vast change from the way teacher preparation programs have been operated in the past, and require hard work, tough decision making, and political will to succeed.”

Carnegie Corporation of New York is a philanthropic foundation created by Andrew Carnegie in 1911 to do "real and permanent good in this world."

**(D)(5) – Exhibit A: Teacher Support Partnership Induction Framework**

**Minnesota – Statewide Context for Induction\***

*\*This document includes information from the Minnesota Staff Development Legislative Report (2009) and the Minnesota Educator Induction Guidelines (2009).*

Induction is defined as a system of strategies for developing induction systems for all new teachers across the state. An induction system is a multi-year process that provides professional learning opportunities for developing dispositions and practices that support student learning. The system includes learning opportunities such as orientation to the workplace, a network of peer support, seminars and workshops, and mentoring focused on standards of professional practice and continual professional growth.

In 2009 Minnesota school districts reported on their current year's induction practices. Although 75 percent of districts report having an induction program, only

- 40 percent provide support for two years.
- 47 percent provide focused mentor support in lesson planning and deepening teacher's content knowledge
- 67 percent provide professional development specific to new teachers (orientation to the district, classroom management, etc.)
- 61 percent provide mentor observations.
- 54 percent provide training to mentors in coaching and observation strategies.

**WHY DEVELOP AN INDUCTION SUPPORT SYSTEM FOR EDUCATORS?**

**(1) Improving instructional practices**

Wang, Odell, and Schwill (2008) reviewed research studies on teacher induction to determine the effects on beginning teachers' thinking about teaching and teaching practices. Beginning teachers report that they find support for developing classroom management repertoires, accessing curriculum resources, and developing relationships with students through induction programs. They also report that induction and mentoring activities does have an effect on teaching practice.

**(2) Enhancing student achievement**

While educational researchers have not yet investigated a direct link between induction systems for educators and student achievement (Lopez, et al., 2004; Wang, O'Dell, & Schwill, 2008), it stands to reason that reported impacts on teacher practices (Wang,

O'Dell, & Schwill, 2008) would potentially contribute to improved opportunities to learn for students. Increasing teacher retention by better supporting the initial educators in their transition to teaching would also create a more stable teaching force, giving teachers time to build their expertise in the classroom and thus be more effective teachers.

### **(3) Promoting supportive professional cultures in schools**

When induction is taken as the responsibility of the whole school community, schools are primed to develop professional learning communities among its professional staff. The investment in personnel can create a climate of professionalism, greater trust among building colleagues, and more stable learning environments for students. Building administrators have noted that induction programs nurture positive and collegial working relationships within the school; create better lines of communication between new staff and the administration; and provide rejuvenating opportunities for the experienced educators in the building.

### **(4) Aligning with school and district improvement priorities**

Induction support of educators gives the school and district the opportunity to convey their educational priorities and goals to their new hires as well as maintain better communication with other educators within the school system. As districts develop continual improvement plans, it will become more and more essential to bring initial educators and transitioning educators into the district conversation as soon as possible.

### **(5) Retaining teachers in districts and in the profession**

The Minnesota Department of Education (2009) reported that of the first year teachers hired in 2001-2004, the retention rate of that group for school districts after five years of teaching was 69%. With almost a third of the Minnesota teaching force leaving teaching after five years and many changing districts in that same time, issues of teacher attrition and turnover are costing Minnesota schools and Minnesota's students resources and expertise. Smith and Ingersol's 2004 national study found that teachers who received significant induction supports including mentoring, collaboration, teacher networks, resources, reduced number of course preparations, and teachers' aides (which were available to a small portion of the teachers in the sample), the turnover rates decreased.

### **(6) Cost-savings for districts**

Some studies suggest that induction efforts may also provide a financial return on investment. It is conservatively estimated that \$4.9 billion dollars nationwide is lost each year due to teacher turnover (Alliance for Excellent Education, 2005). Within Minnesota, this 2005 estimate put the cost for teacher turnover at over \$93 million dollars. One cost benefit study of a small district in California estimated that every \$1.00 invested in induction, a return of \$1.66 was produced (Villar & Strong, 2007). This return accounted for the costs associated with the preparation, recruitment, and professional development for the new teacher for the district, the state, as well as the benefits to student learning associated with higher performance correlated with high quality induction.

## **PROFESSIONAL LEARNING IS A CAREER-LONG PROCESS**

The experiences of the first days and years of an educator are crucial and can either positively or negatively impact an educator's career and student achievement. Feiman-Nemser's (2001) proposal for a professional learning continuum suggests a curricular framework for professional education that accounts for seamless professional development starting in pre-service preparation, transitioning through the induction period of the initial educator, and then shifting to the continuing professional development for the experienced or accomplished professional.

Professional learning, therefore, is a shared responsibility among the pre-service programs, the schools, and the districts. With special attention given to the period of induction, the stressful and uncertain transition can become an opportunity to develop a professional repertoire rather than just a time of survival, as is often reported by initial educators. A system of induction supports can provide a bridge for new teachers as they learn about the local contexts, develop their professional identity, and launch their instructional programs.

**(D)(5) – Exhibit B: Minnesota Principals' Academy**

**Background**

**ABOUT THE MINNESOTA PRINCIPALS' ACADEMY**

Goal: To create a statewide network of district and charter school leaders who are motivated and have the skills to create and sustain schools in which all students are on the path to college readiness by the end of high school

Despite the importance of the principalship and the demands that are placed on principals today, relatively few principals receive ongoing professional development that enhances their ability to lead schools to high performance. The Principals' Academy fills that gap by bringing to Minnesota the research-based program of the National Institute for School Leadership (NISL), an initiative of the Washington, D.C.-based National Center on Education and the Economy. The NISL executive development program was developed over six years with major support from national foundations and is being used to provide leadership development for school principals in Massachusetts, Florida and other states.

Using the NISL program, the Minnesota Principals' Academy enables cohorts of practicing principals to put leadership best practices from education, business, the military and other fields to work on behalf of their students and schools. Delivered in two and three-day segments over the course of one year, the curriculum combines face-to-face instruction in workshops, seminars and study groups with interactive Web-based learning. Through the Minnesota Principals' Academy, this rich curriculum is being adapted to the unique needs of Minnesota's urban, suburban and rural schools and students.

The NISL program uses a train-the-trainer delivery model that enables Minnesota to provide continuing leadership development for principals over the next several years. During 2006-2007, forty-eight Minnesota principals and school leaders were trained by NISL professionals and experts from across the country. Since June 2007, members of the Leadership Team are working in smaller teams to deliver the NISL curriculum to cohorts of principals across the state.

*For more information, please visit the MN Principals' Academy online at:  
<http://www.mnprincipals.umn.edu/>*

**(E)(1) – Exhibit A: Implementation of No Child Left Behind**  
*Minn. Stat. § 127A.095*

**2009 Minnesota Statutes**

**Resources**

**Topics**

- ¶ Academic Standards (public Schools)
- ¶ Education Department
- ¶ Education Funding
- ¶ Federal Aid
- ¶ Management and Budget Department

**127A.095 IMPLEMENTATION OF NO CHILD LEFT BEHIND ACT.**

**Subdivision 1 – Continued implementation.**

The Department of Education shall continue to implement the federal No Child Left Behind Act, Public Law 107-110, without interruption.

**Subdivision 2 – No Child Left Behind review.**

- (a) The legislature intends to require the Department of Education to conduct a comprehensive review of the consolidated state plan the state submitted to the federal Department of Education to implement the No Child Left Behind Act. The Minnesota Department of Education shall seek waivers under paragraph (b). If the Department of Education is unable to obtain waivers under paragraph (b), it should recommend in its report under paragraph (b) whether the state should opt out of the No Child Left Behind Act.
- (b) The commissioner, by January 15, 2008, shall report to the house of representatives and senate committees having jurisdiction over kindergarten through grade 12 education policy and finance whether the department has received approval from the federal Department of Education to:
  - (1) Participate in the growth model pilot program;
  - (2) Exclude from sanctions schools that have not made adequate yearly progress due solely to a subgroup of students with disabilities not testing at a proficient level;

- (3) Identify a school as not making adequate yearly progress only after the school has missed the adequate yearly progress targets in the same subgroup for two consecutive years;
- (4) Determine when to hold schools accountable for including a student with limited English proficiency in adequate yearly progress calculations;
- (5) Allow a district not making adequate yearly progress to offer supplemental educational services as an option before offering school choice;
- (6) Allow a district not making adequate yearly progress to also be the supplemental educational services provider;
- (7) Allow the state to maintain a subgroup size to 40 for the purposes of calculating adequate yearly progress for subgroups of students with limited English proficiency and subgroups of students with disabilities; and
- (8) Create flexibility to enable the state to define and identify highly qualified teachers.

**Subdivision 3 – Department of Management and Budget certification.**

If the federal Department of Education does not transmit to the commissioner of education its approval of the conditions in subdivision 2, paragraph (b), the commissioner of management and budget shall certify and report to the legislature annually beginning January 1, 2008, the amount of federal revenue, if any, that the federal government may withhold as a result of a potential state decision to discontinue implementation of the No Child Left Behind Act. The report shall also specify the intended purpose of the federal revenue and the amount of revenue that the federal government may withhold from the state, each school district, and each charter school in each fiscal year.

History:

1Sp2005 c 5 art 2 s 72; 2007 c 146 art 2 s 32; 2009 c 101 art 2 s 109

**(E)(1) – Exhibit B: Minn. Stat. §120B.35 Student Academic Achievement**

**Subdivision 1 – School and student indicators of growth and achievement.**

The commissioner must develop and implement a system for measuring and reporting academic achievement and individual student growth, consistent with the statewide educational accountability and reporting system. The system components must measure and separately report the adequate yearly progress of schools and the growth of individual students: students' current achievement in schools under subdivision 2; and individual students' educational growth over time under subdivision 3. The system also must include statewide measures of student academic growth that identify schools with high levels of growth, and also schools with low levels of growth that need improvement. When determining a school's effect, the data must include both statewide measures of student achievement and, to the extent annual tests are administered, indicators of achievement growth that take into account a student's prior achievement. Indicators of achievement and prior achievement must be based on highly reliable statewide or districtwide assessments. Indicators that take into account a student's prior achievement must not be used to disregard a school's low achievement or to exclude a school from a program to improve low achievement levels.

**Subdivision 2 – Federal expectations for student academic achievement.**

- (a) Each school year, a school district must determine if the student achievement levels at each school site meet federal expectations. If student achievement levels at a school site do not meet federal expectations and the site has not made adequate yearly progress for two consecutive school years, beginning with the 2001-2002 school year, the district must work with the school site to adopt a plan to raise student achievement levels to meet federal expectations. The commissioner of education shall establish student academic achievement levels to comply with this paragraph.
- (b) School sites identified as not meeting federal expectations must develop continuous improvement plans in order to meet federal expectations for student academic achievement. The department, at a district's request, must assist the district and the school site in developing a plan to improve student achievement. The plan must include parental involvement components.
- (c) The commissioner must:
  - (1) Assist school sites and districts identified as not meeting federal expectations; and
  - (2) Provide technical assistance to schools that integrate student achievement measures into the school continuous improvement plan.

- (d) The commissioner shall establish and maintain a continuous improvement Web site designed to make data on every school and district available to parents, teachers, administrators, community members, and the general public.

**Subdivision 3 – State growth target; other state measures.**

- (a) The state's educational assessment system measuring individual students' educational growth is based on indicators of achievement growth that show an individual student's prior achievement. Indicators of achievement and prior achievement must be based on highly reliable statewide or district wide assessments.
- (b) The commissioner, in consultation with a stakeholder group that includes assessment and evaluation directors and staff and researchers must implement a model that uses a value-added growth indicator and includes criteria for identifying schools and school districts that demonstrate medium and high growth under section 120B.299, subdivisions 8 and 9, and may recommend other value-added measures under section 120B.299, subdivision 3. The model may be used to advance educators' professional development and replicate programs that succeed in meeting students' diverse learning needs. Data on individual teachers generated under the model are personnel data under section 13.43. The model must allow users to:
  - (1) Report student growth consistent with this paragraph; and
  - (2) For all student categories, report and compare aggregated and disaggregated state growth data using the nine student categories identified under the federal 2001 No Child Left Behind Act and two student gender categories of male and female, respectively, following appropriate reporting practices to protect nonpublic student data.

The commissioner must report separate measures of student growth and proficiency, consistent with this paragraph.

- (a) When reporting student performance under section 120B.36, subdivision 1, the commissioner annually, beginning July 1, 2011, must report two core measures indicating the extent to which current high school graduates are being prepared for postsecondary academic and career opportunities:
  - (1) A preparation measure indicating the number and percentage of high school graduates in the most recent school year who completed course work important to preparing them for postsecondary academic and career opportunities, consistent with the core academic subjects required for admission to Minnesota's public colleges and universities as determined by the Office of Higher Education under chapter 136A; and
  - (2) A rigorous coursework measure indicating the number and percentage of high school graduates in the most recent school year who successfully completed one or more college-level advanced placement, international baccalaureate, postsecondary enrollment options including concurrent enrollment, other

rigorous courses of study under section 120B.021, subdivision 1a, or industry certification courses or programs.

When reporting the core measures under clauses (1) and (2), the commissioner must also analyze and report separate categories of information using the nine student categories identified under the federal 2001 No Child Left Behind Act and two student gender categories of male and female, respectively, following appropriate reporting practices to protect nonpublic student data.

- (b) When reporting student performance under section 120B.36, subdivision 1, the commissioner annually, beginning July 1, 2014, must report summary data on school safety and students' engagement and connection at school. The summary data under this paragraph are separate from and must not be used for any purpose related to measuring or evaluating the performance of classroom teachers. The commissioner, in consultation with qualified experts on student engagement and connection and classroom teachers, must identify highly reliable variables that generate summary data under this paragraph. The summary data may be used at school, district, and state levels only. Any data on individuals received, collected, or created that are used to generate the summary data under this paragraph are nonpublic data under section 13.02, subdivision 9.

#### **Subdivision 4 – Improving schools.**

Consistent with the requirements of this section, beginning June 20, 2012, the commissioner of education must annually report to the public and the legislature the organizational and curricular practices implemented in those schools that demonstrate medium and high growth compared to the state growth target.

#### **Subdivision 5 – Improving graduation rates for students with emotional or behavioral disorders.**

- (a) A district must develop strategies in conjunction with parents of students with emotional or behavioral disorders and the county board responsible for implementing sections 245.487 to 245.4889 to keep students with emotional or behavioral disorders in school, when the district has a drop-out rate for students with an emotional or behavioral disorder in grades 9 through 12 exceeding 25 percent.
- (b) A district must develop a plan in conjunction with parents of students with emotional or behavioral disorders and the local mental health authority to increase the graduation rates of students with emotional or behavioral disorders. A district with a drop-out rate for children with an emotional or behavioral disturbance in grades 9 through 12 that is in the top 25 percent of all districts shall submit a plan for review and oversight to the commissioner.

#### **History:**

1998 c 398 art 9 s 1; 1999 c 241 art 9 s 4; 2000 c 500 s 16; 1Sp2001 c 6 art 2 s 5; 2003 c 130 s 12; 2004 c 294 art 5 s 2; 2007 c 147 art 8 s 38; 2009 c 96 art 2 s 12

NOTE: The amendment to subdivision 3, paragraph (c), applies to students in the 2010-2011 school year and later. Laws 2009, chapter 96, article 2, section 12, the effective date.

NOTE: Subdivision 3, paragraph (d), as added by Laws 2009, chapter 96, article 2, section 12, applies to data that are collected in the 2012-2013 school year and later and reported annually beginning July 1, 2014, consistent with advice the commissioner receives from recognized and qualified experts on student engagement and connection and classroom teachers. Laws 2009, chapter 96, article 2, section 12, the effective date.

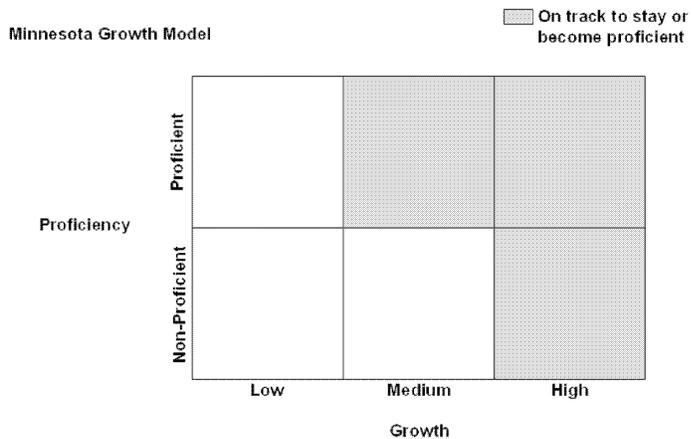
NOTE: The amendment to subdivision 4 by Laws 2009, chapter 96, article 2, section 12, applies in the 2011-2012 school year and later. Laws 2009, chapter 96, article 2, section 12, the effective date.

(E)(2) – Exhibit A: Minnesota Growth Matrix “On Track” explanation

Students in the shaded boxes are making the progress necessary to stay or become proficient



ILLUSTRATIVE



(E)(2) – Exhibit B: Minnesota's Persistently Lowest-Achieving Schools

| School  | LEA                                 | AYP Status   | Average Math Reading Proficiency** |       |       | Growth**<br>% "On track" | Graduation Rate*** |           |           |
|---|-------------------------------------|--|------------------------------------|-------|-------|--------------------------|--------------------|-----------|-----------|
|   |                                     |  | 2007                               | 2008  | 2009  |                          | 2006-2008          | 2006-2007 | 2007-2008 |
| <b>Bottom 5% of Elementary Schools Receiving Title I funding in relevant AYP status</b>             |                                     |  |                                    |       |       |                          |                    |           |           |
| BETHUNE ELEMENTARY  | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - Implementing School Choice         | 44.45                              | 33.90 | 19.50 | 19.65                    |                    |           |           |
| CITYVIEW PAM MAGNET   | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - School is Restructured             | 27.65                              | 23.45 | 21.05 | 24.33                    |                    |           |           |
| HMONG INTERNATIONAL ACADEMY   | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - Implementing School Choice         | 0.00                               | 26.05 | 26.30 | 35.15                    |                    |           |           |
| LUCY LANEY @ CLEVELAND PARK ELEM.   | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - Implementing School Choice         | 0.00                               | 16.10 | 21.10 | 25.13                    |                    |           |           |
| MAXFIELD MAGNET ELEMENTARY  | ST. PAUL PUBLIC SCHOOL DISTRICT     | Title I in 2010 - Implementing Supplemental Services | 28.05                              | 29.15 | 29.45 | 31.70                    |                    |           |           |
| NEW SPIRIT PRIMARY SCHOOL   | NEW SPIRIT SCHOOL                   | Title I in 2010 - Implementing School Choice         | 31.20                              | 25.30 | 27.10 | 32.98                    |                    |           |           |
| NEW VISIONS CHARTER SCHOOL  | NEW VISIONS CHARTER SCHOOL          | Title I in 2010 - Implementing Corrective Action     | 21.75                              | 24.45 | 33.55 | 30.25                    |                    |           |           |
| PONEMAH ELEMENTARY  | RED LAKE PUBLIC SCHOOL DISTRICT     | Title I in 2010 - Implementing Supplemental Services | 21.80                              | 21.10 | 17.45 | 24.88                    |                    |           |           |
| URBAN ACADEMY CHARTER SCHOOL  | URBAN ACADEMY CHARTER SCHOOL        | Title I in 2010 - Implementing Supplemental Services | 16.65                              | 13.95 | 14.15 | 24.63                    |                    |           |           |
| WORTHINGTON AREA LANGUAGE ACADEMY   | WORTHINGTON AREA LANGUAGE ACADEMY   | Title I in 2010 - Implementing Corrective Action     | 29.00                              | 28.30 | 33.00 | 34.23                    |                    |           |           |
| <b>Bottom 5% of Secondary Schools Receiving Title I funding in relevant AYP status</b>              |                                     |  |                                    |       |       |                          |                    |           |           |
| BROADWAY ARTS & TECHNOLOGY  | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - Preparing to Restructure           |                                    | 6.25  | 14.30 | 19.43                    | 6.19               | 9.28      | 4.78      |
| FOUR DIRECTIONS CHARTER SCHOOLS   | FOUR DIRECTIONS CHARTER SCHOOLS     | Title I in 2010 - Implementing Corrective Action     | 5.00                               | 7.15  | 0.00  | 12.62                    |                    | 33.33     |           |
| TRANSITIONS SR. HIGH  | MINNESOTA TRANSITIONS CHARTER SCH   | Title I in 2010 - School is Restructured             | 5.25                               | 10.15 | 6.80  | 18.10                    | 4.49               | 8.56      | 8.08      |
| <b>High Schools Receiving Title I funding in relevant AYP status with graduation rate below 60%</b> |                                     |  |                                    |       |       |                          |                    |           |           |
| EDISON SENIOR HIGH  | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - School is Restructured             | 15.30                              | 17.15 | 18.45 | 20.15                    | 51.65              | 48.53     | 54.98     |
| ENGLISH ACADEMY CAMPUS  | MINNESOTA INTERNSHIP CENTER         | Title I in 2010 - Preparing to Restructure           |                                    |       | 6.25  |                          | 12.07              | 25.87     | 29.15     |
| HIGH SCHOOL FOR RECORDING ARTS  | HIGH SCHOOL FOR RECORDING ARTS      | Title I in 2010 - Implementing Corrective Action     | 7.60                               | 24.80 | 23.20 | 54.19                    | 13.39              | 15.99     | 18.45     |
| HUMBOLDT SENIOR HIGH  | ST. PAUL PUBLIC SCHOOL DISTRICT     | Title I in 2010 - Implementing Corrective Action     | 14.70                              | 19.45 | 23.20 | 33.60                    | 47.51              | 47.57     | 48.94     |
| RED LAKE SENIOR HIGH  | RED LAKE PUBLIC SCHOOL DISTRICT     | Title I in 2010 - Implementing Corrective Action     | 7.45                               | 8.75  | 5.90  | 20.15                    | 40.99              | 33.33     | 25.61     |
| ROCHESTER OFF-CAMPUS CHARTER HIGH   | ROCHESTER OFF-CAMPUS CHARTER HIGH   | Title I in 2010 - Preparing to Restructure           | 14.90                              | 7.80  | 25.00 | 16.29                    | 32.2               | 33.33     | 25        |
| UNITY CAMPUS  | MINNESOTA INTERNSHIP CENTER         | Title I in 2010 - Preparing to Restructure           | 16.85                              | 9.10  | 10.00 |                          | 5.6                | 3.53      | 9.64      |
| WELLSTONE INTERNATIONAL HIGH  | MINNEAPOLIS PUBLIC SCHOOL DIST.     | Title I in 2010 - School is Restructured             | 1.85                               | 1.80  |       |                          | 21.71              | 20.36     | 23.43     |
| <b>Bottom 5% of Secondary Schools Eligible for but not receiving Title I funding</b>                |                                     |  |                                    |       |       |                          |                    |           |           |
| BRAHAM AREA SECONDARY   | BRAHAM PUBLIC SCHOOL DISTRICT       | Not Title I in 2010                                  | 44.40                              | 39.80 | 49.00 | 42.98                    | 95.31              | 93.15     | 86.78     |
| BROOKLYN CENTER SECONDARY   | BROOKLYN CENTER SCHOOL DISTRICT     | Not Title I in 2010                                  | 28.30                              | 24.75 | 27.80 | 33.28                    | 65.87              | 66.67     | 65.35     |
| BUTTERFIELD SECONDARY   | BUTTERFIELD PUBLIC SCHOOL DISTRICT  | Not Title I in 2010                                  | 53.50                              | 38.50 | 35.05 | 40.80                    |                    |           |           |
| CASS LAKE-BENA SECONDARY  | CASS LAKE-BENA PUBLIC SCHOOLS       | Not Title I in 2010                                  | 25.55                              | 37.95 | 30.90 | 36.95                    |                    | 78.69     |           |
| EAST CENTRAL SENIOR SECONDARY   | EAST CENTRAL SCHOOL DISTRICT        | Not Title I in 2010                                  | 30.80                              | 44.90 | 44.10 | 37.00                    | 79.66              | 85.71     | 72.55     |
| GREENBUSH-MIDDLE RIVER SENIOR HIGH  | GREENBUSH-MIDDLE RIVER SCHOOL DIST. | Not Title I in 2010                                  | 36.45                              | 42.10 | 46.15 | 42.45                    |                    |           | 90.45     |
| HMONG COLLEGE PREP ACADEMY HS   | HMONG COLLEGE PREP ACADEMY          | Not Title I in 2010 - Not Implementing               | 16.30                              | 17.90 | 23.70 | 35.05                    |                    | 56.56     | 64.71     |
| ISLE SECONDARY  | ISLE PUBLIC SCHOOL DISTRICT         | Not Title I in 2010                                  | 29.70                              | 33.65 | 46.15 | 40.53                    | 92.5               |           | 91.67     |
| NORTHVIEW IB WORLD SCHOOL   | OSSEO PUBLIC SCHOOL DISTRICT        | Not Title I in 2010                                  | 38.85                              | 37.30 | 44.30 | 40.52                    |                    |           |           |
| OGILVIE SECONDARY   | OGILVIE PUBLIC SCHOOL DISTRICT      | Not Title I in 2010                                  | 38.80                              | 39.95 | 42.95 | 42.58                    | 87.93              | 96.3      | 85.42     |
| ORR SECONDARY   | ST. LOUIS COUNTY SCHOOL DISTRICT    | Not Title I in 2010                                  | 40.45                              | 41.55 | 31.35 | 39.55                    |                    |           |           |
| RIVERWAY SECONDARY  | RIVERWAY LEARNING COMMUNITY CHTR    | Not Title I in 2010                                  | 23.30                              | 26.70 | 40.05 | 39.98                    |                    |           |           |
| WAUBUN SECONDARY  | WAUBUN PUBLIC SCHOOL DISTRICT       | Not Title I in 2010 - Not Implementing               | 34.10                              | 39.30 | 39.10 | 43.60                    | 83.33              | 83.33     | 81.82     |
| <b>High Schools eligible for but not receiving Title I funding with graduation rate below 60%</b>   |                                     |  |                                    |       |       |                          |                    |           |           |
| NONE  |                                     |  |                                    |       |       |                          |                    |           |           |

\* Based on average math and reading proficiency - sufficient sample sizes for 2 of 3 years required

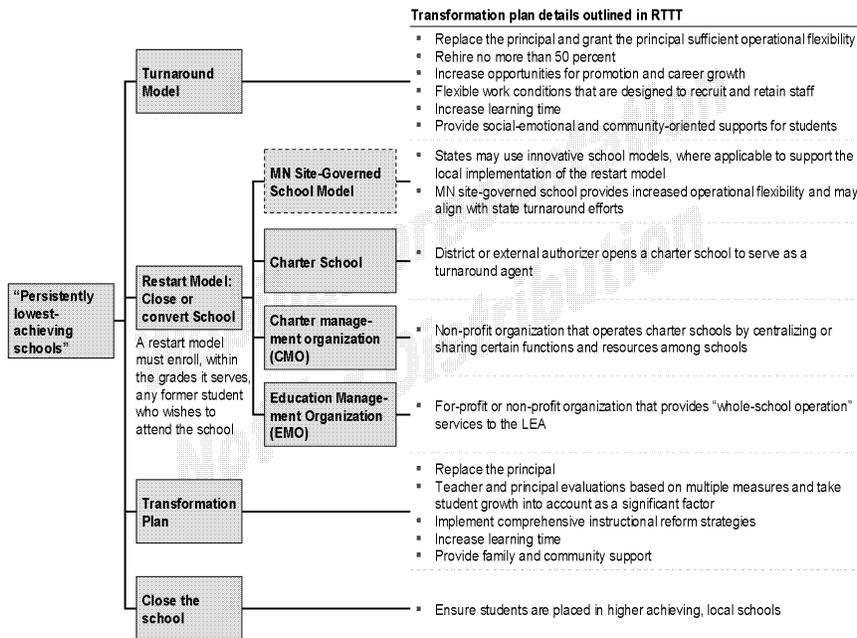
\*\* Based on the percentage of (non-proficient students making high growth)+(proficient students making medium growth) + (proficient students making high growth)

\*\*\* Based on 4 year graduation rates - sufficient sample sizes for 2 of 3 years required

(Minnesota excluded from this analysis charter schools who have been operating for less than three years to allow time for them to become established)

(E)(2) – Exhibit C: *Minnesota Intervention Models*

The USDOE prescribed models to turnaround  
 “the persistently lowest-achieving schools”



**(E)(2) – Exhibit D: *Minn. Stat. § 123B.045 District-created site governed schools***

**Subdivision 1 – Authority.**

- (a) A school board may approve site-governed schools under this section by requesting site-governing school proposals. The request for proposals must include what types of schools or education innovations the board intends to create. A current site may submit a proposal to create a different model for the site if 60 percent or more of the teachers at the site support the proposal. A group of licensed district professionals from one or multiple district sites may submit a proposal. The group submitting the proposal must include parents or other community members in the development of the proposal. A proposal may request approval for a model of a school not included in the request for proposal of the board.
- (b) The school board and the applicable bargaining unit representing district employees must enter into memoranda of understanding specifying how applicable sections of current contracts will enable the provisions of subdivision 2, paragraph (a), clauses (7) and (8), to be implemented.
- (c) Within 60 days of receipt of the application, the school board shall determine whether to approve, deny, or return the application to the applicants for further information or development.
- (d) Upon approval of the proposal, an agreement between the district and the site council shall be developed identifying the powers and duties delegated to the site and outlining the details of the proposal including the provisions of subdivisions 2, 3, and 5. Any powers or duties not specifically delegated to the school site in the agreement remains with the school board.

**Subdivision 2 – Roles and responsibilities of site-governed schools.**

- (a) Site-governed schools approved by the school board have the following autonomy and responsibilities at the discretion of the site:
  - (1) To create the site-governing council of the school. The council shall include teachers, administrators, parents, students if appropriate, community members, and other representatives of the community as determined by the site-governing council. Teachers may comprise a majority of the site-governing council at the option of a majority of the teachers at the site. The number of members on the site-governing council and the composition shall be included in the proposal approved by the school board;
  - (2) To determine the leadership model for the site including: selecting a principal, operating as a teacher professional practices model with school leadership functions performed by one or more teachers or administrators at the school or other model determined by the site;

- (3) To determine the budget for the site and the allocation and expenditure of the revenue based on provisions of subdivision 3;
  - (4) To determine the learning model and organization of the school consistent with the application approved by the school board;
  - (5) To select and develop its curriculum and determine formative and summative assessment practices;
  - (6) To set policies for the site including student promotion, attendance, discipline, graduation requirements which may exceed the school board standards, and other such rules as approved by the school board consistent with the mission, goals, and learning program of the school site;
  - (7) To determine the length of the school day and year and employee work rules covered by the terms and conditions of the employment contract;
  - (8) To select teachers and other staff consistent with current law and collective bargaining agreements and memoranda of understanding provided for in subdivision 1, paragraph (b). At least 70 percent of the teachers must be selected by the site prior to final approval of the agreement. Prior to requesting the district to employ staff not currently employed by the district, the site must first select current district staff including those on requested and unrequested leave as provided for in sections 122A.40 and 122A.41. The school board shall be the legal employer of all staff at the site and all teachers and other staff members of the applicable bargaining units. Teachers and other employees may be required to sign an individual work agreement with the site-governing council committing themselves to the mission and learning program of the school and the requirements of the site-governing council; and
  - (9) To fulfill other provisions as agreed to by the district and site-governing council.
- (b) If a self-governed school created under this section is supervised by a principal, that principal must be licensed, consistent with section 123B.147, subdivision 2.

**Subdivision 3 – Revenue to self-governed school.**

- (a) The revenue that shall be allocated by the site includes the general education revenue generated by the students at the site from state, local, and private sources, referendum revenue, federal revenue from the Elementary and Secondary Education Act, Individuals with Disabilities Education Act, Carl Perkins Act, and other federal programs as agreed to by the school board and site council.
- (b) The district may retain an administrative fee for managing the federal programs, private revenues, and general administrative functions including school board,

superintendent, district legal counsel, finance, accountability and self-governed school contract oversight, facilities maintenance, districtwide special education programs, and other such services as agreed to by the site and school board. The administrative fee shall be included in the agreement.

- (c) As part of the agreement, the district may provide specific services for the site and may specify the amount to be paid for each service and retain the revenues for that amount. The formula or procedures for determining the amount of revenue to be allocated to the site each year shall be consistent with this subdivision and incorporated in the site budget annually following a timeline and process that is included in the agreement with the school board. The site is responsible for allocating revenue for all staff at the site and for the other provisions of the agreement with the district board.
- (d) All unspent revenue shall be carried over to following years for the sole use of the site.

**Subdivision 4 – Exemption from statutes and rules.**

Except as outlined in this section, site-governed schools established under this section are exempt from and subject to the same laws and rules as are chartered schools under section 124D.10, except that the schools shall be subject to chapters 13, 13D, and 179A, and sections 122A.40, 122A.41, 122A.50, and 122A.51.

**Subdivision 5 – Performance standards.**

- (a) The school board and the site council shall include in the agreement performance standards and expectations that shall include at least the following:
  - (1) Student achievement targets on multiple indicators including either a growth model or value-added growth model;
  - (2) The criteria and process to be followed if it is determined that the site failed to comply with district oversight and accountability requirements as outlined in the agreement; and
  - (3) Other performance provisions as agreed to.
- (b) All agreements shall be filed with the commissioner. The initial agreement shall be for up to three years, shall be reviewed annually, and may be renewed by the district board for additional terms of up to five years based on the performance of the school.

**Subdivision 6 – Board termination of self-governed school authority.**

- (a) The district board may terminate the agreement for one or more of the following reasons:

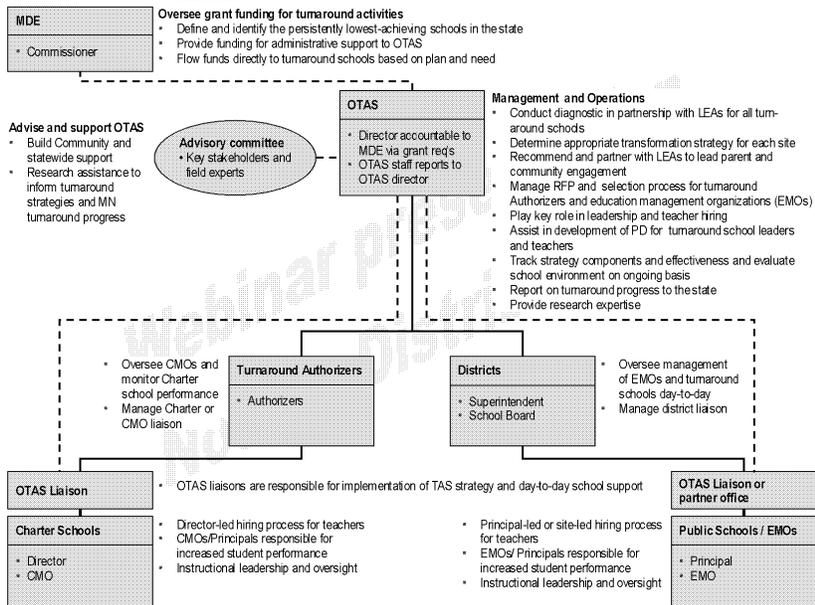
- (1) Failure of the site to meet the provisions specified in the agreement in subdivision 5;
  - (2) Violations of law; or
  - (3) Other good cause shown.
- (b) Site-governed schools that are terminated or not renewed for reasons other than cause may request to convert to charter school status as provided for in section 124D.10 and, if chartered by the board, shall become the owner of all materials, supplies, and equipment purchased during the period the school was a site-governed school.

**History:**

2009 c 96 art 2 s 33

**(E)(2) - Exhibit E: Office of Turnaround Schools Organizational Structure**

**Strategy Overview: Potential Structure and responsibilities  
Office of Turnaround Schools (3/6)**



## **(E)(2) – Exhibit F: *Parent Support Programs in Minnesota’s Urban Core***

### **Example: St. Paul Public Schools Instruction for English Language Learners**

A variety of ELL programs are employed in Saint Paul Public Schools, all with the same basic goal—to help English language learners achieve English proficiency. These programs differ in their approaches, varying in terms of instructional strategies, program structure, and amount of time students spend in classrooms with their native English-speaking peers. In all programs, however, teachers and bilingual Educational Assistants (EAs) provide linguistic, graphic, visual, kinesthetic, interactive, and emotional supports to make content standards and curriculum accessible for ELLs at all levels of proficiency. While it is not necessary for an ELL teacher to speak his/her students’ native language, it is important for schools to maintain a culturally diverse staff—all students need social, emotional, and academic support, and having someone to identify with culturally can make a positive impact on ELLs.

At the elementary level, General Education (GE) and ELL licensed teachers collaborate to teach language through content using district curriculum supported by second language acquisition strategies. Grade level content is made comprehensible using scaffolding techniques to meet individual students’ language needs and learning styles. ELL teachers provide support primarily in English language arts but may provide additional support in math or other content areas.

At the secondary level, ELLs have the opportunity to select courses tailored to four different proficiency levels. All levels of English as a Second Language (ESL) classes emphasize reading and writing skills. Students earn math, science and social studies credit in classes that are co-taught by a licensed ELL teacher and content teacher. Classes at the higher levels specifically prepare students to pass the Graduation Required Assessments for Diploma (GRAD) in reading and writing composition.

In addition, ELLs also have the opportunity to participate in Spanish Dual Language, Hmong Dual Language, Language Academy (LA), and Somali Academic Language and Teaching (SALT) programs depending on their needs, interests, and school of enrollment at the elementary level. Additional secondary programs include the English Language Centers (ELC) and International Academy – LEAP. Latino Consent Decree (LCD) and Hmong Literacy and Culture programs are available for students K-12.

### **Learning Language Through Content**

The field of second language acquisition now advocates the teaching of a second language through, not prior to, academic content. Consequently, the ELL department at Saint Paul Public Schools offers content-based ELL instructional programs, which strive to promote students’ English language proficiency and mastery of academic content at the same time

by integrating subject areas with language objectives. ELL students acquire English through participation in age-appropriate instruction that is aligned to national, state, and district content standards as well English language proficiency standards.

The primary objective of teaching language through content is making grade-level standards and curriculum accessible to ELL students at all levels. Academic content is made comprehensible using multiple scaffolding techniques to accommodate different levels of language proficiency, content knowledge, learning styles, and cultural practices and understandings. What students should know and be able to do is connected to student's prior experiences and modeled. Vocabulary is previewed and comprehension checks are in place to ensure understanding. Instruction is highly interactive using a variety of groupings with ample opportunities to develop listening and speaking skills. Information is presented using graphic organizers, visuals, different levels of academic language, and in many other ways to help students understand. Student's native languages and cultures are represented, encouraged, and used in ways to help them acquire English. Assessments and learning tasks are differentiated for students to demonstrate what know. Formative assessments are used regularly to meet individual needs.

We know that all students learn best in inclusive, diverse environments. General Education (GE) and ELL teachers deliver instruction collaboratively in an inclusive setting unlike pull-out programs, in which a special curriculum is often used and the sole focus is on the development of English proficiency. Students have daily interaction with native English-speaking peers and may be clustered strategically (possibly with other students who speak the same native language or are at the same language level) to maximize resources and target instruction. Collaborative teaching teams meet regularly to articulate content and language objectives, plan for co-teaching and assessments, and reflect on student progress as well as their own teaching practices to meet the needs of all students.

### **Continuum of Support**

ELL students entering in the primary grades have different needs than those in intermediate grades. Furthermore, the gap between mainstream students and newcomers in language level and content knowledge becomes larger through the grades; therefore, instruction may look different at different grade levels. Newcomer Programs

English language learners have had many different experiences with education, culture, and family. Many ELLs are new to the United States, but many others are not; some can read and write in their first language, but others have had little or no formal education at all. Some children have spent the majority of their lives in refugee camps; others were born in the U.S., but may live in a close-knit community where everyone speaks Spanish or Russian or Vietnamese and have therefore had very little experience with English.

Because English language learners come from countless different backgrounds, it is not feasible to predict how long it will take each ELL student to achieve social and academic proficiency in English. Depending on a student's previous education background, the effectiveness of the ESL program, and many other factors, it can take between 4-8 years, if not longer. Most experts on the subject agree that ELL students should remain in ESL

programs as long as is necessary, rather than for a predetermined amount of time. In Minnesota, funding is provided for ELL students for a maximum period of five years – however, in SPPS, we continue to provide service to students for as long as they need it.

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Because English language learners come from countless different backgrounds, it is not feasible to predict how long it will take each ELL student to achieve social and academic proficiency in English. Depending on a student's previous education background, the effectiveness of the ESL program, and many other factors, it can take between 4-8 years, if not longer. Most experts on the subject agree that ELL students should remain in ESL programs as long as is necessary, rather than for a predetermined amount of time. In Minnesota, funding is provided for ELL students for a maximum period of five years – however, in SPPS, we continue to provide service to students for as long as they need it.

### **ESL Programs**

Experts in the field of second language acquisition advocate the teaching of second language through, not prior to, academic content; in recent years, the ELL programs in SPPS have been guided by this philosophy. The district's ELL programs provide instruction in which learners acquire English through participation in age-appropriate, academic content that is driven by national, state, and district standards. The teaching of English through academic content requires ELL instruction that is aligned with and integrated into grade-level curriculum. Academic content must be differentiated as necessary to make standards and curricula accessible to ELL students at all levels.

In order to effectively teach language through academic content, it is necessary for general education staff and ELL staff to work together. Collaboration between ELL and classroom teachers appears to be one of the best means for serving English language learners in elementary schools. In a review of scholarly literature on teacher teaming, Spraker (2003) nicely sums up the need for collaborative practices among teachers in *Teacher Teaming in Relation to Student Performance: Findings from the Literature*:

"Those working on educational reform today argue that quality schooling is achieved through an ongoing, collaborative, and transformative process in a situation where people work together in respectful collegiality, rather than isolation, and where they create solutions through mutual decision-making and adaptation"

(p. 3).

### **DUAL LANGUAGE PROGRAMS**

Over the past five years, the ELL department has significantly expanded the district's dual-language programs it offers with the addition of three two-way immersion programs and one early-exit transitional program. In addition, the district offers two one-way immersion programs—Adams Spanish Immersion and L'Étoile du Nord French Immersion. One-way immersion programs are not ELL programs per se; rather ELL students enrolled in these programs receive ELL support just like ELL students enrolled in other schools in SPPS.

All two and one-way immersion programs are fully articulated programs through 12th grade. Upon completing a K-6 immersion program, in either Spanish or French, students are able to continue their language studies in immersion programs at junior and senior high school programs.

### **One-Way Immersion Programs**

Adams Spanish Immersion and L'Étoile du Nord French Immersion are one-way immersion programs. One-way immersion programs were established for language majority students wishing to learn another language. English literacy instruction is begun in second grade and continued through sixth grade. In addition to English Language Arts, Spanish Language Arts is also taught. Academic content such as math, science, social studies and specialist courses such as art, computer science, and physical education are also taught in Spanish. In recent years an increasing number of ELL students have chosen to enroll in either of these two programs therefore the ELL department provided the appropriate services for these students.

### **Two-Way Immersion Programs**

The programs at Riverview (K-5), Bruce Vento (K-3), and Paul & Sheila Wellstone (K-6), are two-way immersion programs (TWI). All TWI programs will eventually expand to include grades K-6. TWI programs serve both language minority and language majority students in the same classroom and use each group of students' first language for academic instruction at certain points during the program. The aim is for all students to become bilingual, biliterate and culturally proficient in both the majority and partner cultures. The cognitive, academic, and linguistic benefits of these programs fully appear after 5th or 6th grade.

A Hmong dual language program, believed to be the first of its kind in the nation, is offered at Jackson Preparatory. Students are taught academic content in Hmong while also learning to read and write in Hmong and English. Children in this program are taught by a licensed Hmong bilingual teacher, and spend the majority of their school day reading, writing, and thinking in Hmong. A portion of each day is dedicated to English language development. The Hmong dual immersion program will serve students in grades pre-K–4 during 2009-2010.

### **Transitional Bilingual Programs**

The programs at Roosevelt (K-1) and Cherokee Heights (preK-2) are early-exit transitional programs, and as such will not expand beyond second grade. In transitional programs,

Spanish-speaking students initially learn academic content in their first language while developing proficiency in English. ESL instruction is an essential component of transitional programs. The main purpose of these programs is to prepare students to transition into an all-English program of instruction as soon as possible—Spanish is used as a tool to help speed English language and content development.

The SPPS ELL Department is not only providing services for students in the schools, but the ELL Department also works with the families and communities of ELL students to ensure that students and their families are offered opportunities to learn, grow, and participate inside and outside of school. Many of the ELL services for students and families extend into academic, cultural, and community areas. The ELL Department coordinates many family involvement activities for English language learners, which include district-wide parent meetings and classes. Parents of ELL students are all invited to participate in these family involvement activities in which childcare, food, and transportation are provided. The objective of these family involvement activities is to promote and increase parent involvement in the education of ELL students.

Once such program is the Hmong, Latino, Somali and newly forming Karen Parent Advisory Council initiative. The mission of the Parents Advisory Council is to promote a partnership between Hmong, Somali, Latino and Karen parents and Saint Paul Public Schools to improve educational programs and services. The parent groups are coordinated through the ELL Department of Saint Paul Public Schools to serve as a venue for parents who would like to learn new ideas to help their children and to voice their concerns and opinions about their children's education. Parent Advisory Councils convene monthly to provide learning opportunities for parents and to provide a connection between parents, schools, and the community. At the end of each school year, the committee submits an end of the year report along with recommendations and concerns to the ELL Department and the Superintendent.

**(E)(2) – Exhibit G: Support letter for PIQE, upon which MPS CPEO Parents group is based and affiliated**

**JEFFERSON ELEMENTARY SCHOOL**

202 N. Mariposa Fresno, CA 93701  
Phone: (559) 457-2960 Fax: (559) 457-2963  
Edward Gomes - Principal Kelli Wilkins - Vice Principal



June of 2009

To Whom It May Concern:

On behalf of Jefferson Elementary, I am honored to support the Parent Institute of Quality Education and its pursuit to build strong communities and schools through parent education and training.

I have worked with PIQE for five years and have seen firsthand the amazing difference such a program does to not only a single school, but for the school district and community as a whole. I have personally sat through the 9-week program myself and can speak to its strength with supporting parents and their students. In Hanford Elementary School District, we began a partnership with PIQE in my second year as principal. Our school, Lincoln Elementary, was the lowest academic school in the County, had the highest amount of suspensions and expulsions. Following 4 years of PIQE support, over 150 parents graduated the program, affecting a total of over 250 students. Lincoln academic scores climbed through the roof by raising their API scores almost 200 points since the PIQE began at the school site, lowering suspensions and expulsions more than 75%, and becoming the third highest ranking school in the district.

Much of the success at my previous school is in large part from the entire staff and community as a whole, and PIQE was a vital part in changing the belief systems of our parents and creating college ready graduates. I cannot thank PIQE enough for the knowledge, belief, and overall support they have given to our parents at Lincoln Elementary and Jefferson Elementary. We hope to continue this vital partnership throughout the year.

I would once again like to express my support and appreciation to PIQE for empowering our parents here at Jefferson School and that of my former school, Lincoln Elementary.

Please call me for any support you might need at (559) 457-2960 or email me at [Ed.Gomes@fresnounified.org](mailto:Ed.Gomes@fresnounified.org).

Sincerely,

Edward Gomes  
Principal  
Jefferson Elementary

**(F)(1) – Exhibit A: *Minnesota Education Expenditures as percentage of overall state budget***

Percent of State General Fund Expenditure for K-12 and Higher Education for FY 2008 versus FY 2009  
 Source: Minnesota Management and Budget - General Fund - Fund Balance Analysis - July 17, 2009, Page 1  
 \$ in Thousands

|   | FY 2008    | FY 2009    |
|---|------------|------------|
| K-12 Education  | 6,820,422  | 6,957,053  |
| Higher Education  | 1,563,413  | 1,556,056  |
| Subtotal  | 8,383,835  | 8,513,109  |
| Total General Fund Expenditures & Transfers   | 17,005,008 | 16,917,739 |
| K-12 & Higher Education as Percent of Total General Fund Expenditures   | 49.3%      | 50.3%      |
| Total Current Resources   | 16,680,094 | 15,535,638 |
| K-12 & Higher Education Expenditures as Percent of Total Current General Fund Resources (Revenues + Transfers + Prior Year Adjustments) | 50.3%      | 54.8%      |

Minnesota Department of Education - Division of Program Finance  
 4-Nov-09

**(F)(1) – Exhibit B: FY 2009 General Revenues Per ADM: High Poverty vs. Low Poverty LEA's**

| FY 2009 General Revenues Per ADM: High Poverty vs. Low Poverty LEA's   |                                   | FY 2009 Revenue & Poverty Status |              |             |            |
|--|-----------------------------------|----------------------------------|--------------|-------------|------------|
|  |                                   | 11/18/2009                       |              |             |            |
| The order of funding components is based on the level of difference between poverty groups when the poverty criterion is set at 30%. |                                   |                                  |              |             |            |
| Minimum poverty concentration for poverty status:  |                                   | 0.2000                           |              |             |            |
|  |                                   | Total                            | High Poverty | Low Poverty | Difference |
| Pupil Counts   |                                   |                                  |              |             |            |
| 1  | Enrollment                        | 813,792                          | 594,171      | 219,621     | n/a        |
| 2  | Portion of total enrollment       | 100.0%                           | 73.0%        | 27.0%       | n/a        |
| 3  | Free lunch                        | 202,142                          | 181,521      | 20,621      | n/a        |
| 4  | Reduced Lunch                     | 64,907                           | 55,758       | 9,149       | n/a        |
| 5  | Poverty portion = [(3)+(4)]/(1) = | 32.8%                            | 39.9%        | 13.6%       | 26.4%      |
| Average Revenues per ADM   |                                   |                                  |              |             |            |
| 6  | Compensatory                      | 424.17                           | 561.98       | 53.90       | 508.08     |
| 7  | Limited English Proficiency (LEP) | 50.24                            | 62.75        | 16.64       | 46.12      |
| 8  | Transition                        | 36.29                            | 47.78        | 5.44        | 42.34      |
| 9  | Extended Time                     | 64.70                            | 76.72        | 32.40       | 44.31      |
| 10   | Transportation Sparsity           | 74.15                            | 89.56        | 32.75       | 56.81      |
| 11   | Sparsity                          | 27.49                            | 37.32        | 1.07        | 36.25      |
| 12   | Operating Capital                 | 237.56                           | 239.93       | 231.19      | 8.74       |
| 13   | Training & Experience             | 1.60                             | 2.15         | 0.10        | 2.05       |
| 14   | Gifted & Talented                 | 13.92                            | 13.93        | 13.90       | 0.03       |
| 15   | One Time                          | 59.16                            | 59.20        | 59.06       | 0.14       |
| 16   | Pension Adjustment                | -37.58                           | -39.85       | -31.49      | -8.36      |
| 17   | Basic                             | 5,943.90                         | 5,947.77     | 5,933.50    | 14.26      |
| 18   | Combined options adjustment       | 0.18                             | -1.49        | 4.65        | -6.14      |
| 19   | Equity                            | 114.76                           | 113.13       | 119.13      | -6.01      |
| 20   | Q Comp                            | 80.24                            | 62.35        | 128.31      | -65.97     |
| 21   | Referendum                        | 870.94                           | 818.82       | 1,010.97    | -192.15    |
| 22   | Total = sum of (17) to (21) =     | 7,961.71                         | 8,092.04     | 7,611.53    | 480.51     |

**(F)(1) – Exhibit C: Minn. Stat. § 126C General Education Revenue**

**126C.10 GENERAL EDUCATION REVENUE.**

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**Subd. 3. Compensatory education revenue.**

(a) The compensatory education revenue for each building in the district equals the formula allowance minus \$415 times the compensation revenue pupil units computed according to section 126C.05, subdivision 3. Revenue shall be paid to the district and must be allocated according to section 126C.15, subdivision 2.

(b) When the district contracting with an alternative program under section 124D.69 changes prior to the start of a school year, the compensatory revenue generated by pupils attending the program shall be paid to the district contracting with the alternative program for the current school year, and shall not be paid to the district contracting with the alternative program for the prior school year.

(c) When the fiscal agent district for an area learning center changes prior to the start of a school year, the compensatory revenue shall be paid to the fiscal agent district for the current school year, and shall not be paid to the fiscal agent district for the prior school year.

**Subd. 4. Basic skills revenue.**

A school district's basic skills revenue equals the sum of:

- (1) compensatory revenue under subdivision 3; plus
- (2) limited English proficiency revenue under section 124D.65, subdivision 5;  
plus
- (3) \$250 times the limited English proficiency pupil units under section 126C.05, subdivision 17.

**126C.15 BASIC SKILLS REVENUE; COMPENSATORY EDUCATION REVENUE.**

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**Subdivision 1. Use of revenue.**

The basic skills revenue under section 126C.10, subdivision 4, must be reserved and used to meet the educational needs of pupils who enroll under-prepared to learn and whose progress toward meeting state or local content or performance standards is below the level that is appropriate for learners of their age. Any of the following may be provided to meet these learners' needs:

- (1) direct instructional services under the assurance of mastery program according to section 124D.66;

(2) remedial instruction in reading, language arts, mathematics, other content areas, or study skills to improve the achievement level of these learners;

(3) additional teachers and teacher aides to provide more individualized instruction to these learners through individual tutoring, lower instructor-to-learner ratios, or team teaching;

(4) a longer school day or week during the regular school year or through a summer program that may be offered directly by the site or under a performance-based contract with a community-based organization;

(5) comprehensive and ongoing staff development consistent with district and site plans according to section 122A.60, for teachers, teacher aides, principals, and other personnel to improve their ability to identify the needs of these learners and provide appropriate remediation, intervention, accommodations, or modifications;

(6) instructional materials and technology appropriate for meeting the individual needs of these learners;

(7) programs to reduce truancy, encourage completion of high school, enhance self-concept, provide health services, provide nutrition services, provide a safe and secure learning environment, provide coordination for pupils receiving services from other governmental agencies, provide psychological services to determine the level of social, emotional, cognitive, and intellectual development, and provide counseling services, guidance services, and social work services;

(8) bilingual programs, bicultural programs, and programs for learners of limited English proficiency;

(9) all day kindergarten;

(10) extended school day and extended school year programs; and

(11) substantial parent involvement in developing and implementing remedial education or intervention plans for a learner, including learning contracts between the school, the learner, and the parent that establish achievement goals and responsibilities of the learner and the learner's parent or guardian.

**Subd. 2. Building allocation.**

(a) A district must allocate its compensatory revenue to each school building in the district where the children who have generated the revenue are served unless the school district has received permission under Laws 2005, First Special Session chapter 5, article 1, section 50, to allocate compensatory revenue according to student performance measures developed by the school board.

(b) Notwithstanding paragraph (a), a district may allocate up to five percent of the amount of compensatory revenue that the district receives to school sites according to a plan adopted by the school board. The money reallocated under this paragraph must be spent for the purposes listed in subdivision 1, but may be spent on

students in any grade, including students attending school readiness or other prekindergarten programs.

(c) For the purposes of this section and section 126C.05, subdivision 3, "building" means education site as defined in section 123B.04, subdivision 1.

(d) Notwithstanding section 123A.26, subdivision 1, compensatory revenue generated by students served at a cooperative unit shall be paid to the cooperative unit.

(e) A district with school building openings, school building closings, changes in attendance area boundaries, or other changes in programs or student demographics between the prior year and the current year may reallocate compensatory revenue among sites to reflect these changes. A district must report to the department any adjustments it makes according to this paragraph and the department must use the adjusted compensatory revenue allocations in preparing the report required under section 123B.76, subdivision 3, paragraph (c).

**Subd. 3.Recommendation.**

A school site decision-making team, as defined in section 123B.04, subdivision 2, paragraph (a), or the instruction and curriculum advisory committee under section 120B.11, if the school has no school site decision team, shall recommend how the compensatory education revenue will be used to carry out the purpose of this section. A school district that has received permission under Laws 2005, First Special Session chapter 5, article 1, section 50, to allocate compensatory revenue according to school performance measures shall share its plan for the distribution of compensatory revenue with the school site decision team.

**Subd. 4.Separate accounts.**

Each district and cooperative unit that receives basic skills revenue shall maintain separate accounts to identify expenditures for salaries and programs related to basic skills revenue.

**Subd. 5.Annual expenditure report.**

Each year a district that receives basic skills revenue must submit a report identifying the expenditures it incurred to meet the needs of eligible learners under subdivision 1. The report must conform to uniform financial and reporting standards established for this purpose. Using valid and reliable data and measurement criteria, the report also must determine whether increased expenditures raised student achievement levels.

**(F)(1) – Exhibit D: Minnesota Statutes providing compensatory and limited English proficiency revenue**

**MINNESOTA STATUTES PROVIDING FOR COMPENSATORY REVENUE AND LIMITED ENGLISH PROFICIENCY REVENUE**

**124D.65 LIMITED ENGLISH PROFICIENCY (LEP) PROGRAMS AID.**

**Subd. 5. School district LEP revenue.**

(a) A district's limited English proficiency programs revenue equals the product of (1) \$700 in fiscal year 2004 and later times (2) the greater of 20 or the adjusted marginal cost average daily membership of eligible pupils of limited English proficiency enrolled in the district during the current fiscal year.

(b) A pupil ceases to generate state limited English proficiency aid in the school year following the school year in which the pupil attains the state cutoff score on a commissioner-provided assessment that measures the pupil's emerging academic English.

**126C.05 DEFINITION OF PUPIL UNITS.**

**Subd. 3. Compensation revenue pupil units.**

Compensation revenue pupil units for fiscal year 1998 and thereafter must be computed according to this subdivision.

(a) The compensation revenue concentration percentage for each building in a district equals the product of 100 times the ratio of:

(1) the sum of the number of pupils enrolled in the building eligible to receive free lunch plus one-half of the pupils eligible to receive reduced priced lunch on October 1 of the previous fiscal year; to

(2) the number of pupils enrolled in the building on October 1 of the previous fiscal year.

(b) The compensation revenue pupil weighting factor for a building equals the lesser of one or the quotient obtained by dividing the building's compensation revenue concentration percentage by 80.0.

(c) The compensation revenue pupil units for a building equals the product of:

(1) the sum of the number of pupils enrolled in the building eligible to receive free lunch and one-half of the pupils eligible to receive reduced priced lunch on October 1 of the previous fiscal year; times

(2) the compensation revenue pupil weighting factor for the building; times

(3) .60.

(d) Notwithstanding paragraphs (a) to (c), for charter schools and contracted alternative programs in the first year of operation, compensation revenue pupil units shall be computed using data for the current fiscal year. If the charter school or contracted alternative program begins operation after October 1, compensatory revenue pupil units shall be computed based on pupils enrolled on an alternate date determined by the commissioner, and the compensation revenue pupil units shall be prorated based on the ratio of the number of days of student instruction to 170 days.

(e) The percentages in this subdivision must be based on the count of individual pupils and not on a building average or minimum.

**(F)(1) – Exhibit E: *Q Comp funding history***

**Q Comp funding history**

2005-06: Funding for districts participating in Q Comp during this school year was \$260 in state aid for each student that had been enrolled in the district on October 1, 2004.

2006-07: Funding for all districts participating in Q Comp during this school year was \$190 in state aid and up to \$70 in local, board approved levy for each student that had been enrolled in the district on October 1, 2005.

2007-08: Funding for all districts participating in Q Comp during this school year was \$190 in state aid and up to \$70 in local, board approved levy for each student that had been enrolled in the district on October 1, 2006.

2008-09: Funding for all districts participating in Q Comp during this school year was \$190 in state aid and up to \$70 in local, board approved levy for each student that had been enrolled in the district on October 1, 2007.

2009-10: Funding for all districts participating in Q Comp during this school year is \$169 in state aid and up to \$91 in local, board approved levy for each student that had been enrolled in the district on October 1, 2008.

All future school years: Funding for all districts participating in Q Comp during this school year will \$169 in state aid and up to \$91 in local, board approved levy for each student that had been enrolled in the district on October 1 of the previous year.

Minnesota Department of Education Q Comp funding  
 history and projected revenues



|  | FY 2006    | FY 2007    | FY 2008    | FY 2009    | FY 2010    | FY 2011     | FY 2012    | FY 2013    |
|--|------------|------------|------------|------------|------------|-------------|------------|------------|
| <b>NOVEMBER 2009 FORECAST SUMMARY:</b> |            |            |            |            |            |             |            |            |
| <b>Total Certified Levy:</b>           |            |            |            |            |            |             |            |            |
| Current Year Certified Levy            | -          | 6,153,757  | 11,209,703 | 13,869,740 | 18,300,589 | 18,410,979  | 23,818,380 | 25,409,237 |
| Make-up Levy Adjustment                | -          | -          | 3,599,522  | 1,531,640  | 176,612    | (1,458,367) | 1,435,947  | 876,894    |
| Final Levy Adjustment (3YP)            | -          | -          | -          | -          | (67,476)   | 38,398      | (135,818)  | 2,395,814  |
| <b>Total Certified Levy Estimate</b>   | -          | 6,153,757  | 14,809,225 | 15,401,380 | 18,409,725 | 16,991,010  | 25,118,509 | 28,681,945 |
| <b>Total Aid Entitlement:</b>          |            |            |            |            |            |             |            |            |
| Basic Aid Entitlement                  | 13,222,300 | 35,133,009 | 44,232,262 | 46,677,248 | 45,922,384 | 52,068,185  | 56,786,067 | 61,531,951 |
| Equalization Aid Entitlement           | -          | 650,893    | 627,892    | 322,086    | 342,823    | 487,993     | 802,610    | 772,311    |
| Grandfather Alt Comp                   | 3,126,550  | 3,122,304  | 3,123,755  | 2,995,903  | -          | -           | -          | -          |
| <b>Total Aid Entitlement</b>           | 16,348,850 | 38,906,206 | 47,983,909 | 49,995,237 | 46,265,207 | 52,556,178  | 57,588,677 | 62,304,262 |
| <b>Total Levy Authority</b>            | -          | 9,698,158  | 12,779,740 | 13,354,797 | 19,238,036 | 23,440,832  | 24,695,274 | 26,236,117 |
| <b>Total Revenue</b>                   | 16,348,850 | 48,604,364 | 60,763,849 | 63,350,034 | 65,503,243 | 75,997,010  | 82,283,951 | 88,540,379 |

WORKING DRAFT

**(F)(2) – Exhibit A: Minn. Stat. § 124D.10 Charter Schools**

**124D.10 CHARTER SCHOOLS.**

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Subdivision 1. **Purposes.**

(a) The purpose of this section is to:

- (1) improve pupil learning and student achievement;
- (2) increase learning opportunities for pupils;
- (3) encourage the use of different and innovative teaching methods;
- (4) measure learning outcomes and create different and innovative forms of measuring outcomes;
- (5) establish new forms of accountability for schools; and
- (6) create new professional opportunities for teachers, including the opportunity to be responsible for the learning program at the school site.

(b) This section does not provide a means to keep open a school that otherwise would be closed or to reestablish a school that has been closed. Applicants in these circumstances bear the burden of proving that conversion to a charter school or establishment of a new charter school fulfills the purposes specified in this subdivision, independent of the school's closing.

An authorizer shall not approve an application submitted by a charter school developer under subdivision 4, paragraph (a), if the application does not comply with this subdivision. The commissioner shall not approve an affidavit submitted by an authorizer under subdivision 4, paragraph (b), if the affidavit does not comply with this subdivision.

Subd. 2. **Applicability.**

This section applies only to charter schools formed and operated under this section.

Subd. 2a.

[Repealed by amendment, [2009 c 96 art 2 s 41](#)]

Subd. 3. **Authorizer.**

(a) For purposes of this section, the terms defined in this subdivision have the meanings given them.

"Application" to receive approval as an authorizer means the proposal an eligible authorizer submits to the commissioner under paragraph (c) before that authorizer is able to submit any affidavit to charter to a school.

"Application" under subdivision 4 means the charter school business plan a school developer submits to an authorizer for approval to establish a charter school

that documents the school developer's mission statement, school purposes, program design, financial plan, governance and management structure, and background and experience, plus any other information the authorizer requests. The application also shall include a "statement of assurances" of legal compliance prescribed by the commissioner.

"Affidavit" means a written statement the authorizer submits to the commissioner for approval to establish a charter school under subdivision 4 attesting to its review and approval process before chartering a school.

"Affidavit" means the form an authorizer submits to the commissioner that is a precondition to a charter school organizing an affiliated nonprofit building corporation under subdivision 17a.

(b) The following organizations may authorize one or more charter schools:

(1) a school board; intermediate school district school board; education district organized under sections 123A.15 to 123A.19;

(2) a charitable organization under section 501(c)(3) of the Internal Revenue Code of 1986, excluding a nonpublic sectarian or religious institution, any person other than a natural person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with the nonpublic sectarian or religious institution, and any other charitable organization under this clause that in the federal IRS Form 1023, Part IV, describes activities indicating a religious purpose, that:

(i) is a member of the Minnesota Council of Nonprofits or the Minnesota Council on Foundations;

(ii) is registered with the attorney general's office;

(iii) reports an end-of-year fund balance of at least \$2,000,000; and

(iv) is incorporated in the state of Minnesota;

(3) a Minnesota private college, notwithstanding clause (2), that grants two- or four-year degrees and is registered with the Minnesota Office of Higher Education under chapter 136A; community college, state university, or technical college governed by the Board of Trustees of the Minnesota State Colleges and Universities; or the University of Minnesota; or

(4) a nonprofit corporation subject to chapter 317A, described in section 317A.905, and exempt from federal income tax under section 501(c)(6) of the Internal Revenue Code of 1986, may authorize one or more charter schools if the charter school has operated for at least three years under a different authorizer and if the nonprofit corporation has existed for at least 25 years.

(5) no more than three single-purpose sponsors that are charitable, nonsectarian organizations formed under section 501(c)(3) of the Internal Revenue Code of 1986 and incorporated in the state of Minnesota whose sole purpose is to charter schools.

Eligible organizations interested in being approved as a sponsor under this paragraph must submit a proposal to the commissioner that includes the provisions of paragraph (c) and a five-year financial plan. Such authorizers shall consider and approve applications using the criteria provided in subdivision 4 and shall not limit the applications it solicits, considers, or approves to any single curriculum, learning program, or method.

(c) An eligible authorizer under this subdivision must apply to the commissioner for approval as an authorizer before submitting any affidavit to the commissioner to charter a school. The application for approval as a charter school authorizer must demonstrate the applicant's ability to implement the procedures and satisfy the criteria for chartering a school under this section. The commissioner must approve or disapprove an application within 60 business days of the application deadline. If the commissioner disapproves the application, the commissioner must notify the applicant of the deficiencies and the applicant then has 20 business days to address the deficiencies to the commissioner's satisfaction. Failing to address the deficiencies to the commissioner's satisfaction makes an applicant ineligible to be an authorizer. The commissioner, in establishing criteria for approval, must consider the applicant's:

- (1) capacity and infrastructure;
- (2) application criteria and process;
- (3) contracting process;
- (4) ongoing oversight and evaluation processes; and
- (5) renewal criteria and processes.

(d) The affidavit to be submitted to and evaluated by the commissioner must include at least the following:

(1) how chartering schools is a way for the organization to carry out its mission;

(2) a description of the capacity of the organization to serve as a sponsor, including the personnel who will perform the sponsoring duties, their qualifications, the amount of time they will be assigned to this responsibility, and the financial resources allocated by the organization to this responsibility;

(3) a description of the application and review process the authorizer will use to make decisions regarding the granting of charters, which will include at least the following:

- (i) how the statutory purposes defined in subdivision 1 are addressed;
- (ii) the mission, goals, program model, and student performance expectations;
- (iii) an evaluation plan for the school that includes criteria for evaluating educational, organizational, and fiscal plans;
- (iv) the school's governance plan;

(v) the financial management plan; and

(vi) the administration and operations plan;

(4) a description of the type of contract it will arrange with the schools it charters that meets the provisions of subdivision 6 and defines the rights and responsibilities of the charter school for governing its educational program, controlling its funds, and making school management decisions;

(5) the process to be used for providing ongoing oversight of the school consistent with the contract expectations specified in clause (4) that assures that the schools chartered are complying with both the provisions of applicable law and rules, and with the contract;

(6) the process for making decisions regarding the renewal or termination of the school's charter based on evidence that demonstrates the academic, organizational, and financial competency of the school, including its success in increasing student achievement and meeting the goals of the charter school agreement; and

(7) an assurance specifying that the organization is committed to serving as a sponsor for the full five-year term.

A disapproved applicant under this paragraph may resubmit an application during a future application period.

(e) The authorizer must participate in department-approved training.

(f) An authorizer that chartered a school before August 1, 2009, must apply by June 30, 2011, to the commissioner for approval, under paragraph (c), to continue as an authorizer under this section. For purposes of this paragraph, an authorizer that fails to submit a timely application is ineligible to charter a school.

(g) The commissioner shall review an authorizer's performance every five years in a manner and form determined by the commissioner and may review an authorizer's performance more frequently at the commissioner's own initiative or at the request of a charter school operator, charter school board member, or other interested party. The commissioner, after completing the review, shall transmit a report with findings to the authorizer. If, consistent with this section, the commissioner finds that an authorizer has not fulfilled the requirements of this section, the commissioner may subject the authorizer to corrective action, which may include terminating the contract with the charter school board of directors of a school it chartered. The commissioner must notify the authorizer in writing of any findings that may subject the authorizer to corrective action and the authorizer then has 15 business days to request an informal hearing before the commissioner takes corrective action.

(h) The commissioner may at any time take corrective action against an authorizer, including terminating an authorizer's ability to charter a school for:

(1) failing to demonstrate the criteria under paragraph (c) under which the commissioner approved the authorizer;

(2) violating a term of the chartering contract between the authorizer and the charter school board of directors; or

(3) unsatisfactory performance as an approved authorizer.

**Subd. 4. Formation of school.**

(a) An authorizer, after receiving an application from a school developer, may charter a licensed teacher under section 122A.18, subdivision 1, or a group of individuals that includes one or more licensed teachers under section 122A.18, subdivision 1, to operate a school subject to the commissioner's approval of the authorizer's affidavit under paragraph (b). The school must be organized and operated as a cooperative under chapter 308A or nonprofit corporation under chapter 317A and the provisions under the applicable chapter shall apply to the school except as provided in this section.

Notwithstanding sections 465.717 and 465.719, a school district, subject to this section and section 124D.11, may create a corporation for the purpose of establishing a charter school.

(b) Before the operators may establish and operate a school, the authorizer must file an affidavit with the commissioner stating its intent to charter a school. An authorizer must file a separate affidavit for each school it intends to charter. The affidavit must state the terms and conditions under which the authorizer would charter a school and how the authorizer intends to oversee the fiscal and student performance of the charter school and to comply with the terms of the written contract between the authorizer and the charter school board of directors under subdivision 6. The commissioner must approve or disapprove the authorizer's affidavit within 60 business days of receipt of the affidavit. If the commissioner disapproves the affidavit, the commissioner shall notify the authorizer of the deficiencies in the affidavit and the authorizer then has 20 business days to address the deficiencies. If the authorizer does not address deficiencies to the commissioner's satisfaction, the commissioner's disapproval is final. Failure to obtain commissioner approval precludes an authorizer from chartering the school that is the subject of this affidavit.

(c) The authorizer may prevent an approved charter school from opening for operation if, among other grounds, the charter school violates this section or does not meet the ready-to-open standards that are part of the authorizer's oversight and evaluation process or are stipulated in the charter school contract.

(d) The operators authorized to organize and operate a school, before entering into a contract or other agreement for professional or other services, goods, or facilities, must incorporate as a cooperative under chapter 308A or as a nonprofit corporation under chapter 317A and must establish a board of directors composed of at least five members who are not related parties until a timely election for members of the ongoing charter school board of directors is held according to the school's articles and bylaws under paragraph (f). A charter school board of directors must be composed of at least five members who are not related parties. Staff members

employed at the school, including teachers providing instruction under a contract with a cooperative, and all parents or legal guardians of children enrolled in the school are the voters eligible to elect the members of the school's board of directors. A charter school must notify eligible voters of the school board election dates at least 30 days before the election. Board of director meetings must comply with chapter 13D.

(e) Upon the request of an individual, the charter school must make available in a timely fashion the minutes of meetings of the board of directors, and of members and committees having any board-delegated authority; financial statements showing all operations and transactions affecting income, surplus, and deficit during the school's last annual accounting period; and a balance sheet summarizing assets and liabilities on the closing date of the accounting period. A charter school also must post on its official Web site information identifying its authorizer and indicate how to contact that authorizer and include that same information about its authorizer in other school materials that it makes available to the public.

(f) Every charter school board member shall attend department-approved training on board governance, the board's role and responsibilities, employment policies and practices, and financial management. A board member who does not begin the required training within six months of being seated and complete the required training within 12 months of being seated on the board is ineligible to continue to serve as a board member.

(g) The ongoing board must be elected before the school completes its third year of operation. Board elections must be held during a time when school is in session. The charter school board of directors shall be composed of at least five nonrelated members and include: (i) at least one licensed teacher employed at the school or a licensed teacher providing instruction under a contract between the charter school and a cooperative; (ii) the parent or legal guardian of a student enrolled in the charter school; and (iii) an interested community member who is not employed by the charter school and does not have a child enrolled in the school. The board may be a teacher majority board composed of teachers described in this paragraph. The chief financial officer and the chief administrator are ex-officio nonvoting board members. Board bylaws shall outline the process and procedures for changing the board's governance model, consistent with chapter 317A. A board may change its governance model only:

(1) by a majority vote of the board of directors and the licensed teachers employed by the school, including licensed teachers providing instruction under a contract between the school and a cooperative; and

(2) with the authorizer's approval.

Any change in board governance must conform with the board structure established under this paragraph.

(h) The granting or renewal of a charter by an authorizer must not be conditioned upon the bargaining unit status of the employees of the school.

(i) The granting or renewal of a charter school by an authorizer must not be contingent on the charter school being required to contract, lease, or purchase services from the authorizer. Any potential contract, lease, or purchase of service from an authorizer must be disclosed to the commissioner, accepted through an open bidding process, and be a separate contract from the charter contract. The school must document the open bidding process. An authorizer must not enter into a contract to provide management and financial services for a school that it authorizes, unless the school documents that it received at least two competitive bids.

(j) An authorizer may permit the board of directors of a charter school to expand the operation of the charter school to additional sites or to add additional grades at the school beyond those described in the authorizer's original affidavit as approved by the commissioner only after submitting a supplemental affidavit for approval to the commissioner in a form and manner prescribed by the commissioner. The supplemental affidavit must show that:

(1) the expansion proposed by the charter school is supported by need and projected enrollment;

(2) the charter school expansion is warranted, at a minimum, by longitudinal data demonstrating students' improved academic performance and growth on statewide assessments under chapter 120B;

(3) the charter school is fiscally sound and has the financial capacity to implement the proposed expansion; and

(4) the authorizer finds that the charter school has the management capacity to carry out its expansion.

(k) The commissioner shall have 30 business days to review and comment on the supplemental affidavit. The commissioner shall notify the authorizer of any deficiencies in the supplemental affidavit and the authorizer then has 30 business days to address, to the commissioner's satisfaction, any deficiencies in the supplemental affidavit. The school may not expand grades or add sites until the commissioner has approved the supplemental affidavit. The commissioner's approval or disapproval of a supplemental affidavit is final.

**Subd. 4a. Conflict of interest.**

(a) An individual is prohibited from serving as a member of the charter school board of directors if the individual, an immediate family member, or the individual's partner is an owner, employee or agent of, or a contractor with a for-profit or nonprofit entity with whom the charter school contracts, directly or indirectly, for professional services, goods, or facilities. A violation of this prohibition renders a contract voidable at the option of the commissioner or the charter school board of directors. A member of a charter school board of directors who violates this prohibition is individually liable to the charter school for any damage caused by the violation.

(b) No member of the board of directors, employee, officer, or agent of a charter school shall participate in selecting, awarding, or administering a contract if a conflict of interest exists. A conflict exists when:

- (1) the board member, employee, officer, or agent;
- (2) the immediate family of the board member, employee, officer, or agent;
- (3) the partner of the board member, employee, officer, or agent; or
- (4) an organization that employs, or is about to employ any individual in clauses (1) to (3),

has a financial or other interest in the entity with which the charter school is contracting. A violation of this prohibition renders the contract void.

(c) Any employee, agent, or board member of the authorizer who participates in the initial review, approval, ongoing oversight, evaluation, or the charter renewal or nonrenewal process or decision is ineligible to serve on the board of directors of a school chartered by that authorizer.

(d) An individual may serve as a member of the board of directors if no conflict of interest under paragraph (a) exists.

(e) The conflict of interest provisions under this subdivision do not apply to compensation paid to a teacher employed by the charter school who also serves as a member of the board of directors.

(f) The conflict of interest provisions under this subdivision do not apply to a teacher who provides services to a charter school through a cooperative formed under chapter 308A when the teacher also serves on the charter school board of directors.

**Subd. 5. Conversion of existing schools.**

A board of an independent or special school district may convert one or more of its existing schools to charter schools under this section if 60 percent of the full-time teachers at the school sign a petition seeking conversion. The conversion must occur at the beginning of an academic year.

**Subd. 6. Charter contract.**

The authorization for a charter school must be in the form of a written contract signed by the authorizer and the board of directors of the charter school. The contract must be completed within 45 business days of the commissioner's approval of the authorizer's affidavit. The authorizer shall submit to the commissioner a copy of the signed charter contract within ten business days of its execution. The contract for a charter school must be in writing and contain at least the following:

- (1) a declaration of the purposes in subdivision 1 that the school intends to carry out and how the school will report its implementation of those purposes;

- (2) a description of the school program and the specific academic and nonacademic outcomes that pupils must achieve;
- (3) a statement of admission policies and procedures;
- (4) a governance, management, and administration plan for the school;
- (5) signed agreements from charter school board members to comply with all federal and state laws governing organizational, programmatic, and financial requirements applicable to charter schools;
- (6) the criteria, processes, and procedures that the authorizer will use for ongoing oversight of operational, financial, and academic performance;
- (7) the performance evaluation that is a prerequisite for reviewing a charter contract under subdivision 15;
- (8) types and amounts of insurance liability coverage to be obtained by the charter school;
- (9) the term of the contract, which may be up to three years for an initial contract plus an additional preoperational planning year, and up to five years for a renewed contract if warranted by the school's academic, financial, and operational performance;
- (10) how the board of directors or the operators of the charter school will provide special instruction and services for children with a disability under sections 125A.03 to 125A.24, and 125A.65, a description of the financial parameters within which the charter school will operate to provide the special instruction and services to children with a disability;
- (11) the process and criteria the authorizer intends to use to monitor and evaluate the fiscal and student performance of the charter school, consistent with subdivision 15; and
- (12) the plan for an orderly closing of the school under chapter 308A or 317A, if the closure is a termination for cause, a voluntary termination, or a nonrenewal of the contract, and that includes establishing the responsibilities of the school board of directors and the authorizer and notifying the commissioner, authorizer, school district in which the charter school is located, and parents of enrolled students about the closure, the transfer of student records to students' resident districts, and procedures for closing financial operations.

**Subd. 6a. Audit report.**

(a) The charter school must submit an audit report to the commissioner and its authorizer by December 31 each year.

(b) The charter school, with the assistance of the auditor conducting the audit, must include with the report a copy of all charter school agreements for corporate management services. If the entity that provides the professional services to the charter school is exempt from taxation under section 501 of the Internal Revenue

Code of 1986, that entity must file with the commissioner by February 15 a copy of the annual return required under section 6033 of the Internal Revenue Code of 1986.

(c) If the commissioner receives an audit report indicating that a material weakness exists in the financial reporting systems of a charter school, the charter school must submit a written report to the commissioner explaining how the material weakness will be resolved.

**Subd. 7. Public status; exemption from statutes and rules.**

A charter school is a public school and is part of the state's system of public education. A charter school is exempt from all statutes and rules applicable to a school, school board, or school district unless a statute or rule is made specifically applicable to a charter school or is included in this section.

**Subd. 8. Federal, state, and local requirements.**

(a) A charter school shall meet all federal, state, and local health and safety requirements applicable to school districts.

(b) A school must comply with statewide accountability requirements governing standards and assessments in chapter 120B.

(c) A school sponsored by a school board may be located in any district, unless the school board of the district of the proposed location disapproves by written resolution.

(d) A charter school must be nonsectarian in its programs, admission policies, employment practices, and all other operations. A sponsor may not authorize a charter school or program that is affiliated with a nonpublic sectarian school or a religious institution. A charter school student must be released for religious instruction, consistent with section 120A.22, subdivision 12, clause (3).

(e) Charter schools must not be used as a method of providing education or generating revenue for students who are being home-schooled.

(f) The primary focus of a charter school must be to provide a comprehensive program of instruction for at least one grade or age group from five through 18 years of age. Instruction may be provided to people younger than five years and older than 18 years of age.

(g) A charter school may not charge tuition.

(h) A charter school is subject to and must comply with chapter 363A and section 121A.04.

(i) A charter school is subject to and must comply with the Pupil Fair Dismissal Act, sections 121A.40 to 121A.56, and the Minnesota Public School Fee Law, sections 123B.34 to 123B.39.

(j) A charter school is subject to the same financial audits, audit procedures, and audit requirements as a district. Audits must be conducted in compliance with generally accepted governmental auditing standards, the Federal Single Audit Act, if

applicable, and section 6.65. A charter school is subject to and must comply with sections 15.054; 118A.01; 118A.02; 118A.03; 118A.04; 118A.05; 118A.06; 471.38; 471.391; 471.392; and 471.425. The audit must comply with the requirements of sections 123B.75 to 123B.83, except to the extent deviations are necessary because of the program at the school. Deviations must be approved by the commissioner and authorizer. The Department of Education, state auditor, legislative auditor, or authorizer may conduct financial, program, or compliance audits. A charter school determined to be in statutory operating debt under sections 123B.81 to 123B.83 must submit a plan under section 123B.81, subdivision 4.

(k) A charter school is a district for the purposes of tort liability under chapter 466.

(l) A charter school must comply with chapters 13 and 13D; and sections 120A.22, subdivision 7; 121A.75; and 260B.171, subdivisions 3 and 5.

(m) A charter school is subject to the Pledge of Allegiance requirement under section 121A.11, subdivision 3.

(n) A charter school offering online courses or programs must comply with section 124D.095.

(o) A charter school and charter school board of directors are subject to chapter 181.

(p) A charter school must comply with section 120A.22, subdivision 7, governing the transfer of students' educational records and sections 138.163 and 138.17 governing the management of local records.

**Subd. 8a. Aid reduction.**

The commissioner may reduce a charter school's state aid under section 127A.42 or 127A.43 if the charter school board fails to correct a violation under this section.

**Subd. 8b. Aid reduction for violations.**

The commissioner may reduce a charter school's state aid by an amount not to exceed 60 percent of the charter school's basic revenue for the period of time that a violation of law occurs.

**Subd. 9. Admission requirements.**

A charter school may limit admission to:

- (1) pupils within an age group or grade level;
- (2) pupils who are eligible to participate in the graduation incentives program under section 124D.68; or
- (3) residents of a specific geographic area in which the school is located when the majority of students served by the school are members of underserved populations in which the school is located when the majority of students served by the school are members of underserved populations.

A charter school shall enroll an eligible pupil who submits a timely application, unless the number of applications exceeds the capacity of a program, class, grade level, or building. In this case, pupils must be accepted by lot. The charter school must develop and publish a lottery policy and process that it must use when accepting pupils by lot.

A charter school shall give preference for enrollment to a sibling of an enrolled pupil and to a foster child of that pupil's parents and may give preference for enrolling children of the school's teachers before accepting other pupils by lot.

A charter school may not limit admission to pupils on the basis of intellectual ability, measures of achievement or aptitude, or athletic ability and may not establish any criteria or requirements for admission that are inconsistent with this subdivision.

The charter school shall not distribute any services or goods of value to students, parents, or guardians as an inducement, term, or condition of enrolling a student in a charter school.

**Subd. 10. Pupil performance.**

A charter school must design its programs to at least meet the outcomes adopted by the commissioner for public school students. In the absence of the commissioner's requirements, the school must meet the outcomes contained in the contract with the authorizer. The achievement levels of the outcomes contained in the contract may exceed the achievement levels of any outcomes adopted by the commissioner for public school students.

**Subd. 11. Employment and other operating matters.**

(a) A charter school must employ or contract with necessary teachers, as defined by section 122A.15, subdivision 1, who hold valid licenses to perform the particular service for which they are employed in the school. The charter school's state aid may be reduced under section 127A.43 if the school employs a teacher who is not appropriately licensed or approved by the board of teaching. The school may employ necessary employees who are not required to hold teaching licenses to perform duties other than teaching and may contract for other services. The school may discharge teachers and nonlicensed employees. The charter school board is subject to section 181.932. When offering employment to a prospective employee, a charter school must give that employee a written description of the terms and conditions of employment and the school's personnel policies.

(b) A person, without holding a valid administrator's license, may perform administrative, supervisory, or instructional leadership duties. The board of directors shall establish qualifications for persons that hold administrative, supervisory, or instructional leadership roles. The qualifications shall include at least the following areas: instruction and assessment; human resource and personnel management; financial management; legal and compliance management; effective communication; and board, authorizer, and community relationships. The board of directors shall use those qualifications as the basis for job descriptions, hiring, and performance

evaluations of those who hold administrative, supervisory, or instructional leadership roles. The board of directors and an individual who does not hold a valid administrative license and who serves in an administrative, supervisory, or instructional leadership position shall develop a professional development plan. Documentation of the implementation of the professional development plan of these persons shall be included in the school's annual report.

(c) The board of directors also shall decide matters related to the operation of the school, including budgeting, curriculum and operating procedures.

**Subd. 12. Pupils with a disability.**

A charter school must comply with sections 125A.02, 125A.03 to 125A.24, and 125A.65 and rules relating to the education of pupils with a disability as though it were a district.

**Subd. 13. Length of school year.**

A charter school must provide instruction each year for at least the number of days required by section 120A.41. It may provide instruction throughout the year according to sections 124D.12 to 124D.127 or 124D.128.

**Subd. 14. Annual public reports.**

A charter school must publish an annual report approved by the board of directors. The annual report must at least include information on school enrollment, student attrition, governance and management, staffing, finances, academic performance, operational performance, innovative practices and implementation, and future plans. A charter school must distribute the annual report by publication, mail, or electronic means to the commissioner, sponsor, school employees, and parents and legal guardians of students enrolled in the charter school and must also post the report on the charter school's official Web site. The reports are public data under chapter 13.

**Subd. 15. Review and comment.**

(a) The authorizer shall provide a formal written evaluation of the school's performance before the authorizer renews the charter contract. The department must review and comment on the authorizer's evaluation process at the time the sponsor submits its application for approval and each time the authorizer undergoes its five-year review under subdivision 3, paragraph (e).

(b) A sponsor shall monitor and evaluate the fiscal, operational, and student performance of the school, and may for this purpose annually assess a charter school a fee according to paragraph (c). The agreed-upon fee structure must be stated in the charter school contract.

(c) The fee that each charter school pays to an authorizer each year is the greater of:

(1) the basic formula allowance for that year; or

(2) the lesser of:

(i) the maximum fee factor times the basic formula allowance for that year; or

(ii) the fee factor times the basic formula allowance for that year times the charter school's adjusted marginal cost pupil units for that year. The fee factor equals .005 in fiscal year 2010, .01 in fiscal year 2011, .013 in fiscal year 2012, and .015 in fiscal years 2013 and later. The maximum fee factor equals 1.5 in fiscal year 2010, 2.0 in fiscal year 2011, 3.0 in fiscal year 2012, and 4.0 in fiscal years 2013 and later.

(d) The department and any charter school it charters must not assess or pay a fee under paragraphs (b) and (c).

(e) For the preoperational planning period, the authorizer may assess a charter school a fee equal to the basic formula allowance.

(f) By September 30 of each year, an authorizer shall submit to the commissioner a statement of expenditures related to chartering activities during the previous school year ending June 30. A copy of the statement shall be given to all schools chartered by the authorizer.

**Subd. 16. Transportation.**

(a) A charter school after its first fiscal year of operation by March 1 of each fiscal year and a charter school by July 1 of its first fiscal year of operation must notify the district in which the school is located and the Department of Education if it will provide its own transportation or use the transportation services of the district in which it is located for the fiscal year.

(b) If a charter school elects to provide transportation for pupils, the transportation must be provided by the charter school within the district in which the charter school is located. The state must pay transportation aid to the charter school according to section 124D.11, subdivision 2.

For pupils who reside outside the district in which the charter school is located, the charter school is not required to provide or pay for transportation between the pupil's residence and the border of the district in which the charter school is located. A parent may be reimbursed by the charter school for costs of transportation from the pupil's residence to the border of the district in which the charter school is located if the pupil is from a family whose income is at or below the poverty level, as determined by the federal government. The reimbursement may not exceed the pupil's actual cost of transportation or 15 cents per mile traveled, whichever is less. Reimbursement may not be paid for more than 250 miles per week.

At the time a pupil enrolls in a charter school, the charter school must provide the parent or guardian with information regarding the transportation.

(c) If a charter school does not elect to provide transportation, transportation for pupils enrolled at the school must be provided by the district in which the school is located, according to sections 123B.88, subdivision 6, and 124D.03, subdivision 8, for a pupil residing in the same district in which the charter school is located.

Transportation may be provided by the district in which the school is located, according to sections 123B.88, subdivision 6, and 124D.03, subdivision 8, for a pupil residing in a different district. If the district provides the transportation, the scheduling of routes, manner and method of transportation, control and discipline of the pupils, and any other matter relating to the transportation of pupils under this paragraph shall be within the sole discretion, control, and management of the district.

**Subd. 17. Leased space.**

A charter school may lease space from an independent or special school board eligible to be an authorizer, other public organization, private, nonprofit nonsectarian organization, private property owner, or a sectarian organization if the leased space is constructed as a school facility. The department must review and approve or disapprove leases in a timely manner.

**Subd. 17a. Affiliated nonprofit building corporation.**

(a) Before a charter school may organize an affiliated nonprofit building corporation (i) to renovate or purchase an existing facility to serve as a school or (ii) to construct a new school facility, an authorizer must submit an affidavit to the commissioner for approval in the form and manner the commissioner prescribes, and consistent with paragraphs (b) and (c) or (d).

(b) An affiliated nonprofit building corporation under this subdivision must:

(1) be incorporated under section 317A and comply with applicable Internal Revenue Service regulations;

(2) submit to the commissioner each fiscal year a list of current board members and a copy of its annual audit; and

(3) comply with government data practices law under chapter 13.

An affiliated nonprofit building corporation must not serve as the leasing agent for property or facilities it does not own. A charter school that leases a facility from an affiliated nonprofit building corporation that does not own the leased facility is ineligible to receive charter school lease aid. The state is immune from liability resulting from a contract between a charter school and an affiliated nonprofit building corporation.

(c) A charter school may organize an affiliated nonprofit building corporation to renovate or purchase an existing facility to serve as a school if the charter school:

(1) has been operating for at least five consecutive school years and the school's charter has been renewed for a five-year term;

(2) has had a net positive unreserved general fund balance as of June 30 in the preceding five fiscal years;

(3) has a long-range strategic and financial plan;

(4) completes a feasibility study of available buildings; and

(5) documents sustainable enrollment projections and the need to use an affiliated building corporation to renovate or purchase an existing facility to serve as a school.

(d) A charter school may organize an affiliated nonprofit building corporation to construct a new school facility if the charter school:

(1) demonstrates the lack of facilities available to serve as a school;

(2) has been operating for at least eight consecutive school years;

(3) has had a net positive unreserved general fund balance as of June 30 in the preceding eight fiscal years;

(4) completes a feasibility study of facility options;

(5) has a long-range strategic and financial plan that includes sustainable enrollment projections and demonstrates the need for constructing a new school facility; and

(6) a positive review and comment from the commissioner under section 123B.71.

Subd. 18.

[Repealed by amendment, 2009 c 96 art 2 s 41]

Subd. 19. **Disseminate information.**

(a) The authorizer, the operators, and the department must disseminate information to the public on how to form and operate a charter school. Charter schools must disseminate information about how to use the offerings of a charter school. Targeted groups include low-income families and communities, students of color, and students who are at risk of academic failure.

(b) Authorizers, operators, and the department also may disseminate information about the successful best practices in teaching and learning demonstrated by charter schools.

Subd. 20. **Leave to teach in a charter school.**

If a teacher employed by a district makes a written request for an extended leave of absence to teach at a charter school, the district must grant the leave. The district must grant a leave not to exceed a total of five years. Any request to extend the leave shall be granted only at the discretion of the school board. The district may require that the request for a leave or extension of leave be made before February 1 in the school year preceding the school year in which the teacher intends to leave, or February 1 of the calendar year in which the teacher's leave is scheduled to terminate. Except as otherwise provided in this subdivision and except for section 122A.46, subdivision 7, the leave is governed by section 122A.46, including, but not limited to, reinstatement, notice of intention to return, seniority, salary, and insurance.

During a leave, the teacher may continue to aggregate benefits and credits in the Teachers' Retirement Association account under chapters 354 and 354A, consistent with subdivision 22.

**Subd. 21. Collective bargaining.**

Employees of the board of directors of a charter school may, if otherwise eligible, organize under chapter 179A and comply with its provisions. The board of directors of a charter school is a public employer, for the purposes of chapter 179A, upon formation of one or more bargaining units at the school. Bargaining units at the school must be separate from any other units within an authorizing district, except that bargaining units may remain part of the appropriate unit within an authorizing district, if the employees of the school, the board of directors of the school, the exclusive representative of the appropriate unit in the authorizing district, and the board of the authorizing district agree to include the employees in the appropriate unit of the authorizing district.

**Subd. 22. Teacher and other employee retirement.**

(a) Teachers in a charter school must be public school teachers for the purposes of chapters 354 and 354a.

(b) Except for teachers under paragraph (a), employees in a charter school must be public employees for the purposes of chapter 353.

**Subd. 23. Causes for nonrenewal or termination of charter school contract.**

(a) The duration of the contract with an authorizer must be for the term contained in the contract according to subdivision 6. The authorizer may or may not renew a contract at the end of the term for any ground listed in paragraph (b). An authorizer may unilaterally terminate a contract during the term of the contract for any ground listed in paragraph (b). At least 60 days before not renewing or terminating a contract, the authorizer shall notify the board of directors of the charter school of the proposed action in writing. The notice shall state the grounds for the proposed action in reasonable detail and that the charter school's board of directors may request in writing an informal hearing before the authorizer within 15 business days of receiving notice of nonrenewal or termination of the contract. Failure by the board of directors to make a written request for a hearing within the 15-business-day period shall be treated as acquiescence to the proposed action. Upon receiving a timely written request for a hearing, the authorizer shall give ten business days' notice to the charter school's board of directors of the hearing date. The authorizer shall conduct an informal hearing before taking final action. The authorizer shall take final action to renew or not renew a contract no later than 20 business days before the proposed date for terminating the contract or the end date of the contract.

(b) A contract may be terminated or not renewed upon any of the following grounds:

(1) failure to meet the requirements for pupil performance contained in the contract;

- (2) failure to meet generally accepted standards of fiscal management;
- (3) violations of law; or
- (4) other good cause shown.

If a contract is terminated or not renewed under this paragraph, the school must be dissolved according to the applicable provisions of chapter 308A or 317A.

(c) If the sponsor and the charter school board of directors mutually agree to terminate or not renew the contract, a change in sponsors is allowed if the commissioner approves the transfer to a different eligible authorizer to authorize the charter school. Both parties must jointly submit their intent in writing to the commissioner to mutually terminate the contract. The sponsor that is a party to the existing contract at least must inform the approved different eligible sponsor about the fiscal and operational status and student performance of the school. Before the commissioner determines whether to approve a transfer of authorizer, the commissioner first must determine whether the charter school and prospective new authorizer can identify and effectively resolve those circumstances causing the previous authorizer and the charter school to mutually agree to terminate the contract. If no transfer of sponsor is approved, the school must be dissolved according to applicable law and the terms of the contract.

(d) The commissioner, after providing reasonable notice to the board of directors of a charter school and the existing authorizer, and after providing an opportunity for a public hearing, may terminate the existing contract between the authorizer and the charter school board if the charter school has a history of:

- (1) failure to meet pupil performance requirements contained in the contract;
- (2) financial mismanagement or failure to meet generally accepted standards of fiscal management; or
- (3) repeated or major violations of the law.

(e) If the commissioner terminates a charter school contract under subdivision 3, paragraph (g), the commissioner shall provide the charter school with information about other eligible authorizers.

**Subd. 23a. Related party lease costs.**

(a) A charter school is prohibited from entering a lease of real property with a related party unless the lessor is a nonprofit corporation under chapter 317A or a cooperative under chapter 308A, and the lease cost is reasonable under section 124D.11, subdivision 4, clause (1).

(b) For purposes of this section and section 124D.11:

(1) "related party" means an affiliate or immediate relative of the other party in question, an affiliate of an immediate relative, or an immediate relative of an affiliate;

(2) "affiliate" means a person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with another person;

(3) "immediate family" means an individual whose relationship by blood, marriage, adoption, or partnering is no more remote than first cousin;

(4) "person" means an individual or entity of any kind; and

(5) "control" means the ability to affect the management, operations, or policy actions or decisions of a person, whether through ownership of voting securities, by contract, or otherwise.

(c) A lease of real property to be used for a charter school, not excluded in paragraph (a), must contain the following statement: "This lease is subject to Minnesota Statutes, section 124D.10, subdivision 23a."

(d) If a charter school enters into as lessee a lease with a related party and the charter school subsequently closes, the commissioner has the right to recover from the lessor any lease payments in excess of those that are reasonable under section 124D.11, subdivision 4, clause (1).

**Subd. 24. Pupil enrollment upon nonrenewal or termination of charter school contract.**

If a contract is not renewed or is terminated according to subdivision 23, a pupil who attended the school, siblings of the pupil, or another pupil who resides in the same place as the pupil may enroll in the resident district or may submit an application to a nonresident district according to section 124D.03 at any time. Applications and notices required by section 124D.03 must be processed and provided in a prompt manner. The application and notice deadlines in section 124D.03 do not apply under these circumstances. The closed charter school must transfer the student's educational records within ten business days of closure to the student's school district of residence where the records must be retained or transferred under section 120A.22, subdivision 7.

**Subd. 25. Extent of specific legal authority.**

(a) The board of directors of a charter school may sue and be sued.

(b) The board may not levy taxes or issue bonds.

(c) The commissioner, a sponsor, members of the board of a sponsor in their official capacity, and employees of a sponsor are immune from civil or criminal liability with respect to all activities related to a charter school they approve or sponsor. The board of directors shall obtain at least the amount of and types of insurance up to the applicable tort liability limits under chapter 466. The charter school board must submit a copy of the insurance policy to its authorizer and the commissioner before starting operations. The charter school board must submit changes in its insurance carrier or policy to its authorizer and the commissioner within 20 business days of the change.

Subd. 26.

[Repealed by amendment, 2009 c 96 art 2 s 41]

**History:**

1991 c 265 art 3 s 38; art 9 s 3; 1992 c 499 art 12 s 1; 1993 c 224 art 9 s 2-12; art 14 s 16; 1994 c 465 art 2 s 1; 1994 c 647 art 9 s 1,2; 1Sp1995 c 3 art 9 s 2; art 16 s 13; 1996 c 412 art 4 s 2; 1Sp1997 c 4 art 5 s 5-9; 1998 c 397 art 2 s 2-21,164; art 11 s 3; 1998 c 398 art 2 s 4; art 5 s 3,55; 1999 c 241 art 5 s 7-11; 2000 c 489 art 6 s 18-23; 1Sp2001 c 6 art 2 s 20-26,66; 2002 c 352 s 10; 2003 c 120 s 3; 2003 c 130 s 12; 1Sp2003 c 9 art 2 s 21-25; art 12 s 10,11; 2005 c 107 art 2 s 60; 1Sp2005 c 5 art 2 s 59-62; 2006 c 263 art 2 s 15; 2007 c 146 art 2 s 23-25,47; 2009 c 96 art 2 s 41

**NOTE:** The changes in subdivision 3, paragraph (b), clause (2), shall not apply to a sponsor under Minnesota Statutes 2008, section 124D.10, that is a party to a charter contract on May 17, 2009, except that subdivision 3, paragraph (b), clause (2), item (iv), applies to such sponsors beginning July 1, 2011. Laws 2009, chapter 96, article 2, section 41, the effective date.

**NOTE:** The amendment to subdivision 9 by Laws 2009, chapter 96, article 2, section 41, is effective May 17, 2009, and applies to the 2010-2011 school year and later. Laws 2009, chapter 96, article 2, section 41, the effective date.

**(F)(2) – Exhibit B: Current Charter Schools: Types and Geographic Trends**

| <b>School Type</b>                          | <b>Number of Schools</b> | <b>%</b>    |
|---|--------------------------|-------------|
| Secondary Schools (e.g. 7-12)               | 48                       | 32%         |
| Serve Elementary & Middle Grades (e.g. K-8) | 39                       | 26%         |
| Serve All Grades (i.e. K-12)                | 27                       | 18%         |
| Elementary Schools (e.g. K-6)               | 23                       | 15%         |
| Serve Middle & Secondary Grades (e.g. 6-12) | 8                        | 5%          |
| Middle Schools (e.g. 5-8)                   | 7                        | 4%          |
| <b>TOTAL CHARTER SCHOOLS</b>                | <b>152</b>               | <b>100%</b> |
| <b>Geographic Location</b>                  | <b>Number of Schools</b> | <b>%</b>    |
| Urban (Minneapolis & St. Paul)              | 63                       | 41%         |
| Rural (Outside of 7-County Metro Area)      | 48                       | 32%         |
| Metro (7-County Metro Area)                 | 38                       | 25%         |
| Virtual (Online)                            | 3                        | 2%          |

**(F)(2) – Exhibit C: List of Current Charter Schools in Minnesota**

| Dist # | Charter school                         | Location            | Open | Ages/grades | School Type | Location |
|--------|--|---------------------|------|-------------|-------------|----------|
| 4003   | New Heights School                     | Stillwater          | 1993 | K-12        | All         | Metro    |
| 4008   | PACT Charter School                    | Ramsey              | 1994 | K-12        | All         | Metro    |
| 4030   | Odyssey Charter School                 | Brooklyn Park       | 1998 | K-12        | All         | Metro    |
| 4120   | St. Croix Preparatory Academy          | Stillwater          | 2004 | K-12        | All         | Metro    |
| 4185   | DaVinci Academy of Arts and Science    | Blaine/Moundsview   | 2008 | K-12        | All         | Metro    |
| 4068   | Excell Academy for Higher Learning     | Brooklyn Park       | 2001 | K-6         | E           | Metro    |
| 4159   | Seven Hills Classical Academy          | Bloomington         | 2005 | K-5         | E           | Metro    |
| 4167   | International Spanish Language Academy | Minnetonka          | 2007 | K-6         | E           | Metro    |
| 4187   | Michael Frome Academy                  | Woodbury            | 2008 | K-5         | E           | Metro    |
| 4016   | World Learner of Chaska                | Chaska              | 1995 | K-8         | E, M        | Metro    |
| 4097   | Partnership Academy                    | Richfield           | 2002 | K-7         | E, M        | Metro    |
| 4099   | Tarek ibn Ziyad Academy                | Inver Grove Heights | 2003 | K-8         | E, M        | Metro    |
| 4116   | Lakes International Language Academy   | Forest Lake         | 2004 | K-8         | E, M        | Metro    |
| 4118   | Kaleidoscope Charter School            | Rogers              | 2004 | K-9         | E, M        | Metro    |
| 4124   | Beacon Academy                         | Plymouth            | 2004 | K-8         | E, M        | Metro    |
| 4141   | Paideia Academy                        | Apple Valley        | 2005 | K-8         | E, M        | Metro    |
| 4171   | Noble Academy                          | Brooklyn Park       | 2007 | K-8         | E, M        | Metro    |
| 4184   | Aspen Academy                          | Savage/Shakopee     | 2008 | K-8         | E, M        | Metro    |
| 4186   | Global Academy                         | Richfield           | 2008 | K-8         | E, M        | Metro    |
| 4188   | Cologne Academy                        | Cologne             | 2008 | K-8         | E, M        | Metro    |
| 4192   | Best Academy                           | Golden Valley       | 2008 | K-8         | E, M        | Metro    |
| 4053   | North Lakes Academy                    | Forest Lake         | 1999 | 6-9         | M           | Metro    |
| 4148   | Academy of BioScience                  | New Brighton        | 2005 | 4-9         | M           | Metro    |
| 4149   | Cygnus Academy                         | Anoka               | 2006 | 6-8         | M           | Metro    |
| 4043   | Math & Science Academy                 | Woodbury            | 1998 | 6-12        | M, S        | Metro    |
| 4122   | Eagle Ridge Academy                    | Eden Prairie        | 2004 | 6-12        | M, S        | Metro    |
| 4133   | Beacon Preparatory School              | Bloomington         | 2006 | 6-12        | M, S        | Metro    |
| 4183   | Lionsgate Academy                      | Robbinsdale         | 2008 | 6-12        | M, S        | Metro    |
| 4045   | Lakes Area Charter School              | Osakis              | 1999 | 7-12        | S           | Metro    |

|      |  |                            |      |      |     |         |
|------|--|----------------------------|------|------|-----|---------|
| 4049 | Northwest Passage High School            | Coon Rapids                | 1999 | 9-12 | S   | Metro   |
| 4074 | Academy of Food Sciences and Agriculture | Little Canada              | 2001 | 9-12 | S   | Metro   |
| 4087 | SAGE Academy                             | Brooklyn Park              | 2002 | 9-12 | S   | Metro   |
| 4104 | Liberty High School                      | Blaine                     | 2003 | 9-12 | S   | Metro   |
| 4108 | Gen. John J. Vessey Jr. Leadership Acad. | W St. Paul                 | 2004 | 9-12 | S   | Metro   |
| 4109 | Sobriety High                            | Maplewood/Edina/Burnsville | 2003 | 9-12 | S   | Metro   |
| 4110 | Mainstreet School of Performing Arts     | Hopkins                    | 2004 | 9-12 | S   | Metro   |
| 4119 | River Heights Charter School             | W St. Paul                 | 2004 | 7-12 | S   | Metro   |
| 4160 | Spectrum High School                     | Elk River                  | 2006 | 9-12 | S   | Metro   |
| 4082 | BlueSky Charter School                   | On-line                    | 2002 | K-12 | All | On-line |
| 4150 | MN On-Line High School                   | On-line                    | 2005 | 9-12 | S   | On-line |
| 4151 | EdVisions Off Campus                     | On-line                    | 2006 | 7-12 | S   | On-line |
| 4020 | Duluth Edison Academies                  | Duluth                     | 1997 | K-12 | All | Rural   |
| 4026 | ECHO Charter School                      | Echo                       | 1997 | K-12 | All | Rural   |
| 4028 | Eci' Nompa Woonspe' Charter School       | Morton                     | 1998 | K-12 | All | Rural   |
| 4054 | La Crescent Montessori Academy           | La Crescent                | 1999 | K-12 | All | Rural   |
| 4064 | Riverway Learning Community              | Minnesota City             | 2000 | K-12 | All | Rural   |
| 4100 | Great Expectations School                | Grand Marais               | 2003 | K-12 | All | Rural   |
| 4174 | Pine Grove Leadership Academy            | Sandstone                  | 2007 | K-12 | All | Rural   |
| 4177 | Minisinaakwaang Leadership Academy       | McGregor                   | 2007 | K-12 | All | Rural   |
| 4055 | Nerstrand Charter School                 | Nerstrand                  | 1999 | K-5  | E   | Rural   |
| 4083 | Ridgeway Community School                | Houston                    | 2001 | K-5  | E   | Rural   |
| 4084 | North Shore Community School             | Duluth                     | 2002 | K-6  | E   | Rural   |
| 4090 | Prairie Creek Community School           | Northfield                 | 2002 | K-5  | E   | Rural   |
| 4123 | Dakota Area Community School             | Dakota                     | 2004 | K-5  | E   | Rural   |
| 4127 | TEAM Academy                             | Waseca                     | 2004 | K-6  | E   | Rural   |
| 4137 | Swan River Montessori                    | Monticello                 | 2005 | K-6  | E   | Rural   |
| 4138 | MILROY Area Charter School               | Milroy                     | 2005 | K-4  | E   | Rural   |
| 4144 | Green Isle Community School              | Green Isle                 | 2005 | K-6  | E   | Rural   |
| 4145 | Birch Grove Community School             | Tofte                      | 2005 | K-5  | E   | Rural   |
| 4161 | New Discoveries Montessori Academy       | Hutchinson                 | 2006 | K-6  | E   | Rural   |

|      |  |            |      |       |      |       |
|------|--|------------|------|-------|------|-------|
| 4168 | Glacial Hills Elementary School            | Starbuck   | 2007 | K-6   | E    | Rural |
| 4001 | Bluffview Montessori Charter School        | Winona     | 1993 | K-8   | E, M | Rural |
| 4012 | Emily Charter School                       | Emily      | 1994 | K-8   | E, M | Rural |
| 4050 | Lafayette Public Charter School            | Lafayette  | 1999 | K-8   | E, M | Rural |
| 4058 | Schoolcraft Learning Community             | Bemidji    | 2000 | K-9   | E, M | Rural |
| 4059 | Crosslake Community School                 | Crosslake  | 2000 | K-8   | E, M | Rural |
| 4125 | Worthington Area Language Academy          | Bigelow    | 2005 | K-8   | E, M | Rural |
| 4135 | Rochester Math & Science Academy           | Rochester  | 2005 | K-8   | E, M | Rural |
| 4142 | STRIDE Academy                             | St. Cloud  | 2005 | K-8   | E, M | Rural |
| 4155 | Naytahwaush Community Charter School       | Natahwaush | 2005 | K-8   | E, M | Rural |
| 4172 | Clarkfield Charter School                  | Clarkfield | 2007 | K-8   | E, M | Rural |
| 4007 | MN New Country School                      | Henderson  | 1994 | 6-12  | M, S | Rural |
| 4066 | RiverBend Academy                          | Mankato    | 2000 | 6-12  | M, S | Rural |
| 4091 | ARTech                                     | Northfield | 2003 | 6-12  | M, S | Rural |
| 4046 | Lake Superior High School                  | Duluth     | 1999 | 7-12  | S    | Rural |
| 4048 | Great River Education Center               | Waite Park | 2000 | 7-12  | S    | Rural |
| 4056 | Rochester Off Campus                       | Rochester  | 1999 | 9-12  | S    | Rural |
| 4061 | Studio Academy                             | Rochester  | 2000 | 9-12  | S    | Rural |
| 4072 | Yankton Country School                     | Balaton    | 2000 | 9-12  | S    | Rural |
| 4080 | Pillager Area Charter School               | Pillager   | 2001 | 7-12  | S    | Rural |
| 4081 | Discovery Public School of Faribault       | Faribault  | 2001 | 7-12  | S    | Rural |
| 4085 | Harbor City International                  | Duluth     | 2002 | 9-12  | S    | Rural |
| 4093 | New Century Charter School                 | Hutchinson | 2002 | 7-12  | S    | Rural |
| 4095 | TRIO Wolf Creek Distance Learning          | Lindstrom  | 2002 | 9-12  | S    | Rural |
| 4106 | TrekNorth HS                               | Bemidji    | 2003 | 7-12  | S    | Rural |
| 4107 | Voyageurs Expeditionary HS                 | Bemidji    | 2003 | 9-12  | S    | Rural |
| 4146 | Northern Lights Community School           | Warba      | 2005 | 7-12  | S    | Rural |
| 4154 | Recovery School of Southern Minnesota      | Owatonna   | 2006 | 9-12  | S    | Rural |
| 4166 | East Range Academy of Technology & Science | Eveleth    | 2007 | 10-12 | S    | Rural |
| 4005 | Metro Deaf School                          | St. Paul   | 1993 | K-12  | All  | Urban |

|      |  |                   |      |      |      |       |
|------|--|-------------------|------|------|------|-------|
| 4015 | Community of Peace Academy                     | St. Paul          | 1995 | K-12 | All  | Urban |
| 4017 | MN Transitions Charter School                  | Minneapolis       | 1996 | K-12 | All  | Urban |
| 4027 | Higher Ground                                  | St. Paul          | 1999 | K-12 | All  | Urban |
| 4029 | New Spirit School                              | St. Paul          | 1998 | K-12 | All  | Urban |
| 4070 | HOPE Community Academy                         | St. Paul          | 2000 | K-12 | All  | Urban |
| 4073 | Academia Cesar Chavez                          | St. Paul          | 2001 | K-12 | All  | Urban |
| 4079 | Friendship Academy of Fine Arts                | Minneapolis       | 2001 | K-12 | All  | Urban |
| 4098 | Nova Classical Academy                         | St. Paul          | 2003 | K-12 | All  | Urban |
| 4103 | Hmong College Prep Academy                     | St. Paul          | 2004 | K-12 | All  | Urban |
| 4163 | Learning for Leadership Charter School         | Minneapolis       | 2006 | K-12 | All  | Urban |
| 4170 | Hiawatha Leadership Academy                    | Minneapolis       | 2007 | K-12 | All  | Urban |
| 4191 | KIPP: Minnesota                                | Minneapolis       | 2008 | K-12 | All  | Urban |
| 4032 | Harvest Preparatory Acad.                      | Minneapolis       | 1998 | K-6  | E    | Urban |
| 4077 | Twin Cities International Elem. School         | Minneapolis       | 2001 | K-4  | E    | Urban |
| 4086 | Woodson Institute for Student Excellence       | Minneapolis       | 2002 | K-5  | E    | Urban |
| 4088 | Urban Academy                                  | St. Paul          | 2003 | K-6  | E    | Urban |
| 4113 | Fraser Academy                                 | Minneapolis       | 2004 | K-5  | E    | Urban |
| 4140 | Yinghua Academy                                | St. Paul          | 2006 | K-5  | E    | Urban |
| 4189 | Bright Water Elementary Charter School         | North Minneapolis | 2008 | K-6  | E    | Urban |
| 4004 | Cedar-Riverside Community School               | Minneapolis       | 1993 | K-8  | E, M | Urban |
| 4011 | New Visions School                             | Minneapolis       | 1994 | K-8  | E, M | Urban |
| 4018 | Achieve Language Academy                       | St. Paul          | 1996 | K-8  | E, M | Urban |
| 4025 | Cyber Village Academy                          | St. Paul          | 1998 | K-8  | E, M | Urban |
| 4035 | Concordia Creative Learning Academy            | St. Paul          | 1998 | K-8  | E, M | Urban |
| 4038 | Sojourner Truth Academy                        | Minneapolis       | 1999 | K-8  | E, M | Urban |
| 4067 | Aurora Charter School                          | Minneapolis       | 2000 | K-8  | E, M | Urban |
| 4089 | New City School                                | Minneapolis       | 2003 | K-8  | E, M | Urban |
| 4126 | Prairie Seeds Academy                          | Minneapolis       | 2004 | K-8  | E, M | Urban |
| 4139 | LoveWorks Academy for Visual & Performing Arts | Minneapolis       | 2005 | K-8  | E, M | Urban |
| 4143 | New Millennium Academy                         | Minneapolis       | 2005 | K-8  | E, M | Urban |
| 4152 | Twin Cities German Immersion                   | St. Paul          | 2005 | K-8  | E, M | Urban |

|      |  |             |      |       |      |       |
|------|--|-------------|------|-------|------|-------|
|      | Charter School                               |             |      |       |      |       |
| 4153 | Dugsi Academy                                | St. Paul    | 2005 | K-8   | E, M | Urban |
| 4162 | Southside Family Charter School              | Minneapolis | 2006 | K-8   | E, M | Urban |
| 4169 | Stonebridge Community School                 | Minneapolis | 2007 | K-8   | E, M | Urban |
| 4180 | Emily O. Goodridge-Grey Accelerated CS       | Minneapolis | 2007 | K-8   | E, M | Urban |
| 4181 | Community School of Excellence               | St. Paul    | 2007 | K-8   | E, M | Urban |
| 4042 | Twin Cities Academy                          | St. Paul    | 1999 | 6-8   | M    | Urban |
| 4078 | MN International Middle School               | Minneapolis | 2001 | 5-8   | M    | Urban |
| 4115 | Minneapolis Academy                          | Minneapolis | 2004 | 5-8   | M    | Urban |
| 4176 | Waynewood School of Hope 2008                | Minneapolis | 2008 | 6-8   | M    | Urban |
| 4182 | Quest Academy                                | Minneapolis | 2008 | 5-12  | M, S | Urban |
| 4000 | City Academy                                 | St. Paul    | 1992 | 10-12 | S    | Urban |
| 4006 | Skills for Tomorrow Sr. High                 | St. Paul    | 1994 | 9-12  | S    | Urban |
| 4031 | Jennings Community Learning Center           | St. Paul    | 1998 | 7-12  | S    | Urban |
| 4036 | Face to Face Academy                         | St. Paul    | 1998 | 7-12  | S    | Urban |
| 4039 | High School for Recording Arts               | St. Paul    | 1998 | 9-12  | S    | Urban |
| 4052 | Four Directions Charter School               | Minneapolis | 1999 | 9-12  | S    | Urban |
| 4057 | El Colegio Charter School                    | Minneapolis | 2000 | 9-12  | S    | Urban |
| 4075 | Avalon School                                | St. Paul    | 2001 | 9-12  | S    | Urban |
| 4092 | Watershed High School                        | Minneapolis | 2002 | 9-12  | S    | Urban |
| 4101 | MN North Star Academy                        | St. Paul    | 2004 | 9-12  | S    | Urban |
| 4102 | MN Internship Center                         | Minneapolis | 2003 | 9-12  | S    | Urban |
| 4105 | Great River School                           | St. Paul    | 2004 | 7-12  | S    | Urban |
| 4111 | Augsburg Fairview Academy                    | Minneapolis | 2005 | 9-12  | S    | Urban |
| 4112 | St. Paul Conservatory for Performing Artists | St. Paul    | 2005 | 9-12  | S    | Urban |
| 4114 | Prestige Academy                             | Minneapolis | 2004 | 9-12  | S    | Urban |
| 4121 | Ubah Medical Academy                         | Minneapolis | 2004 | 9-12  | S    | Urban |
| 4131 | Lighthouse Academy of Nations                | Minneapolis | 2005 | 9-12  | S    | Urban |
| 4132 | Twin Cities Academy High School              | St. Paul    | 2006 | 9-12  | S    | Urban |
| 4173 | Dunwoody Academy                             | Minneapolis | 2007 | 9-12  | S    | Urban |
| 4175 | Long Tieng Academy                           | Minneapolis | 2007 | 9-12  | S    | Urban |
| 4178 | Lincoln International High School            | Minneapolis | 2007 | 9-12  | S    | Urban |

**(F)(2) – Exhibit D: Charter applications and closings since 2003**

| <p>The number of charter school applications made in the state within the last five years</p>   | <p>Total = 131<br/>SY 05 = 37<br/>SY 06 = 28<br/>SY 07 = 18<br/>SY 08 = 22<br/>SY 09 = 7<br/>SY 10 = 15</p>      |  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
|---|--|--|----------------|----------|-----------|------------|-------|--|--|---|--|---|-----------------------|--|---|--|---|--------------------------|--|---|---|--|----------------------------------|--|---|--|--|--------------------|--|---|--|---|----------------|--|---|---|--|------------------------------------|--|--|---|--|----------------------------|--|---|---|--|------------------------------|---|--|--|---|--------------|--|---|---|---|----------------|--|--|--|---|----------------------|--|---|--|---|----------------------------|--|---|--|--|---|--|---|--|---|------------------------|--|---|--|--|------------------------|--|--|---|--|---------------------------|--|--|---|---|------------------------------------|--|--|--|---|---------------------------------|--|---|---|--|
| <p>The number of charter school applications approved within the last five years</p>  | <p>Total = 62 (66)<br/>SY 05 = 25<br/>SY 06 = 12<br/>SY 07 = 11<br/>SY 08 = 11<br/>SY 09 = 3<br/>SY 10 = 4*</p>  |  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| <p>The number of charter school applications denied and reason for denial within the last five years</p>  | <p>Total = 65<br/>SY 05 = 12<br/>SY 06 = 16<br/>SY 07 = 7<br/>SY 08 = 11<br/>SY 09 = 7 (12)<br/>SY 10 = 15**</p> | <p>Each denied application failed to meet the selection criteria of the year's charter school application (i.e. a denial was based on an application's lack of collective quality rather than any specific deficiency).</p>  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| <p>The number and identity of charter schools that have closed (including schools that were not reauthorized to operate) within the last five years</p> | <p>Total = 19<br/>SY 05 = 4<br/>SY 06 = 5<br/>SY 07 = 3<br/>SY 08 = 1<br/>SY 09 = 3<br/>SY 10 = 2</p>            | <table border="1"> <thead> <tr> <th>Charter school</th> <th>academic</th> <th>financial</th> <th>enrollment</th> <th>other</th> </tr> </thead> <tbody> <tr> <td>Colonel Charles Young Military Academy</td> <td></td> <td>x</td> <td></td> <td>x</td> </tr> <tr> <td>Chiron Charter School</td> <td></td> <td>x</td> <td 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1270">x</td> <td></td> </tr> <tr> <td>Mary McEvoy Early Literacy Academy</td> <td></td> <td></td> <td>x</td> <td></td> </tr> <tr> <td>Minnesota Business Academy</td> <td></td> <td>x</td> <td>x</td> <td></td> </tr> <tr> <td>Village School of Northfield</td> <td>x</td> <td></td> <td></td> <td>x</td> </tr> <tr> <td>Soul Academy</td> <td></td> <td>x</td> <td>x</td> <td>x</td> </tr> <tr> <td>Dakota Academy</td> <td></td> <td></td> <td></td> <td>x</td> </tr> <tr> <td>New Salem Elementary</td> <td></td> <td>x</td> <td></td> <td>x</td> </tr> <tr> <td>ELDM International Academy</td> <td></td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>Heart of the Earth Center for American Indian Education</td> <td></td> <td>x</td> <td></td> <td>x</td> </tr> <tr> <td>Yankton Country School</td> <td></td> <td>x</td> <td></td> <td></td> </tr> <tr> <td>Academy of Bio Science</td> <td></td> <td></td> <td>x</td> <td></td> </tr> <tr> <td>Wayneswood School of Hope</td> <td></td> <td></td> <td>x</td> <td>x</td> </tr> <tr> <td>Ed' Nompa 'Woonspe' Charter School</td> <td></td> <td></td> <td></td> <td>x</td> </tr> <tr> <td>Skills for Tomorrow High School</td> <td></td> <td>x</td> <td>x</td> <td></td> </tr> </tbody> </table> | Charter school | academic | financial | enrollment | other | Colonel Charles Young Military Academy |  | x |  | x | Chiron Charter School |  | x |  | x | MN Academy of Technology |  | x | x |  | Wm McGee Institute of Technology |  | x |  |  | New Voyage Academy |  | x |  | x | Family Academy |  | x | x |  | Mary McEvoy Early Literacy Academy |  |  | x |  | Minnesota Business Academy |  | x | x |  | Village School of Northfield | x |  |  | x | Soul Academy |  | x | x | x | Dakota Academy |  |  |  | x | New Salem Elementary |  | x |  | x | ELDM International Academy |  | x |  |  | Heart of the Earth Center for American Indian Education |  | x |  | x | Yankton Country School |  | x |  |  | Academy of Bio Science |  |  | x |  | Wayneswood School of Hope |  |  | x | x | Ed' Nompa 'Woonspe' Charter School |  |  |  | x | Skills for Tomorrow High School |  | x | x |  |
| Charter school  | academic   | financial  | enrollment     | other    |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Colonel Charles Young Military Academy  |  | x  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Chiron Charter School   |  | x  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| MN Academy of Technology  |  | x  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Wm McGee Institute of Technology  |  | x  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| New Voyage Academy  |  | x  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Family Academy  |  | x  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Mary McEvoy Early Literacy Academy  |  |  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Minnesota Business Academy  |  | x  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Village School of Northfield  | x  |  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Soul Academy  |  | x  | x              | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Dakota Academy  |  |  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| New Salem Elementary  |  | x  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| ELDM International Academy  |  | x  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Heart of the Earth Center for American Indian Education   |  | x  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Yankton Country School  |  | x  |                |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Academy of Bio Science  |  |  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Wayneswood School of Hope   |  |  | x              | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Ed' Nompa 'Woonspe' Charter School  |  |  |                | x        |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |
| Skills for Tomorrow High School   |  | x  | x              |          |           |            |       |  |  |   |  |   |                       |  |   |  |   |                          |  |   |   |  |                                  |  |   |  |  |                    |  |   |  |   |                |  |   |   |  |                                    |  |  |   |  |                            |  |   |   |  |                              |   |  |  |   |              |  |   |   |   |                |  |  |  |   |                      |  |   |  |   |                            |  |   |  |  |   |  |   |  |   |                        |  |   |  |  |                        |  |  |   |  |                           |  |  |   |   |                                    |  |  |  |   |                                 |  |   |   |  |

(F)(2) – Exhibit E: *MN Charter School Funding Overview*



Program Finance Division  
Revised October 20, 2009

### CHARTER SCHOOL FUNDING DESCRIPTION

Minnesota charter schools are considered to be Local Education Agencies (LEAs), and are fiscally independent of school districts. They receive direct payment of state and federal aids which flow through the Minnesota Department of Education (MDE).

The state's primary education funding formula is called "General Education Revenue". General education revenue consists of several components, as described in Minnesota Statutes, section 126C.10. For a summary of Minnesota's K-12 education finance system generally, see:

- *Financing Education in Minnesota, 2009-10*, at <http://www.house.leg.state.mn.us/fiscal/files/09fined.pdf>, or
- *Minnesota School Finance: A Guide for Legislators*, at <http://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>

Pages 74 and 75 of the latter document provide an overview of charter school funding as follows:

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House Research Department September 2009  
Minnesota School Finance Page 74

#### **Charter Schools**

As of June 30, 2009, there were 152 charter schools operating in Minnesota serving an estimated 31,728 students. Charter schools are eligible for general education revenue, special education revenue, building lease revenue, start-up grants, and certain other school district revenue.

**General Education Revenue.** A charter school earns general education revenue on a per pupil unit basis just as though it were a school district except for approximately \$250 per pupil unit (4.85 percent of the basic formula allowance) for transportation expenses, which the charter school receives only if it provides transportation services. The general education revenue paid to a charter school is paid entirely through state aid. Operating capital revenue received by the charter school may be used for any purpose.

**Referendum Revenue.** A charter school receives the aid portion of each enrolling student's referendum revenue based on the student's resident district referendum amount.

**Special Education Revenue.** A charter school receives special education revenue as though it were a school district. In addition, a charter school may bill-back to a disabled student's resident school district any eligible unreimbursed special education costs.

**Transportation Revenue.** A charter school is eligible for an additional amount of general education revenue of approximately \$250 per pupil unit if it elects to provide transportation services. In the alternative, a charter school may choose to have the school district in which it is located provide transportation services. In this case, the charter school does not receive any transportation funding, and the school district must provide transportation services to the charter school attendees in the same manner as it provides transportation to its resident students and students entering the school district under the enrollment options (open enrollment) program.

**Building Lease Aid.** Beginning in fiscal year 2004, a charter school is eligible for building lease aid equal to the lesser of \$1,200 per pupil or 90 percent of the charter school's lease costs. However, for a charter school with more than \$1,200 per pupil in lease costs, the school's lease aid is equal to its fiscal year 2003 lease aid per pupil. Charter school building lease aid was first available in fiscal year 1998.

**Start-up Grants.** For the first two years of a charter school's operation, it is eligible for charter school start-up grant aid equal to the greater of \$50,000 per charter school, or \$500 per charter school pupil unit. State charter school start-up aid is suspended for charter schools that are in their first year of operation in either fiscal year 2004 or fiscal year 2005.

**Integration Revenue.** Prior to fiscal year 2004, a charter school was eligible for the aid portion of integration revenue for enrolled students who are residents of a district that is eligible for integration revenue if the enrollment of the pupil in the charter school contributes to integration or desegregation purposes. This aid was separately appropriated and was prorated if the appropriation was insufficient. This revenue is eliminated for fiscal year 2004 and later.

**Other Aid, Grants, Revenue.** A charter school is eligible to receive other aids, grants, and revenue according to the school funding formulas as though it were a school district, unless the receipt of the revenue would require a local property tax levy. A charter school may receive money from any source for capital facilities needs. Any unexpended capital facilities revenue must be reserved and must be expended only for future capital facilities purposes.

**Federal Aid.** A charter school is eligible for any federal aid received by the state as if the charter school were a school district.

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The calculation of state revenues for charter schools, including general education revenue, is described in Minnesota Statutes, Section 124D.11. Under subdivision 1 of this statute, "general education revenue must be paid to a charter school as though it were a district". The revenue for a charter school includes the following:

1. The state average general education revenue per pupil unit received by school districts for most components of general education revenue,
2. Transportation revenue based on the per pupil rate for the district in which the school is located if the charter school elects to provide transportation,
3. Basic skills, extended time, transition and alternative teacher compensation revenue as though the school were a district, based on the unique characteristics of the school, and

4. the state aid portion of voter approved local operating referendum levies.

The General Education Aid Report for each charter school shows the data and calculations used to determine the school's general education aid. See, for example, the 20009-10 report for City Academy, at: <http://app.education.state.mn.us/mfrreports/GENEDB/09-10/4000070000000000.pdf>

Under Minnesota Statutes, Section 124D.11, subdivision 6, a charter school receives other state aids, grants, and revenue according to chapters 120A to 129C, as though it were a district. However, a charter school may not receive aid, a grant, or revenue if a levy is required to obtain the money, or if the aid, grant, or revenue replaces levy revenue that is not general education revenue. Federal aid received by the state must be paid to the school, if it qualifies for the aid as though it were a school district.

Table 1 below summarizes the total and per pupil amounts of state aid paid to charter schools and traditional school districts through major state aid programs for fiscal year 2008. On average, charter schools receive significantly more state aid per pupil than school districts, in part to compensate for the lack of a local property tax levy.

TABLE 1  
FY 2008 STATE AIDS - MAJOR PROGRAMS

| Aid Program                           | Charter School | School District | Charter School | School District |
|---------------------------------------|----------------|-----------------|----------------|-----------------|
|                                       | Total          | Total           | Per Student    | Per Student     |
| General Education                     | 212,179,114    | 5,388,999,951   | 7,534          | 6,669           |
| First Grade Preparedness              | 1,193,119      | 6,056,881       | 42             | 7               |
| School Technology & Operating Capital | 1,269,336      | 36,868,026      | 45             | 46              |
| Desegregation Transportation          |                | 10,897,829      | -              | 13              |
| Special Education                     | 25,963,599     | 625,225,389     | 922            | 774             |
| Excess Cost                           | 261,703        | 110,379,297     | 9              | 137             |
| Integration                           |                | 58,329,541      | -              | 72              |
| Charter School Lease                  | 32,602,191     |                 | 1,158          | -               |
| Charter School Startup                | 1,619,565      |                 | 58             | -               |
|                                       |                |                 | -              | -               |
| Total                                 | 275,088,628    | 6,236,756,915   | 9,768          | 7,718           |
| Total Excluding Lease Aid             | 242,486,437    | 6,236,756,915   | 8,610          | 7,718           |
| Adjusted Average Daily Membership     |                |                 | 28,162         | 808,054         |

Table 2 below shows the history of state aid entitlements of charter schools for major state aid programs from FY 2001 through FY 2008. Total state aid entitlements for charter schools have increased significantly each year since FY 2001.

TABLE 2

## State Aid Entitlements (UFARS Revenue Basis) for Charter Schools

## Major State Aid Programs

Fiscal Years 00-01 Through 07-08

Data as of 11/20/08

| Program Name                     | Fiscal Year |            |             |             |             |             |             |             |
|----------------------------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                  | FY 2001     | FY 2002    | FY 2003     | FY 2004     | FY 2005     | FY 2006     | FY 2007     | FY 2008     |
| General Education                | 52,730,749  | 61,902,545 | 79,593,968  | 93,689,379  | 116,255,323 | 142,626,567 | 172,400,983 | 212,179,114 |
| First Grade Preparedness         | 383,055     | 405,338    | 366,861     | 590,770     | 825,406     | 995,254     | 1,068,013   | 1,193,119   |
| School Technology & Oper Capital |             |            |             |             |             |             |             | 1,269,336   |
| Special Education*               | 4,321,754   | 3,738,810  | 5,286,560   | 6,381,101   | 7,421,006   | 8,692,083   | 21,488,424  | 25,963,599  |
| Excess Cost                      |             |            |             |             |             |             |             | 261,703     |
| Charter School Lease             | 10,705,121  | 12,620,782 | 15,342,766  | 17,542,645  | 20,634,020  | 24,253,723  | 27,803,213  | 32,602,191  |
| Charter School Startup           | 2,608,150   | 1,959,540  | 1,332,155   | 760,985     |             | 1,431,290   | 2,408,475   | 1,619,565   |
| Total                            | 70,748,829  | 80,627,015 | 101,922,310 | 118,964,880 | 145,135,756 | 177,998,917 | 225,169,108 | 275,088,628 |

\* Prior to FY 2007, charter schools received tuition payments from the resident school district for special education costs not covered through the state special education aid formula. Beginning in FY 2007, the state Department of Education calculates the adjustments due from each resident district and adjusts the special education aid paid to the charter schools and school districts accordingly.

Charter schools annually report their revenues, expenditures and financial condition to the Minnesota Department of Education using the state's Uniform Accounting and Reporting Standards (UFARS) as if they were school districts. Summary reports, called the *School District Financial Profiles*, are published annual on the MDE website at [http://education.state.mn.us/MDE/Accountability\\_Programs/Program\\_Finance/Financial\\_Management/School\\_District\\_Financial\\_Profiles/index.html](http://education.state.mn.us/MDE/Accountability_Programs/Program_Finance/Financial_Management/School_District_Financial_Profiles/index.html)

These reports, in EXCEL spreadsheet format, show the revenues, expenditures, revenues per pupil and expenditures per pupil for each school district and charter school, and also summary statistics for school districts and charter schools in aggregate.

Table 3 below provides a comparison of average FY 2008 revenues per student for school districts and charter schools, broken down into federal, state and local sources. The amounts shown include general fund and debt service fund revenues. In Minnesota, pupil transportation and capital expenditures are included in the general fund. The food service, community education and building construction funds are excluded. The average charter school revenue per student in the general and debt service funds from all sources was slightly higher than the average school district revenue per student -- \$11,039 for charter schools versus \$10,926 for school districts. School districts received more from local sources due to the property tax, but this was offset by significantly higher state aid and slightly higher federal aid per student for the charter schools.

**TABLE 3**

| Revenues Per Average Daily Membership (ADM) Served Plus Tuitioned Out FY 2008 | District ADM Served Plus Tuitioned Out | General Fund Revenues |       |                     |                       |                       |                     |                     |                 |                            | DEBT          | Total Revenue General Fund + Debt Fund |
|---|--|-----------------------|-------|---------------------|-----------------------|-----------------------|---------------------|---------------------|-----------------|----------------------------|---------------|--|
|   |  | Local Sources         |       |                     | State Sources         |                       |                     |                     | Federal Sources | General Fund Total Revenue | Debt Fund     |  |
|   |  | Property Taxes        | Other | Total Local Sources | General Education Aid | Special Education Aid | All Other State Aid | Total State Sources | Federal         |                            | Total Revenue |  |
|   |  | 1.                    | 2.    | 3.                  | 4.                    | 5.                    | 6.                  | 7.                  | 8.              | 9.                         |               |  |
| Districts   | 808,054                                | 1,201                 | 486   | 1,687               | 6,694                 | 887                   | 189                 | 7,770               | 441             | 9,898                      | 1,028         | 10,926                                 |
| Charter Schools   | 28,162                                 | 0                     | 502   | 502                 | 7,470                 | 913                   | 1,258               | 9,641               | 897             | 11,039                     | 0             | 11,039                                 |
| State   | 836,216                                | 1,160                 | 487   | 1,647               | 6,720                 | 888                   | 225                 | 7,833               | 456             | 9,937                      | 993           | 10,930                                 |

Table 4 below provides a comparison of average FY 2008 general and debt service fund expenditures per student by program for school districts and charter schools. The average charter school expenditure per student in the general and debt service funds was slightly lower than the average school district expenditure per student -- \$10,728 for charter schools versus \$10,865 for school districts.

**TABLE 4**

| Expenditures Per Average Daily Membership (ADM) Served Plus Tuitioned Out FY 2008 | District ADM Served Plus Tuitioned Out | 2007-2008 Total Expenditures  |                             |                     |                                |                   |                                |                                |                        |                                |                        |   |           |                  |  |                                       |              |                                    |
|---|--|-------------------------------|-----------------------------|---------------------|--------------------------------|-------------------|--------------------------------|--------------------------------|------------------------|--------------------------------|------------------------|---|-----------|------------------|--|---------------------------------------|--------------|------------------------------------|
|   |  | District Level Administration | School Level Administration | Regular Instruction | Career & Technical Instruction | Special Education | Student Activities & Athletics | Instructional Support Services | Pupil Support Services | Operation, Maintenance & Other | Student Transportation | Subtotal: General Fund Operating Expenditures | Equipment | Land & Buildings | Capital Expenditures: Sum of Columns 12 & 13 | Total PK-12 General Fund Expenditures | Debt Service | Total General & Debt Service Funds |
|   |  | 1.                            | 2.                          | 3.                  | 4.                             | 5.                | 6.                             | 7.                             | 8.                     | 9.                             | 10.                    | 11.   | 12.       | 13.              | 14.  | 15.                                   |              |                                    |
| Districts   | 808,054                                | 382                           | 396                         | 4,282               | 146                            | 1,725             | 253                            | 468                            | 271                    | 818                            | 570                    | 9,312   | 353       | 99               | 453  | 9,764                                 | 1,101        | 10,865                             |
| Charters  | 28,162                                 | 1,272                         | 502                         | 4,274               | 27                             | 1,078             | 52                             | 256                            | 183                    | 617                            | 474                    | 8,735   | 379       | 1,614            | 1,993  | 10,728                                | 0            | 10,728                             |
| State   | 836,216                                | 412                           | 399                         | 4,282               | 142                            | 1,703             | 246                            | 461                            | 268                    | 811                            | 567                    | 9,292   | 354       | 150              | 505  | 9,797                                 | 1,064        | 10,860                             |

Charter school revenues and expenditures are not fully comparable to school district revenues and expenditures. For example, charter schools may elect to have the school district where the charter school is located provide pupil transportation services. If the school district provides the transportation, the transportation portion of the general education aid for the charter school is paid to the school district, and the expenditures are reported by the district. This slightly increases the revenue and expenditures per student for school districts and reduces the revenues and expenditures for charter schools, compared with what would be reported if the charter school elected to provide transportation for its students. Revenues and expenditures per student for school districts are also slightly inflated because they are required to provide transportation, textbooks, guidance and health services for the benefit of private school students.

State funding for charter school facilities includes school building lease aid, as described above, as well as operating capital revenue, a component of the general education revenue

program. School districts must reserve operating capital revenue for facilities, equipment or technology purposes, while charter schools can use operating capital revenue for any school purpose. Since charter school building lease expenditures and aid are recorded in the general fund, while school district facilities are funded primarily with debt service, charter school general fund expenditures are inflated compared with school district general fund expenditures (see column 13 in the table above – “Land and Buildings”). To account for the variation between charter schools and school districts in where facilities costs are reported, the analysis above includes both the general fund and the debt service fund.

While funding for charter school operations is very similar to funding for school district operations, there are two significant differences:

- 1) Charter schools receive only the state aid portion of voter approved operating referendum levies; the resident school district retains the local property tax portion. On the average, school districts received \$916 per student in operating referendum revenue in FY 2009, while charter schools received \$55 per student.
- 2) Offsetting the difference above, charter schools are guaranteed to receive full funding for the cost of special education, while school districts receive only partial funding, and must cover the unfunded costs of all resident special education students, including charter school students, from their general fund budgets. On the average, school districts spent \$706 per total enrollment (regular + special education) student in FY 2009 to cover unfunded special education costs.

**Minnesota Statutes, Section 124D.11, provides for state funding of charter schools as follows:**

**124D.11 REVENUE FOR A CHARTER SCHOOL.**

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**Subdivision 1. General education revenue.**

(a) General education revenue must be paid to a charter school as though it were a district. The general education revenue for each adjusted marginal cost pupil unit is the state average general education revenue per pupil unit, plus the referendum equalization aid allowance in the pupil's district of residence, minus an amount equal to the product of the formula allowance according to section 126C.10, subdivision 2, times .0485, calculated without basic skills revenue, extended time revenue, alternative teacher compensation revenue, transition revenue, and transportation sparsity revenue, plus basic skills revenue, extended time revenue, basic alternative teacher compensation aid according to section 126C.10, subdivision 34, and transition revenue as though the school were a school district. The general education revenue for each extended time marginal cost pupil unit equals \$4,378.

(b) Notwithstanding paragraph (a), for charter schools in the first year of operation, general education revenue shall be computed using the number of adjusted pupil units in the current fiscal year.

**Subd. 2. Transportation revenue.**

Transportation revenue must be paid to a charter school that provides transportation services according to section 124D.10, subdivision 16, according to this subdivision. Transportation aid shall equal transportation revenue.

In addition to the revenue under subdivision 1, a charter school providing transportation services must receive general education aid equal to the sum of the product of (i) an amount equal to the product of the formula allowance according to section 126C.10, subdivision 2, times .0485, plus the transportation sparsity allowance for the school district in which the charter school is located times (ii) the adjusted marginal cost pupil units, plus the product of \$223 times the extended time marginal cost pupil units.

**Subd. 3. Use of total operating capital revenue.**

Notwithstanding section 126C.10, subdivision 14, a charter school may use total operating capital revenue for any purpose related to the school.

**Subd. 4. Building lease aid.**

When a charter school finds it economically advantageous to rent or lease a building or land for any instructional purposes and it determines that the total operating capital revenue under section 126C.10, subdivision 13, is insufficient for this purpose, it may apply to the commissioner for building lease aid for this purpose. The commissioner must review and either approve or deny a lease aid application using the following criteria:

- (1) the reasonableness of the price based on current market values;

- (2) the extent to which the lease conforms to applicable state laws and rules; and
- (3) the appropriateness of the proposed lease in the context of the space needs and financial circumstances of the charter school.

A charter school must not use the building lease aid it receives for custodial, maintenance service, utility, or other operating costs. The amount of building lease aid per pupil unit served for a charter school for any year shall not exceed the lesser of (a) 90 percent of the approved cost or (b) the product of the pupil units served for the current school year times the greater of the charter school's building lease aid per pupil unit served for fiscal year 2003, excluding the adjustment under Laws 2002, chapter 392, article 6, section 4, or \$1,200.

**Subd. 5. Special education aid.**

(a) Except as provided in subdivision 2, special education aid must be paid to a charter school according to section 125A.76, as though it were a school district.

(b) For fiscal year 2006, the charter school may charge tuition to the district of residence as follows:

(1) if the charter school does not receive general education revenue on behalf of the student according to subdivision 1, tuition shall be charged as provided in section 125A.11; or

(2) if the charter school receives general education revenue on behalf of the student according to subdivision 1, tuition shall be charged as provided in section 127A.47, subdivision 7, paragraph (d).

(c) For fiscal year 2007 and later, the special education aid paid to the charter school shall be adjusted as follows:

(1) if the charter school does not receive general education revenue on behalf of the student according to subdivision 1, the aid shall be adjusted as provided in section 125A.11; or

(2) if the charter school receives general education revenue on behalf of the student according to subdivision 1, the aid shall be adjusted as provided in section 127A.47, subdivision 7, paragraph (d).

**Subd. 6. Other aid, grants, revenue.**

(a) A charter school is eligible to receive other aids, grants, and revenue according to chapters 120A to 129C, as though it were a district.

(b) Notwithstanding paragraph (a), a charter school may not receive aid, a grant, or revenue if a levy is required to obtain the money, or if the aid, grant, or revenue replaces levy revenue that is not general education revenue, except as otherwise provided in this section.

(c) Federal aid received by the state must be paid to the school, if it qualifies for the aid as though it were a school district.

(d) A charter school may receive money from any source for capital facilities needs. In the year-end report to the commissioner of education, the charter school shall report the total amount of funds received from grants and other outside sources.

**Subd. 7. Use of state money.**

Money received from the state may not be used to purchase land or buildings. The school may own land and buildings if obtained through nonstate sources.

**Subd. 8. Start-up costs.**

During the first two years of a charter school's operation, the charter school is eligible for aid to pay for start-up costs and additional operating costs. Start-up cost aid equals the greater of:

- (1) \$50,000 per charter school; or
- (2) \$500 times the charter school's pupil units served for that year.

**Subd. 9. Payment of aids to charter schools.**

(a) Notwithstanding section 127A.45, subdivision 3, aid payments for the current fiscal year to a charter school shall be of an equal amount on each of the 24 payment dates.

(b) Notwithstanding paragraph (a) and section 127A.45, for a charter school ceasing operation on or prior to June 30 of a school year, for the payment periods occurring after the school ceases serving students, the commissioner shall withhold the estimated state aid owed the school. The charter school board of directors and authorizer must submit to the commissioner a closure plan under chapter 308A or 317A, and financial information about the school's liabilities and assets. After receiving the closure plan, financial information, an audit of pupil counts, documentation of lease expenditures, and monitoring of special education expenditures, the commissioner may release cash withheld and may continue regular payments up to the current year payment percentages if further amounts are owed. If, based on audits and monitoring, the school received state aid in excess of the amount owed, the commissioner shall retain aid withheld sufficient to eliminate the aid overpayment. For a charter school ceasing operations prior to, or at the end of, a school year, notwithstanding section 127A.45, subdivision 3, preliminary final payments may be made after receiving the closure plan, audit of pupil counts, monitoring of special education expenditures, documentation of lease expenditures, and school submission of Uniform Financial Accounting and Reporting Standards (UFARS) financial data for the final year of operation. Final payment may be made upon receipt of audited financial statements under section 123B.77, subdivision 3.

(c) If a charter school fails to comply with the commissioner's directive to return, for cause, federal or state funds administered by the department, the commissioner may withhold an amount of state aid sufficient to satisfy the directive.

(d) If, within the timeline under section 471.425, a charter school fails to pay the state of Minnesota, a school district, intermediate school district, or service cooperative after receiving an undisputed invoice for goods and services, the

commissioner may withhold an amount of state aid sufficient to satisfy the claim and shall distribute the withheld aid to the interested state agency, school district, intermediate school district, or service cooperative. An interested state agency, school district, intermediate school district, or education cooperative shall notify the commissioner when a charter school fails to pay an undisputed invoice within 75 business days of when it received the original invoice.

(e) Notwithstanding section 127A.45, subdivision 3, and paragraph (a), 80 percent of the start-up cost aid under subdivision 8 shall be paid within 45 days after the first day of student attendance for that school year.

(f) In order to receive state aid payments under this subdivision, a charter school in its first three years of operation must submit a school calendar in the form and manner requested by the department and a quarterly report to the Department of Education. The report must list each student by grade, show the student's start and end dates, if any, with the charter school, and for any student participating in a learning year program, the report must list the hours and times of learning year activities. The report must be submitted not more than two weeks after the end of the calendar quarter to the department. The department must develop a Web-based reporting form for charter schools to use when submitting enrollment reports. A charter school in its fourth and subsequent year of operation must submit a school calendar and enrollment information to the department in the form and manner requested by the department.

(g) Notwithstanding sections 317A.701 to 317A.791, upon closure of a charter school and satisfaction of creditors, cash and investment balances remaining shall be returned to the state.

**(F)(3) – Exhibit A: Minnesota School Finance History**

**MINNESOTA SCHOOL FINANCE HISTORY**

**1849 – 2005**

**1849 – 1915: Local Property Tax Supplemented with State Flat Grants**

*Early revenue sources included county and school district property tax levies, supplemented with distributions from the permanent school fund and a gradually increasing number of state flat grants (state aid not adjusted for differences in local tax base).*

1849 Congress reserves 16th and 36th sections of each township for use of public schools. First territorial legislature authorizes establishment of school districts and permanent school fund.

1858 Minnesota Constitution makes it the duty of the legislature to establish a general and uniform system of public schools, and establishes permanent school fund.

1862 School districts prohibited from charging tuition.

1878 State aid initiated for high schools maintaining a minimum course of study and a minimum school year. In subsequent years, the amount of aid and the number of aid categories were gradually increased, to include aid for junior and senior high schools, high school departments, graded and semi-graded schools, consolidated schools and rural schools.

1885 First compulsory attendance law, but children from families too poor to provide school clothes, child with disabilities, and children living more than 2 miles from school were exempted. As an incentive for school attendance, the allocation method for permanent school funds was changed from number of school-age children to number of pupils in attendance.

1887 State property tax levy for support of schools initiated. Funds were allocated in proportion to the number of pupils in attendance at least 40 days in a school with a qualified teacher.

1911 Financial incentives for school consolidation, initiated, including transportation aid and matching funds for school construction (There were about 8,000 school districts in Minnesota at this time.

1915 Categorical aid for special classes for handicapped children initiated.

**1915 – 1956: Local Property Tax Supplemented with State Flat Grants and Limited State Equalization Aid**

*State share of education funding increases gradually, but local property taxes continue to*

provide the bulk of school revenues. Limited state equalization aid provided, but most state aid provided as flat grants.

- 1915 State equalization aid initiated. School districts with maintenance levies exceeding 20 mills were granted Supplemental Aid equal to 1/3 of the amount raised by the levy in excess of 20 mills, up to a maximum of \$1,800 for a graded school or \$2,500 for a high school.
- 1921 Supplemental aid program amended to provide state aid equal to 1/3 of the maintenance levy between 20 and 32 mills, and 1/2 of the levy exceeding 32 mills. Districts in which a 20-mill levy would raise more than \$100 per pupil were excluded, and the maximum aid was limited to \$200 per elementary teacher and \$250 per high school and special teacher employed.
- 1933 State income tax enacted. Proceeds were distributed to school districts based on number of resident children in the district aged 8 to 16. In 1937, the portion of income tax dedicated to school support was limited to \$10 per child.
- 1935 Supplemental aid amended to guarantee that school districts making a regular maintenance levy of 30 mills would receive \$60 per elementary pupil and \$100 per high school pupil in Average Daily Attendance (ADA) from the combination of the levy, the permanent school fund apportionment, and special state aids.
- 1947 Approximately 40 special aids combined to create basic aid, which was allocated on a flat grant on a per pupil basis. Weighted pupil units were used for the first time to allocate school funds, adjusting for the differential costs of kindergarten, elementary and secondary levels (K= 0.25, elementary = 1.0, secondary = 1.5).
- 1955 Equalization Aid Review Committee (EARC) created. Equalized assessed valuations of property, adjusted using sales ratio studies, replaced unequalized assessed valuations as the basis for distributing state equalization aids. In 1955, The Bureau of Field Studies at the University of Minnesota, directed by Otto Domian, was commissioned to study the school finance system. The study report included the following summary of Minnesota school aids:

**Minnesota School Aids Summary, FY 1955**

| <b>Program</b>   | <b>\$ (Millions)</b> | <b>Percent</b> |
|--|----------------------|----------------|
| Basic aid (flat grant)                                 | \$42.5               | 57.9%          |
| Apportionment (permanent school fund earnings)         | 5.7                  | 7.8%           |
| Subtotal (\$80 per pupil unit--weighted ADA)           | 48.2                 | 65.7%          |
| Equalization   | 7.6                  | 10.3%          |
| Income tax (census) aid (\$10 x school age population) | 6.0                  | 8.2%           |
| Categoricals:  |                      |                |
| ¶ Transportation                                       | 7.3                  | 10.0%          |
| ¶ Handicapped pupils                                   | 1.3                  | 1.8%           |
| ¶ Vocational   | 1.3                  | 1.7%           |

|                        |        |        |
|------------------------|--------|--------|
| ¶ Other                | 1.6    | 2.3%   |
| TOTAL STATE SCHOOL AID | \$73.3 | 100.0% |

The study included the following recommendations:

1. *Adopt a foundation-type program for granting state support.* Based on FY 1955 data, the following formula was recommended:  

$$\text{Aid} = \text{the greater of: } (\$215 \times \text{weighted ADA}) - (.012 \times \text{equalized valuation}), \text{ or } \$92 \text{ per pupil unit.}$$

The \$215 was based on the state median cost per pupil unit in districts with both elementary and secondary schools. The tax rate of 12 mills was selected so that nearly all districts would have the same tax rate and receive some state aid. The minimum aid of \$92 per pupil unit was to prevent districts from receiving less aid than under the previous set of formulas.
2. *The foundation program of education should be defined.* The nature of the educational program to be supported by the state should be defined and clarified (i.e., minimum services to pupils that should be offered by all schools). When this is done, a study should be completed on the cost of maintaining such a program, and the foundation formula should be set accordingly.
3. *There should be a study of pupil weights.* No recent study has been done on the pupil weights, and the 1.5 weight is high compared with findings in other states.
4. *Increase the state share of state & local school funding to 50%.* (In FY 1955, the state share was 41.7% and the local share was 58.3%).
5. *Establish a state loan fund for school construction.*
6. *Provide state aid to equalize debt service levies that exceed a certain minimum tax rate.*
7. *Continue to use equalized property values for state aid computations.*

**1957 - 1971: Foundation Program with Minimum Aid Provision and State Share Below 50 Percent**

1957 Foundation program enacted, beginning in FY 1958. Formula allowance set at \$240, which was 84% of the average adjusted maintenance cost per pupil unit in FY 1958. Basic levy set at 16.5 mills times adjusted assessed valuation. Minimum aid set at \$85 per pupil unit, plus the \$10 per school-age child income tax aid. Pupil units based on ADA; K weighted at 0.5, elementary at 1.0, secondary at 1.5.

1963 In subsequent years, the formula allowance was gradually increased, but the increases did not keep up with the growth in average costs. By FY 1963, the formula allowance was equal to 78.1% of average cost. The \$10 census aid was included as part of the aid under Formula A.

- 1967 State sales tax enacted. State property tax was repealed. Homestead credit enacted. 1969 AFDC funding was initiated: \$30/pupil for each school with 20% or more of students from families receiving AFDC.
- 1970 State and local operating costs ranged from \$370 to \$903. The state aid paid for 43% of school operating costs. School tax rates for current operations ranged from less than 35 mills to more than 100 mills. Property taxes had increased about 65% in the past 3 years. There was a major property taxpayer revolt. Wendell Anderson based his 1970 campaign for Governor largely on a pledge to reduce property taxes, increase the state share of school funding, and provide equal educational opportunity. An example of funding inequities cited by Anderson was that Anoka was forced to levy a tax of \$581 on a \$20,000 home to spend \$536 per pupil, while Golden Valley had to levy only \$369 on a similar home to spend \$837 per pupil.
- 1971 *Van Dusartz v Hatfield*. On October 12, 1971, in federal district court, Judge Miles Lord held that the Minnesota school finance system made spending per pupil a function of school district wealth and violated the equal protection clause of the 14th amendment to the US Constitution. Plaintiffs, parents of students in the White Bear Lake schools, complained that the system denied their children substantially equal educational opportunity and required them to pay higher tax rates than those in wealthy districts to receive the same or lesser expenditure level. The case was considered shortly after the August 1971 California Supreme Court decision in *Serrano v Priest*, and made findings similar to the California court. Plaintiffs dismissed their complaint after the 1971 tax bill was enacted.

**1971 - 1991: Foundation Program with State Share Exceeding 50 Percent**

1971 Omnibus Tax Bill, "Minnesota Miracle": After a stalemate during the regular legislative session, and shortly after the *Van Dusartz* ruling, a compromise was passed during a special legislative session (October 30, 1971).

1. State share of total school operating revenues was increased from 43% to 65%. Total state taxes increased by 23% (\$581 million), largely by increasing the tax rates for state income and sales taxes. Property taxes reduced by 15 - 20 %.
2. Foundation formula allowance increased from \$404 in FY 1971 (55% of state median maintenance cost) to \$750 in FY 1973 (93% of state median maintenance cost). School districts were classified as high-spending or low-spending, depending on whether their actual FY 1971 operating costs were above or below the state average. Low spending districts did not receive the full formula allowance; they received the formula allowance minus the amount they were below the average expenditure per pupil unit in FY 1971. High spending districts received the full formula allowance plus a grandfather levy equal to the amount they were above the state average in FY 1971. This locked in spending disparities at the FY 1971 level.

3. The basic tax rate used as the deduction in computing foundation aid was raised from 20 mills to 30 mills. Uniform statewide levy limits were imposed for the first time; the limits could be exceeded only if approved by voters in a referendum.
4. Pupil units computed based on ADM instead of ADA, and the secondary pupil unit weight was reduced from 1.5 to 1.4 (a proposal to lower the secondary weight to 1.3 based on cost data and national comparisons was defeated).
5. Minimum aid was set at \$215 per pupil unit, compared with \$141 in FY 1971. A hold-harmless provision guaranteed that no district would receive less state aid from the new formula in FY 1973 than it received in FY 1971 or FY 1972.
6. Declining pupil unit aid was initiated.
7. AFDC funding was changed to an additional .5 pupil unit for each AFDC pupil.

The chief initial effect was to shift the primary source of education funding from the property tax to state taxes, thereby reducing disparities in property tax rates.

Spending disparities were essentially fixed in place at the 1971 level.

1973 Six year catch-up provision enacted for low spending districts, designed to gradually bring their formula allowances up to full amount by FY 1979. AFDC "Concentration" units added to supplement the "Basic" AFDC units approved in 1971. "Fast Growth" units provided for districts with annual enrollment growth exceeding 4% per year. Minimum aid per pupil guarantee eliminated.

1979 Sparsity funding for isolated small schools initiated. Pupil transportation formula changed from actual base year cost model to predicted cost model based on population density. Replacement and discretionary revenue formulas replace enrollment growth /decline and sparsity formulas, effective in FY 1981. 1980 Limited English Proficiency (LEP) aid formula initiated, replacing pilot program.

1982 Property tax shift enacted, beginning FY 1983.

1983 Teacher training & experience funding enacted as part of five tiered funding formula, replacing discretionary and replacement revenue formula. Capital expenditure hazardous substance revenue initiated. District cooperation revenue initiated.

1984 Early Childhood Family Education (ECFE) revenue initiated, replacing CQE grants. Desegregation levy initiated.

1985 Direct state payments to teacher retirement funds discontinued beginning in FY 1987; school districts made responsible for employer contributions to teacher retirement funds, and provided with teacher retirement aid from state.

- 1987 General Education Revenue replaces foundation revenue, teacher retirement aid, and several smaller categorical aids and levies, beginning in FY 1989. Secondary pupil unit weight reduced from 1.40 to 1.35. Basic AFDC pupil units eliminated (only "concentration" units remain); requirements for use of compensatory revenue initiated. T&E revenue limited to high T&E districts. Supplemental revenue initiated to ensure all districts receive at least a \$40/pu increase in FY 1989 over FY 1988. \$10/PU of basic revenue reserved for staff development. Beginning in FY 1989, the tax rate for capital expenditure revenue reduced from 9 mills to 3 mills, bringing most districts on the formula (most were previously off the formula). Beginning in FY 1989, hazardous substance (health & safety) revenue changed from \$25/PU to 100% of approved cost basis.
- 1988 Mandatory open enrollment program set to begin in FY 1990 for districts with more than 1,000 pupil units, and in FY 1991 for other districts. Procedure for uniform transfer of general education and capital expenditure revenues for open enrollment students established.
- 1989 Elementary sparsity revenue enacted. \$25/pu penalty for contract settlements after January 15 enacted. Referendum levy election may only be held on general election day. Assurance of Mastery (AOM) revenue enacted. Individualized learning and development aid enacted. Cooperation & Combination program enacted. Homestead & Agricultural Credit Aid replaced with HACA. Truth in taxation initiated.

**1991 - 2000: Foundation Program Supplemented with Referendum and Debt Service Equalization**

1991 Referendum equalization initiated beginning in FY 1993—referendum revenue equal to 10% of formula allowance (\$305 for FY 1993) equalized at 50% of equalizing factor. Beginning July 1, 1991, referendums must be expressed as a rate per pupil unit, and are limited to 5 years. Referendums approved after Nov 1, 1992 must be spread on market value. Cap on referendum revenue per pupil unit initiated beginning in FY 1993. Debt service equalization enacted but vetoed by Governor. Would have provided 100% equalization of debt levy exceeding a 12% tax rate. Secondary pupil weight reduced from 1.35 to 1.3, beginning in FY 1992. New AFDC formula enacted; AFDC pupil weight ranges from 0 to .65 PU as concentration goes from 0 to 11.5%. New T&E formula provides funding for nearly all districts. Beginning in FY 1992, \$15/pu reserved for staff development for peer review or OBE (replacing previous \$10 reserve), and \$5 reserved for parent involvement. Charter school legislation enacted.

December 17, 1991. District court decision in *Skeen v. State of Minnesota* holds that the referendum levy, supplemental revenue and debt service revenue violate the education clause and equal protection guarantees of the Minnesota Constitution

- 1992 Debt service equalization formula changed to equalize the debt levy over 10% tax rate at 50% of the equalizing factor, beginning in FY 1993.
- 1993 Referendum equalization fixed at \$315/pu and equalizing factor increased from 50% to 100% (1993). Supplemental & referendum revenue reduced to offset \$100 formula increase in FY 1995. Elementary pupil unit weight increased from 1.0 in FY 1993 to 1.03 in FY 1994 and to 1.06 beginning in FY 1995; the additional revenue generated by the weighting increase is reserved for elementary class size reduction. Special education excess cost aid initiated; replaced residential facility aid. Salaries for special education administrators excluded from aid eligibility beginning in FY 1994. District cooperation revenue initiated beginning in FY 1995; replacing previous cooperation revenue programs. Initially set at \$50/PU, with phase-up to \$67/PU. Portion of basic general education revenue reserved for staff development increased from \$15 to 1% in FY 1994 and 2% (\$63/pu in FY 1995) beginning in FY 1995. 50% of staff development revenue allocated to school sites on a per pupil basis, 25% for incentive grants to schools, and 25% for district-wide uses. Mandate repeal article of education bill repealed numerous laws and rules, including minimum number of days in school year (effective FY 1997). Facilities formula modified to adjust for school building age. August 20, 1993. Minnesota Supreme Court overturns District Court decision in *Skeen* case, holding that the current education finance system does not violate the Minnesota Constitution.
- 1994 Maximum years for referendum increased from 5 to 10. Kindergarten PU weight increased to .515 for FY 1994 and to .53 for FY 1995. Staff development reserve increased to 2.5% of basic revenue, beginning FY 1996.
- 1995 Pupil transportation and T&E funding rolled into general education formula, effective FY 1997. Facilities and equipment revenues combined and included in general education program, beginning FY 1997. Maximum AFDC pupil units per AFDC pupil increased from .65 to .67. Requirement to reserve a portion of general education revenue for staff development is eliminated beginning in FY 1996. Special education and LEP funding changed from current year basis to base year (2nd prior year) formula, and special education levy phased out; funded by phaseout of school HACA. MN Dept of Education abolished and MN Dept of CFL established effective 10/1/95; transfers from other departments begin 7/1/96.
- 1996 Transportation & capital expenditure funds dissolved 7/1/96. First grade preparedness program enacted.
- 1997 T&E allowance pulled out of basic formula beginning in FY 1999 and phased out as teachers employed in FY 1997 leave the district. Compensatory revenue computed using free & reduced lunch counts instead of AFDC data, and allocated directly to school sites, beginning FY 1998. LEP concentration revenue enacted. Beginning in

FY 1999, special programs transportation funding rolled into special education formula, and desegregation transportation funding rolled into integration revenue formula. Education homestead credit enacted, beginning with taxes payable in 1998.

1998 Graduation standards implementation revenue enacted, beginning FY 1999.

Districts required to reserve an amount equal to 1% of basic revenue for staff development, beginning FY 1999. District coop revenue rolled into general education formula, beginning FY 2001. Aid reduction for property tax shift eliminated; referendum shift continued. Beginning in FY 2000 equalized portion of referendum revenue increased from \$315/PU to \$350/PU

1999 Beginning in FY 2000, pupil weights increased to .557 for kindergarten and to 1.115 for grades 1-3 to provide added funding for class size reduction. Beginning in FY 2000, adjusted marginal cost pupil units replace resident weighted ADM in most revenue calculations. "Adjusted" counts equal residents plus nonresidents enrolled in the district under an alternative attendance program, minus residents attending another district under an alternative attendance program. Under "marginal cost" concept, funding is based on 90% of current year count and 10% of prior year count. Beginning in FY 2000, graduation standards implementation revenue is rolled into the general education formula, and two new components are added to general education revenue: Equity Revenue and Referendum Offset Adjustment. Beginning in FY 2000, referendum revenue is computed using resident marginal cost pupil units, and state aid portion follows students under open enrollment and to charter schools. Beginning in FY 2001, referendum cap is increased from 25% of formula less \$300 to 25% of full formula; equalized portion of referendum revenue increased from \$350/PU to \$415/PU. Education agricultural credit enacted, effective for taxes payable in 2000.

2000 Beginning in FY 2001, marginal cost pupil units equal the greater of the current year pupil units, or 77% of the current year plus 23% of the prior year. Set-aside for staff development increased from 1% to 2%.

\$5 increase in operating capital allowance and telecommunication access aid replace telecommunication access grants. One-time funding provided in FY 2001 for T&E replacement and deferred maintenance.

**2001 - Full State Funding of Basic Formula with Two-Tiered Equalization of Operating Referendum and Debt Service Levies**

2001 Beginning in FY 2003, the General Education levy is eliminated and replaced with state education aid. Beginning in FY 2003, supplemental and transition revenue are eliminated, but may be converted to referendum revenue by board action ("referendum conversion allowance").

Under the "\$415 referendum transfer", \$415 is added to the basic formula, and the first \$415 per pupil unit of referendum revenue is eliminated. Districts with less than \$415 of referendum revenue

receive a net revenue increase equal to the difference between \$415 and their referendum allowance per pupil unit. The full formula allowance, including the increase due to the \$415 transfer, is used in

in compensatory, sparsity & transportation sparsity revenue calculations.

Beginning with taxes payable in 2002, agricultural land (excluding house, garage & 1 acre) and cabin property are exempted from the operating referendum levy.

The cap on referendum levies is set at the greater of:

- (a) 18.2% of basic formula (\$837/PU in FY 2003), or
- (b) 116.2% of the district's FY 1994 referendum allowance, plus the referendum conversion allowance, less \$415.

The first \$126/PU of remaining referendum revenue is fully equalized (\$476,000 equalizing factor); remaining referendum revenue up to cap is partially equalized (\$270,000 equalizing factor). For districts receiving sparsity aid, there is no cap, and partial equalization applies to the full levy above \$126/PU. Beginning with taxes payable in 2002, additional debt service equalization aid is provided to districts with debt service tax rates exceeding 25% of adjusted net tax capacity.

Alternative teacher compensation aid enacted; effective in FY 2002.

- 2002 For FY 2003, the percentage of annual state aid paid during the current fiscal year is reduced from 90% to 83%, and the final payment made in the following fiscal year is increased from 10% to 17%.  
Safe schools (crime) levy increased from \$11/PU to \$30/PU (later reduced to \$27/PU in 2003).
- 2003 Beginning in FY 2004, learning year pupil units for at-risk students served more than full-time eliminated and replaced with extended time revenue, with a cap of 0.2 additional ADM per student. Beginning in FY 2005, eligibility for LEP revenue limited to the first 5 years of ADM in Minnesota; allowance per LEP pupil increased from \$584 to \$700. Beginning in FY 2004, compensatory revenue computed using the formula allowance minus \$415. Transition revenue provided to hold districts harmless at the lesser of FY 2003 or FY 2004 old formula revenue per pupil unit. Beginning in FY 2005, school districts must levy for a portion of operating capital, transition, and equity revenue. Beginning in FY 2005, referendum cap inflated based on CPI. Beginning in FY 2004, statutory inflation factors eliminated for special education regular and excess cost aid. Beginning in FY 2004, the percentage of annual state aid paid during the current fiscal year is reduced from 83% to 80%, and the final payment made in the following fiscal year is increased from 17% to 20%. Beginning in FY 2004, state aids are reduced to offset early recognition of property tax revenues, with the tax shift percentage set at 48.6%.
- 2005 Beginning in FY 2005, the current year aid payment percentage is increased from 80% to 84.3%. Beginning in FY 2006, alternative

teacher compensation (Q Comp) revenue added as a component of general education revenue; funded at \$260 per pupil - all aid in FY 2006 and \$190 of aid and \$70 of equalized levy beginning in FY 2007. Funding is sufficient to cover districts with 9% of the state's students in FY 2006 and 48% in 2007 and later. Beginning in FY 2006, gifted & talented revenue added as a new component of general education revenue; funded at \$4 per pupil unit in FY 2006 and \$9 per pupil unit in FY 2007 and later. Beginning in FY 2007, referendum cap increased from 18.6% to 26% of the formula allowance; tier 1 referendum equalization increased to \$600/PU in FY 2007 and to \$700/PU in FY 2008 and later. Beginning in FY 2006, additional equity revenue provided for districts with referendum revenue/PU below 10% of the state average, and metro districts receive a 25% increase in equity revenue. Beginning in FY 2007, all districts below the regional 95th percentile of referendum revenue per pupil unit receive an additional \$46 per pupil unit of equity revenue; those above the 95th percentile receive \$23/PU.

**(F)(3) – Exhibit B: Minnesota Public Radio Report on 2001  
Special Session**

Session 2001: The Tax Debate  
By Mark Zdechlik, Minnesota Public Radio  
July 3, 2001

The decision by the Minnesota Legislature to largely take local property taxes out of school funding will mean massive property-tax cuts for home and business owners. The tax bill also fundamentally changes Minnesota tax policy, by shifting some of the property-tax burden from businesses to homes. Supporters say the changes will make Minnesota businesses more competitive, and force local governments to be more accountable for their spending. Critics worry the sum total of the property tax changes will be property tax increases for people who can least afford to pay.

MINNESOTA BUSINESSES MAY be the biggest winners in this year's landmark tax change. Business leaders have long complained that state taxes put them at a disadvantage relative to competitors in other states and other countries "It's good news for business taxpayers because first we'll be getting immediate reduction of 10 percent," says Minnesota Chamber of Commerce President Bill Blazer. "That should help to make Minnesota businesses more competitive. Looking ahead to the future, because of the increases in accountability businesses will see slower property-tax increases."

Initially, homeowners will be getting even larger property-tax breaks than businesses, averaging nearly 25 percent. However if - or more likely, when - local governments increase levies, homeowners will be paying a larger share of the overall property-tax bill.

Minnesota Taxpayers Association Executive Director Dan Salomone says shifting more of the burden to homeowners is good policy that he thinks will generate more interest in controlling the size of government. "It doesn't sound like a good thing, but we tend to think that people make better decisions when they're well informed about what things cost and they have to pay for more of that cost. That's all this bill does," Salomone says.

The new law also taxes all homes worth up to \$500,000 at a flat rate of one percent. So in addition to making homeowners responsible for a larger percentage of future

property-tax increases, the law makes most homeowners share the tax burden equally, cutting the break that low-valued houses used to enjoy.

"The concern here is have we shifted too much? Are we going to have too much tax burden on homeowners and did the pendulum slip too far the other direction?" asks Jim Mulder, the executive director of the Minnesota Association of Counties, which supported many of the overall tax changes, except for provisions capping future local government taxing authority.

"This is going to be like a fine wine. If in a few years it ages well, we could have the finest wine we've ever seen in Minnesota. But if the cork isn't on quite tight, if it gets a little bit too much sun, it may turn to vinegar and we may need to fix it again," Mulder says.

Joe Pedersen, the mayor of Hawley in northwestern Minnesota, is all but certain the overhaul will have to be overhauled again because of the toll he predicts the changes will take on rural Minnesota. He says contrary to much of the rhetoric that's surrounded the property-tax debate, local governments spend money wisely. And he says asking homeowners with the lowest valued properties to pay a larger portion of the property-tax bill runs contrary principles of ethics and logic.

"At least it used to be and I still hold to that that we have some reason and need to take care of those who are less blessed than the rest of us are. And also if you make that lower-valued home so that it's unaffordable, you just create a housing crisis which we already have throughout the state," Pedersen says.

Supporters of the bill say property-tax cuts for apartments contained in the legislation will encourage private developers to build more rental properties. Even supporters of the tax overhaul acknowledge having a big budget surplus to mask future realities that would otherwise be hard for many constituencies to swallow.

"I've had calls from other states saying, 'how in the world did you guys figure out how to shift the tax off business property and to fix the system?' and, of course, the way to do it is very carefully and very slowly and it helps to have a lot of money around to buy off the losers and make them feel good about the deal," Dan Salomone of the Minnesota Taxpayers Association says.

**(F)(3) – Exhibit C: *Minn. Stat. § 125A.18 Special Instruction  
Nonpublic Schools***

**125A.18 SPECIAL INSTRUCTION; NONPUBLIC SCHOOLS.**

No resident of a district who is eligible for special instruction and services under this section may be denied instruction and service on a shared time basis consistent with section 126C.19, subdivision 4, because of attending a nonpublic school defined in section 123B.41, subdivision 9. If a resident pupil with a disability attends a nonpublic school located within the district of residence, the district must provide necessary transportation for that pupil within the district between the nonpublic school and the educational facility where special instruction and services are provided on a shared time basis. If a resident pupil with a disability attends a nonpublic school located in another district and if no agreement exists under section 126C.19, subdivision 1 or 2, for providing special instruction and services on a shared time basis to that pupil by the district of attendance and where the special instruction and services are provided within the district of residence, the district of residence must provide necessary transportation for that pupil between the boundary of the district of residence and the educational facility. The district of residence may provide necessary transportation for that pupil between its boundary and the nonpublic school attended, but the nonpublic school must pay the cost of transportation provided outside the district boundary.

Parties serving students on a shared time basis have access to the due process hearing system described under United States Code, title 20, and the complaint system under Code of Federal Regulations, title 34, section 300.660-662. In the event it is determined under these systems that the nonpublic school or staff impeded the public school district's provision of a free appropriate education, the commissioner may withhold public funds available to the nonpublic school proportionally applicable to that student under section 123B.42.

**History:**

Ex 1959 c 71 art 1 s 17; 1961 c 559 s 2; 1961 c 690 s 1; 1965 c 241 s 1-3; 1967 c 872 s 1; 1969 c 981 s 2-5; 1971 c 689 s 1-3; 1973 c 683 s 1,2; 1975 c 162 s 41; 1975 c 321 s 2; 1975 c 432 s 8-10; 1976 c 211 s 1-6; 1976 c 271 s 13-18; 1977 c 447 art 3 s 1-4; 1977 c 449 s 12; 1978 c 733 s 1; 1978 c 764 s 3-5; 1978 c 793 s 61;

1979 c 334 art 2 s 1,2; art 3 s 2,3; 1980 c 509 s 30; 1981 c 358 art 1 s 1; art 3 s 2-7;  
1982 c 424 s 28,29,130; 1982 c 548 art 3 s 1-3; 1983 c 247 s 55; 1983 c 258 s 13;  
1983 c 314 art 1 s 22; art 3 s 1; 1984 c 463 art 3 s 1; 1984 c 654 art 5 s 58;  
1Sp1985 c 12 art 3 s 2-8; 1986 c 444; 1987 c 384 art 2 s 24; 1987 c 398 art 3 s 2-  
14; 1988 c 486 s 2-5; 1988 c 629 s 24; 1988 c 718 art 3 s 1; art 6 s 2; 1989 c 209 art  
2 s 1; 1989 c 329 art 3 s 1-3; 1991 c 265 art 3 s 1,2,38; art 11 s 1; 1991 c 292 art 6  
s 58 subd 2; 1992 c 499 art 3 s 1-7; art 11 s 1; 1993 c 224 art 3 s 1-9; art 14 s 3;  
1994 c 483 s 1; 1994 c 647 art 3 s 2-8,34; 1Sp1995 c 3 art 3 s 1-3; art 16 s 13; 1996  
c 412 art 2 s 1,2; art 3 s 1-3; 1998 c 397 art 2 s 37,164; art 11 s 3; 1998 c 398 art 2  
s 13; 1999 c 123 s 11

**(F)(3) – Exhibit D: Minn. Stat. § 124D.03 Enrollment Options Program**

**124D.03 ENROLLMENT OPTIONS PROGRAM.**

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Subdivision 1. **Establishment.**

(a) An enrollment options program is established to enable any pupil to attend a school or program in a district in which the pupil does not reside, subject to the limitations in this section.

(b) A district may refuse to allow a pupil who is expelled under section 121A.45 to enroll during the term of the expulsion if the student was expelled for:

(1) possessing a dangerous weapon, as defined by United States Code, title 18, section 930, paragraph (g)(2), at school or a school function;

(2) possessing or using an illegal drug at school or a school function;

(3) selling or soliciting the sale of a controlled substance while at school or a school function; or

(4) committing a third-degree assault as described in section 609.223, subdivision 1.

Subd. 2. **Limited enrollment of nonresident pupils.**

(a) A board may, by resolution, limit the enrollment of nonresident pupils in its schools or programs according to this section to a number not less than the lesser of:

(1) one percent of the total enrollment at each grade level in the district; or

(2) the number of district residents at that grade level enrolled in a nonresident district according to this section.

(b) A district that limits enrollment of nonresident pupils under paragraph (a) shall report to the commissioner by July 15 on the number of nonresident pupils denied admission due to the limitations on the enrollment of nonresident pupils.

Subd. 3. **Pupil application procedures.**

In order that a pupil may attend a school or program in a nonresident district, the pupil's parent or guardian must submit an

application to the nonresident district. Before submitting an application, the pupil and the pupil's parent or guardian must explore with a school guidance counselor, or other appropriate staff member employed by the district the pupil is currently attending, the pupil's academic or other reason for applying to enroll in a nonresident district. The pupil's application must identify the reason for enrolling in the nonresident district. The parent or guardian of a pupil must submit an application by January 15 for initial enrollment beginning the following school year. The application must be on a form provided by the Department of Education. A particular school or program may be requested by the parent. Once enrolled in a nonresident district, the pupil may remain enrolled and is not required to submit annual or periodic applications. To return to the resident district or to transfer to a different nonresident district, the parent or guardian of the pupil must provide notice to the resident district or apply to a different nonresident district by January 15 for enrollment beginning the following school year.

**Subd. 4. Desegregation district transfers.**

(a) This subdivision applies to a transfer into or out of a district that has a desegregation plan approved by the commissioner of education.

(b) An application to transfer may be submitted at any time for enrollment beginning at any time.

(c) A pupil enrolled in a nonresident district under a desegregation plan approved by the commissioner of education is not required to make annual or periodic application for enrollment but may remain enrolled in the same district. A pupil may transfer to the resident district at any time.

(d) Subdivision 2 applies to a transfer into or out of a district with a desegregation plan.

**Subd. 5. Nonresident district procedures.**

A district shall notify the parent or guardian in writing by February 15 whether the application has been accepted or rejected. If an application is rejected, the district must state in the notification the reason for rejection. The parent or guardian must notify the nonresident district by March 1 whether the pupil intends

to enroll in the nonresident district. Notice of intent to enroll in the nonresident district obligates the pupil to attend the nonresident district during the following school year, unless the boards of the resident and the nonresident districts agree in writing to allow the pupil to transfer back to the resident district, or the pupil's parents or guardians change residence to another district. If a parent or guardian does not notify the nonresident district, the pupil may not enroll in that nonresident district during the following school year, unless the boards of the resident and nonresident district agree otherwise. The nonresident district must notify the resident district by March 15 of the pupil's intent to enroll in the nonresident district. The same procedures apply to a pupil who applies to transfer from one participating nonresident district to another participating nonresident district.

**Subd. 6. Basis for decisions.**

The board must adopt, by resolution, specific standards for acceptance and rejection of applications. Standards may include the capacity of a program, class, or school building. The school board may not reject applications for enrollment in a particular grade level if the nonresident enrollment at that grade level does not exceed the limit set by the board under subdivision 2. Standards may not include previous academic achievement, athletic or other extracurricular ability, disabling conditions, proficiency in the English language, previous disciplinary proceedings, or the student's district of residence.

**Subd. 7. Exceptions to deadlines.**

Notwithstanding subdivision 3, the following pupil application procedures apply:

(a) Upon agreement of the resident and nonresident districts, a pupil may submit an application to a nonresident district after January 15 for enrollment beginning the following school year.

(b) If, as a result of entering into, modifying, or terminating an agreement between boards, a pupil is assigned after December 1 to a different school for enrollment beginning at any time, the pupil, the pupil's siblings, or any other pupil residing in the pupil's residence may submit an application to a nonresident district at any time before July 1 for enrollment beginning the following school year.

(c) A pupil who becomes a resident of a district after December 1 may submit an application to a nonresident district on January 15 or any time after that date for enrollment beginning any time before the following December 1.

(d) If the commissioner of education and the commissioner of human rights determine that the policies, procedures, or practices of a district are in violation of Title VI of the Civil Rights Act of 1964 (Public Law 88-352) or chapter 363A, any pupil in the district may submit an application to a nonresident district at any time for enrollment beginning at any time.

For exceptions under this subdivision, the applicant, the applicant's parent or guardian, the district of residence, and the district of attendance must observe, in a prompt and efficient manner, the application and notice procedures in subdivisions 3 and 5, except that the application and notice deadlines do not apply.

**Subd. 8. Transportation.**

If requested by the parent of a pupil, the nonresident district shall provide transportation within the district.

The resident district is not required to provide or pay for transportation between the pupil's residence and the border of the nonresident district. A parent may be reimbursed by the nonresident district for the costs of transportation from the pupil's residence to the border of the nonresident district if the pupil is from a family whose income is at or below the poverty level, as determined by the federal government. The reimbursement may not exceed the pupil's actual cost of transportation or 15 cents per mile traveled, whichever is less. Reimbursement may not be paid for more than 250 miles per week.

At the time a nonresident district notifies a parent or guardian that an application has been accepted under subdivision 4 or 5, the nonresident district must provide the parent or guardian with the following information regarding the transportation of nonresident pupils under section 123B.88, subdivision 6.

**Subd. 9. Credits toward graduation.**

A nonresident district shall accept credits toward graduation that were awarded by another district. The nonresident district shall

award a diploma to a nonresident pupil if the pupil meets its graduation requirements.

**Subd. 10. Information.**

A district shall make information about the district, schools, programs, policies, and procedures available to all interested people.

**Subd. 11. General education aid.**

Adjustments to general education aid for the resident and nonresident districts shall be made according to section 127A.47, subdivision 7.

**Subd. 12. Termination of enrollment.**

A district may terminate the enrollment of a nonresident student enrolled under this section or section 124D.08 at the end of a school year if the student meets the definition of a habitual truant under section 260C.007, subdivision 19, the student has been provided appropriate services under chapter 260A, and the student's case has been referred to juvenile court. A district may also terminate the enrollment of a nonresident student over the age of 16 enrolled under this section if the student is absent without lawful excuse for one or more periods on 15 school days and has not lawfully withdrawn from school under section 120A.22, subdivision 8.

**History:**

1988 c 718 art 7 s 8; 1989 c 222 s 1,2; 1989 c 329 art 9 s 1-3; 1990 c 562 art 6 s 1,2; 1991 c 130 s 1,2; 1991 c 265 art 2 s 1; art 3 s 38; art 9 s 1; 1992 c 499 art 9 s 1; 1993 c 224 art 2 s 1; art 13 s 1; 1Sp1995 c 3 art 16 s 13; 1997 c 7 art 1 s 43; 1Sp1997 c 4 art 1 s 1; art 5 s 1-4; 1998 c 397 art 1 s 9-14,58; art 11 s 3; 1998 c 398 art 5 s 55; 1999 c 139 art 4 s 2; 1999 c 241 art 9 s 25; 2000 c 489 art 6 s 16; 1Sp2001 c 6 art 2 s 19; 2003 c 130 s 12; 1Sp2003 c 9 art 12 s 8

**(F)(3) – Exhibit E: *Minn. Stat. § 124D.09 Postsecondary Enrollment Options Act***

**124D.09 POSTSECONDARY ENROLLMENT OPTIONS ACT.**

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**Subdivision 1. Citation.**

This section may be cited the "Postsecondary Enrollment Options Act."

**Subd. 2. Purpose.**

The purpose of this section is to promote rigorous academic pursuits and to provide a wider variety of options to high school pupils by encouraging and enabling secondary pupils to enroll full time or part time in nonsectarian courses or programs in eligible postsecondary institutions, as defined in subdivision 3.

**Subd. 3. Definitions.**

For purposes of this section, the following terms have the meanings given to them.

(a) "Eligible institution" means a Minnesota public postsecondary institution, a private, nonprofit two-year trade and technical school granting associate degrees, an opportunities industrialization center accredited by the North Central Association of Colleges and Schools, or a private, residential, two-year or four-year, liberal arts, degree-granting college or university located in Minnesota.

(b) "Course" means a course or program.

**Subd. 4. Alternative pupil.**

"Alternative pupil" means an 11th or 12th grade student not enrolled in a public school district, and includes students attending nonpublic schools and students who are home schooled. An alternative pupil is considered a pupil for purposes of this section only. An alternative pupil must register with the commissioner of education before participating in the postsecondary enrollment options program. The commissioner shall prescribe the form and manner of the registration, in consultation with the Nonpublic Education Council under section 123B.445, and may request any necessary information from the alternative pupil.

**Subd. 5. Authorization; notification.**

Notwithstanding any other law to the contrary, an 11th or 12th grade pupil enrolled in a school or an American Indian-controlled tribal contract or grant school

eligible for aid under section 124D.83, except a foreign exchange pupil enrolled in a district under a cultural exchange program, may apply to an eligible institution, as defined in subdivision 3, to enroll in nonsectarian courses offered by that postsecondary institution. If an institution accepts a secondary pupil for enrollment under this section, the institution shall send written notice to the pupil, the pupil's school or school district, and the commissioner within ten days of acceptance. The notice must indicate the course and hours of enrollment of that pupil. If the pupil enrolls in a course for postsecondary credit, the institution must notify the pupil about payment in the customary manner used by the institution.

**Subd. 6. Counseling.**

To the extent possible, the school or school district must provide counseling services to pupils and their parents or guardian before the pupils enroll in courses under this section to ensure that the pupils and their parents or guardian are fully aware of the risks and possible consequences of enrolling in postsecondary courses. The school or school district must provide information on the program including who may enroll, what institutions and courses are eligible for participation, the decision-making process for granting academic credits, financial arrangements for tuition, books and materials, eligibility criteria for transportation aid, available support services, the need to arrange an appropriate schedule, consequences of failing or not completing a course in which the pupil enrolls, the effect of enrolling in this program on the pupil's ability to complete the required high school graduation requirements, and the academic and social responsibilities that must be assumed by the pupils and their parents or guardian. The person providing counseling shall encourage pupils and their parents or guardian to also use available counseling services at the postsecondary institutions before the quarter or semester of enrollment to ensure that anticipated plans are appropriate.

Prior to enrolling in a course, the pupil and the pupil's parents or guardian must sign a form that must be provided by the school or school district and may be obtained from a postsecondary institution stating that they have received the information specified in this subdivision and that they understand the responsibilities that must be assumed in enrolling in this program. The department must, upon request, provide technical assistance to a school or school district in developing appropriate forms and counseling guidelines.

**Subd. 7. Dissemination of information; notification of intent to enroll.**

By March 1 of each year, a district must provide general information about the program to all pupils in grades 10 and 11. To assist the district in planning, a pupil shall inform the district by March 30 of each year of the pupil's intent to enroll in

postsecondary courses during the following school year. A pupil is not bound by notifying or not notifying the district by March 30.

**Subd. 8. Limit on participation.**

A pupil who first enrolls in grade 11 may not enroll in postsecondary courses under this section for secondary credit for more than the equivalent of two academic years. A pupil who first enrolls in grade 12 may not enroll in postsecondary courses under this section for secondary credit for more than the equivalent of one academic year. If a pupil in grade 11 or 12 first enrolls in a postsecondary course for secondary credit during the school year, the time of participation shall be reduced proportionately. If a pupil is in a learning year or other year-round program and begins each grade in the summer session, summer sessions shall not be counted against the time of participation. A pupil who has graduated from high school cannot participate in a program under this section. A pupil who has completed course requirements for graduation but who has not received a diploma may participate in the program under this section.

**Subd. 9. Enrollment priority.**

A postsecondary institution shall give priority to its postsecondary students when enrolling 11th and 12th grade pupils in its courses. A postsecondary institution may provide information about its programs to a secondary school or to a pupil or parent, but it may not advertise or otherwise recruit or solicit the participation of secondary pupils to enroll in its programs on financial grounds. An institution must not enroll secondary pupils, for postsecondary enrollment options purposes, in remedial, developmental, or other courses that are not college level. Once a pupil has been enrolled in a postsecondary course under this section, the pupil shall not be displaced by another student.

**Subd. 10. Courses according to agreements.**

An eligible pupil, according to subdivision 5, may enroll in a nonsectarian course taught by a secondary teacher or a postsecondary faculty member and offered at a secondary school, or another location, according to an agreement between a public school board and the governing body of an eligible public postsecondary system or an eligible private postsecondary institution, as defined in subdivision 3. All provisions of this section shall apply to a pupil, public school board, district, and the governing body of a postsecondary institution, except as otherwise provided.

**Subd. 11. Participation in high school activities.**

Enrolling in a course under this section shall not, by itself, prohibit a pupil from participating in activities sponsored by the pupil's high school.

**Subd. 12. Credits.**

A pupil may enroll in a course under this section for either secondary credit or postsecondary credit. At the time a pupil enrolls in a course, the pupil shall designate whether the course is for secondary or postsecondary credit. A pupil taking several courses may designate some for secondary credit and some for postsecondary credit. A pupil must not audit a course under this section.

A district shall grant academic credit to a pupil enrolled in a course for secondary credit if the pupil successfully completes the course. Seven quarter or four semester college credits equal at least one full year of high school credit. Fewer college credits may be prorated. A district must also grant academic credit to a pupil enrolled in a course for postsecondary credit if secondary credit is requested by a pupil. If no comparable course is offered by the district, the district must, as soon as possible, notify the commissioner, who shall determine the number of credits that shall be granted to a pupil who successfully completes a course. If a comparable course is offered by the district, the school board shall grant a comparable number of credits to the pupil. If there is a dispute between the district and the pupil regarding the number of credits granted for a particular course, the pupil may appeal the board's decision to the commissioner. The commissioner's decision regarding the number of credits shall be final.

The secondary credits granted to a pupil must be counted toward the graduation requirements and subject area requirements of the district. Evidence of successful completion of each course and secondary credits granted must be included in the pupil's secondary school record. A pupil shall provide the school with a copy of the pupil's grade in each course taken for secondary credit under this section. Upon the request of a pupil, the pupil's secondary school record must also include evidence of successful completion and credits granted for a course taken for postsecondary credit. In either case, the record must indicate that the credits were earned at a postsecondary institution.

If a pupil enrolls in a postsecondary institution after leaving secondary school, the postsecondary institution must award postsecondary credit for any course successfully completed for secondary credit at that institution. Other postsecondary institutions may award, after a pupil leaves secondary school, postsecondary credit for any courses successfully completed under this section. An institution may not charge a pupil for the award of credit.

The Board of Trustees of the Minnesota State Colleges and Universities and the Board of Regents of the University of Minnesota must, and private nonprofit and proprietary postsecondary institutions should, award postsecondary credit for any successfully completed courses in a program certified by the National Alliance of Concurrent Enrollment Partnerships offered according to an agreement under subdivision 10.

**Subd. 13. Financial arrangements.**

For a pupil enrolled in a course under this section, the department must make payments according to this subdivision for courses that were taken for secondary credit.

The department must not make payments to a school district or postsecondary institution for a course taken for postsecondary credit only. The department must not make payments to a postsecondary institution for a course from which a student officially withdraws during the first 14 days of the quarter or semester or who has been absent from the postsecondary institution for the first 15 consecutive school days of the quarter or semester and is not receiving instruction in the home or hospital.

A postsecondary institution shall receive the following:

(1) for an institution granting quarter credit, the reimbursement per credit hour shall be an amount equal to 88 percent of the product of the formula allowance minus \$415, multiplied by 1.3, and divided by 45; or

(2) for an institution granting semester credit, the reimbursement per credit hour shall be an amount equal to 88 percent of the product of the general revenue formula allowance minus \$415, multiplied by 1.3, and divided by 30.

The department must pay to each postsecondary institution 100 percent of the amount in clause (1) or (2) within 30 days of receiving initial enrollment information each quarter or semester. If changes in enrollment occur during a quarter or semester, the change shall be reported by the postsecondary institution at the time the enrollment information for the succeeding quarter or semester is submitted. At any time the department notifies a postsecondary institution that an overpayment has been made, the institution shall promptly remit the amount due.

**Subd. 14. Grants and financial aid prohibited.**

A pupil enrolled in a postsecondary course for secondary credit is not eligible for any state student financial aid under chapter 136A.

Subd. 15.

[Repealed, 1Sp2003 c 9 art 9 s 10]

**Subd. 16. Financial arrangements for courses provided according to agreements.**

(a) The agreement between a board and the governing body of a public postsecondary system or private postsecondary institution shall set forth the payment amounts and arrangements, if any, from the board to the postsecondary institution. No payments shall be made by the department according to subdivision 13 or 15. For the purpose of computing state aids for a district, a pupil enrolled according to subdivision 10 shall be counted in the average daily membership of the district as though the pupil were enrolled in a secondary course that is not offered in connection with an agreement. Nothing in this subdivision shall be construed to prohibit a public postsecondary system or private postsecondary institution from receiving additional state funding that may be available under any other law.

(b) If a course is provided under subdivision 10, offered at a secondary school, and taught by a secondary teacher, the postsecondary system or institution must not require a payment from the school board that exceeds the cost to the postsecondary institution that is directly attributable to providing that course.

**Subd. 17. Alternative pupils financial arrangements.**

For an alternative pupil enrolled in a course or program under this section, the Department of Education shall make payments to the eligible institution according to subdivision 13. The department shall not make any payments to a school district for alternative pupils.

**Subd. 18. Tuition at nonpublic secondary institution.**

A nonpublic secondary institution must proportionately adjust its tuition to accurately reflect the time an alternative pupil spends in a postsecondary enrollment course or program.

**Subd. 19. Fees; textbooks; materials.**

A postsecondary institution that receives reimbursement for a pupil under subdivision 13 may not charge that pupil for fees, textbooks, materials, support services as defined in section 135A.16, or other necessary costs of the course or program in which the pupil is enrolled if the charge would be prohibited under section 123B.37, except for equipment purchased by the pupil that becomes the property of the pupil. An institution may require the pupil to pay for fees, textbooks, and materials for a course taken for postsecondary credit.

**Subd. 20. Textbooks; materials.**

All textbooks and equipment provided to a pupil, and paid for under subdivision 13, are the property of the pupil's postsecondary institution. Each pupil is required to return all textbooks and equipment to the postsecondary institution after the course has ended.

**Subd. 21. Support services.**

The postsecondary institution must inform the pupil of the support services available at that institution. If the student has an individual education plan that provides general education support and accommodations, the postsecondary institution must provide the support services as described in the student's IEP and the postsecondary institution and the district shall negotiate an agreement on the rate to be charged for the services. Nothing in this section shall prevent the student from enrolling while the agreement is being developed. If the parties cannot agree on the services, on application of either party, the commissioner shall resolve the dispute in the same manner the commissioner fixes tuition rates under section 125A.11. The commissioner's decision is binding on both parties.

**Subd. 22. Transportation.**

A parent or guardian of a pupil enrolled in a course for secondary credit may apply to the pupil's district of residence for reimbursement for transporting the pupil between the secondary school in which the pupil is enrolled or the pupil's home and the postsecondary institution that the pupil attends. The state shall provide state aid to a district in an amount sufficient to reimburse the parent or guardian for the necessary transportation costs when the family's or guardian's income is at or below the poverty level, as determined by the federal government. The reimbursement shall be the pupil's actual cost of transportation or 15 cents per mile traveled, whichever is less. Reimbursement may not be paid for more than 250 miles per week. However, if the nearest postsecondary institution is more than 25 miles from the pupil's resident secondary school, the weekly reimbursement may not exceed the reimbursement rate per mile times the actual distance between the secondary school or the pupil's home and the nearest postsecondary institution times ten. The state must pay aid to the district according to this subdivision.

**Subd. 23. Exception; intermediate districts.**

A secondary pupil who is a resident of a member district of an intermediate district, as defined in section 136D.01, may not enroll in that intermediate district's vocational program as a postsecondary pupil under this section when the intermediate district operates a secondary program at a college facility and secondary

students have access to the postsecondary curriculum and receive high school and college credit for successfully completing the program.

**Subd. 24. Limit; state obligation.**

The provisions of subdivisions 13, 19, 22, and 23 shall not apply for any postsecondary courses in which a pupil is enrolled in addition to being enrolled full time in that pupil's district or for any postsecondary course in which a pupil is enrolled for postsecondary credit. The pupil is enrolled full time if the pupil attends credit-bearing classes in the high school or high school program for all of the available hours of instruction.

**Subd. 25. Pupils 40 miles or more from an eligible institution.**

A pupil who is enrolled in a secondary school that is located 40 miles or more from the nearest eligible institution may request that the resident district offer at least one accelerated or advanced academic course within the resident district in which the pupil may enroll for postsecondary credit. A pupil may enroll in a course offered under this subdivision for either secondary or postsecondary credit according to subdivision 12.

A district must offer an accelerated or advanced academic course for postsecondary credit if one or more pupils requests such a course under this subdivision. The district may decide which course to offer, how to offer the course, and whether to offer one or more courses. The district must offer at least one such course in the next academic period and must continue to offer at least one accelerated or advanced academic course for postsecondary credit in later academic periods.

**Subd. 26. Pupils less than 40 miles from an eligible institution.**

A pupil enrolled in a secondary school that is located less than 40 miles from the nearest eligible institution may enroll in a postsecondary course provided at the secondary school.

**History:**

1Sp1985 c 12 art 5 s 1; 1Sp1985 c 16 art 2 s 32; 1986 c 447 s 1-11; 1988 c 486 s 16; 1988 c 718 art 6 s 5; 1989 c 329 art 9 s 8-12; 1990 c 562 art 6 s 14,15; 1991 c 265 art 2 s 2; art 7 s 7,8; art 9 s 37-39,75; 1992 c 499 art 9 s 3-11; 1993 c 224 art 9 s 23-26; art 13 s 22,23; 1994 c 647 art 8 s 4; art 9 s 4-6; 1Sp1995 c 3 art 2 s 2; art 3 s 5,6; art 7 s 2; art 16 s 13; 1996 c 412 art 6 s 2; art 9 s 4,5; 1997 c 187 art 1 s 12; 1Sp1997 c 4 art 1 s 3-9; art 7 s 5,6; 1998 c 397 art 2 s 75-87,164; art 11 s 3; 1998 c 398 art 6 s 18; 2003 c 130 s 12; 1Sp2003 c 9 art 1 s 12; art 2 s 16-19; art 12 s 9; 1Sp2005 c 5 art 2 s 57

**(F)(3) – Exhibit F: *Minn. Stat. § 290.0674 Minnesota Education Credit***

**290.0674 MINNESOTA EDUCATION CREDIT.**

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**Subdivision 1. Credit allowed.**

An individual is allowed a credit against the tax imposed by this chapter in an amount equal to 75 percent of the amount paid for education-related expenses for a qualifying child in kindergarten through grade 12. For purposes of this section, "education-related expenses" means:

(1) fees or tuition for instruction by an instructor under section 120A.22, subdivision 10, clause (1), (2), (3), (4), or (5), or a member of the Minnesota Music Teachers Association, and who is not a lineal ancestor or sibling of the dependent for instruction outside the regular school day or school year, including tutoring, driver's education offered as part of school curriculum, regardless of whether it is taken from a public or private entity or summer camps, in grade or age appropriate curricula that supplement curricula and instruction available during the regular school year, that assists a dependent to improve knowledge of core curriculum areas or to expand knowledge and skills under the required academic standards under section 120B.021, subdivision 1, and the elective standard under section 120B.022, subdivision 1, clause (2), and that do not include the teaching of religious tenets, doctrines, or worship, the purpose of which is to instill such tenets, doctrines, or worship;

(2) expenses for textbooks, including books and other instructional materials and equipment purchased or leased for use in elementary and secondary schools in teaching only those subjects legally and commonly taught in public elementary and secondary schools in this state. "Textbooks" does not include instructional books and materials used in the teaching of religious tenets, doctrines, or worship, the purpose of which is to instill such tenets, doctrines, or worship, nor does it include books or materials for extracurricular activities including sporting events, musical or dramatic events, speech activities, driver's education, or similar programs;

(3) a maximum expense of \$200 per family for personal computer hardware, excluding single purpose processors, and educational software that assists a dependent to improve knowledge of core curriculum areas or to expand knowledge and skills under the required academic standards under section 120B.021, subdivision 1, and the elective standard under section

120B.022, subdivision 1, clause (2), purchased for use in the taxpayer's home and not used in a trade or business regardless of whether the computer is required by the dependent's school; and

(4) the amount paid to others for transportation of a qualifying child attending an elementary or secondary school situated in Minnesota, North Dakota, South Dakota, Iowa, or Wisconsin, wherein a resident of this state may legally fulfill the state's compulsory attendance laws, which is not operated for profit, and which adheres to the provisions of the Civil Rights Act of 1964 and chapter 363A.

For purposes of this section, "qualifying child" has the meaning given in section 32(c)(3) of the Internal Revenue Code.

**Subd. 2. Limitations.**

(a) For claimants with income not greater than \$33,500, the maximum credit allowed for a family is \$1,000 multiplied by the number of qualifying children in kindergarten through grade 12 in the family. The maximum credit for families with one qualifying child in kindergarten through grade 12 is reduced by \$1 for each \$4 of household income over \$33,500, and the maximum credit for families with two or more qualifying children in kindergarten through grade 12 is reduced by \$2 for each \$4 of household income over \$33,500, but in no case is the credit less than zero.

For purposes of this section "income" has the meaning given in section 290.067, subdivision 2a. In the case of a married claimant, a credit is not allowed unless a joint income tax return is filed.

(b) For a nonresident or part-year resident, the credit determined under subdivision 1 and the maximum credit amount in paragraph (a) must be allocated using the percentage calculated in section 290.06, subdivision 2c, paragraph (e).

**Subd. 3. Reduction by alternative minimum tax liability.**

The amount of the credit allowed must be reduced by the amount of the taxpayer's liability under section 290.091, determined before the credit allowed by this section is subtracted from regular tax liability.

**Subd. 4. Credit to be refundable.**

If the amount of credit that the claimant is eligible to receive under this section exceeds the claimant's tax liability under this chapter, the commissioner shall refund the excess to the claimant.

**Subd. 5. Appropriation.**

An amount sufficient to pay the refunds required by this section is appropriated to the commissioner from the general fund.

**History:**

1Sp1997 c 4 art 13 s 3; 1998 c 397 art 11 s 3; 1998 c 398 art 6 s 32; 1999 c 243 art 2 s 13,14; 1Sp2001 c 5 art 9 s 11; 2005 c 151 art 6 s 17; 1Sp2005 c 3 art 3 s 10

**(F)(3) – Exhibit G: *Minn. Stat. § 120B.30 Statewide testing and reporting system***

**120B.30 STATEWIDE TESTING AND REPORTING SYSTEM.**

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**Subdivision 1. Statewide testing.**

(a) The commissioner, with advice from experts with appropriate technical qualifications and experience and stakeholders, consistent with subdivision 1a, shall include in the comprehensive assessment system, for each grade level to be tested, state-constructed tests developed from and aligned with the state's required academic standards under section 120B.021, include multiple choice questions, and be administered annually to all students in grades 3 through 8. State-developed high school tests aligned with the state's required academic standards under section 120B.021 and administered to all high school students in a subject other than writing must include multiple choice questions. The commissioner shall establish one or more months during which schools shall administer the tests to students each school year. For students enrolled in grade 8 before the 2005-2006 school year, Minnesota basic skills tests in reading, mathematics, and writing shall fulfill students' basic skills testing requirements for a passing state notation. The passing scores of basic skills tests in reading and mathematics are the equivalent of 75 percent correct for students entering grade 9 based on the first uniform test administered in February 1998. Students who have not successfully passed a Minnesota basic skills test by the end of the 2011-2012 school year must pass the graduation-required assessments for diploma under paragraph (b).

(b) The state assessment system must be aligned to the most recent revision of academic standards as described in section 120B.023 in the following manner:

(1) mathematics;

(i) grades 3 through 8 beginning in the 2010-2011 school year; and

(ii) high school level beginning in the 2013-2014 school year;

(2) science; grades 5 and 8 and at the high school level beginning in the 2011-2012 school year; and

(3) language arts and reading; grades 3 through 8 and high school level beginning in the 2012-2013 school year.

(c) For students enrolled in grade 8 in the 2005-2006 school year and later, only the following options shall fulfill students' state graduation test requirements:

(1) for reading and mathematics:

(i) obtaining an achievement level equivalent to or greater than proficient as determined through a standard setting process on the Minnesota comprehensive assessments in grade 10 for reading and grade 11 for mathematics or achieving a passing score as determined through a standard setting process on the graduation-required assessment for diploma in grade 10 for reading and grade 11 for mathematics or subsequent retests;

(ii) achieving a passing score as determined through a standard setting process on the state-identified language proficiency test in reading and the mathematics test for English language learners or the graduation-required assessment for diploma equivalent of those assessments for students designated as English language learners;

(iii) achieving an individual passing score on the graduation-required assessment for diploma as determined by appropriate state guidelines for students with an individual education plan or 504 plan;

(iv) obtaining achievement level equivalent to or greater than proficient as determined through a standard setting process on the state-identified alternate assessment or assessments in grade 10 for reading and grade 11 for mathematics for students with an individual education plan; or

(v) achieving an individual passing score on the state-identified alternate assessment or assessments as determined by appropriate state guidelines for students with an individual education plan; and

(2) for writing:

(i) achieving a passing score on the graduation-required assessment for diploma;

(ii) achieving a passing score as determined through a standard setting process on the state-identified language proficiency test in writing for students designated as English language learners;

(iii) achieving an individual passing score on the graduation-required assessment for diploma as determined by appropriate state guidelines for students with an individual education plan or 504 plan; or

(iv) achieving an individual passing score on the state-identified alternate assessment or assessments as determined by appropriate state guidelines for students with an individual education plan.

(d) Students enrolled in grade 8 in any school year from the 2005-2006 school year to the 2009-2010 school year who do not pass the mathematics graduation-required assessment for diploma under paragraph (b) are eligible to receive a high school diploma with a passing state notation if they:

(1) complete with a passing score or grade all state and local coursework and credits required for graduation by the school board granting the students their diploma;

(2) participate in district-prescribed academic remediation in mathematics; and

(3) fully participate in at least two retests of the mathematics GRAD test or until they pass the mathematics GRAD test, whichever comes first. A school, district, or charter school must place a student's highest assessment score for each of the following assessments on the student's high school transcript: the mathematics Minnesota Comprehensive Assessment, reading Minnesota Comprehensive Assessment, and writing Graduation-Required Assessment for Diploma, and when applicable, the mathematics Graduation-Required Assessment for Diploma and reading Graduation-Required Assessment for Diploma.

In addition, the school board granting the students their diplomas may formally decide to include a notation of high achievement on the high school diplomas of those graduating seniors who, according to established school board criteria, demonstrate exemplary academic achievement during high school.

(e) The 3rd through 8th grade and high school test results shall be available to districts for diagnostic purposes affecting student learning and district instruction and curriculum, and for establishing educational accountability. The commissioner must disseminate to the public the high school test results upon receiving those results.

(f) The 3rd through 8th grade and high school tests must be aligned with state academic standards. The commissioner shall determine the testing process and the order of administration. The statewide results shall be aggregated at the site and district level, consistent with subdivision 1a.

(g) In addition to the testing and reporting requirements under this section, the commissioner shall include the following components in the statewide public reporting system:

(1) uniform statewide testing of all students in grades 3 through 8 and at the high school level that provides appropriate, technically sound accommodations or alternate assessments;

(2) educational indicators that can be aggregated and compared across school districts and across time on a statewide basis, including average daily attendance, high school graduation rates, and high school drop-out rates by age and grade level;

(3) state results on the American College Test; and

(4) state results from participation in the National Assessment of Educational Progress so that the state can benchmark its performance against the nation and other states, and, where possible, against other countries, and contribute to the national effort to monitor achievement.

**Subd. 1a. Statewide and local assessments; results.**

(a) For purposes of conforming with existing federal educational accountability requirements, the commissioner must develop reading and mathematics assessments for grades 3 through 8, state-developed high school reading and mathematics tests aligned with state academic standards, and science assessments under clause (2) that districts and sites must use to monitor student growth toward achieving those standards. The commissioner must not develop statewide assessments for academic standards in social studies, health and physical education, and the arts. The commissioner must require:

(1) annual reading and mathematics assessments in grades 3 through 8, and high school reading and mathematics tests; and

(2) annual science assessments in one grade in the grades 3 through 5 span, the grades 6 through 8 span, and a life sciences assessment in the grades 9 through 12 span, and the commissioner must not require students to achieve a passing score on high school science assessments as a condition of receiving a high school diploma.

(b) The commissioner must ensure that all statewide tests administered to elementary and secondary students measure students' academic knowledge and skills and not students' values, attitudes, and beliefs.

(c) Reporting of assessment results must:

(1) provide timely, useful, and understandable information on the performance of individual students, schools, school districts, and the state;

(2) include a value-added growth indicator of student achievement under section 120B.35, subdivision 3, paragraph (b); and

(3)(i) for students enrolled in grade 8 before the 2005-2006 school year, determine whether students have met the state's basic skills requirements; and

(ii) for students enrolled in grade 8 in the 2005-2006 school year and later, determine whether students have met the state's academic standards.

(d) Consistent with applicable federal law and subdivision 1, paragraph (d), clause (1), the commissioner must include appropriate, technically sound accommodations or alternative assessments for the very few students with disabilities for whom statewide assessments are inappropriate and for students with limited English proficiency.

(e) A school, school district, and charter school must administer statewide assessments under this section, as the assessments become available, to evaluate student proficiency in the context of the state's grade level academic standards. If a state assessment is not available, a school, school district, and charter school must determine locally if a student has met the required academic standards. A school, school district, or charter school may use a student's performance on a statewide assessment as one of multiple criteria to determine grade promotion or retention. A school, school district, or charter school may use a high school student's performance on a statewide assessment as a percentage of the student's final grade in a course, or place a student's assessment score on the student's transcript.

**Subd. 2. Department of Education assistance.**

The Department of Education shall contract for professional and technical services according to competitive bidding procedures under chapter 16C for purposes of this section.

**Subd. 3. Reporting.**

The commissioner shall report test data publicly and to stakeholders, including the performance achievement levels developed from students' unweighted test scores in each tested subject and a listing of demographic factors that strongly correlate with student performance. The commissioner shall also report data that compares performance results among school sites, school districts, Minnesota and other states, and Minnesota and other nations. The commissioner shall disseminate to schools and

school districts a more comprehensive report containing testing information that meets local needs for evaluating instruction and curriculum.

**Subd. 4. Access to tests.**

The commissioner must adopt and publish a policy to provide public and parental access for review of basic skills tests, Minnesota Comprehensive Assessments, or any other such statewide test and assessment. Upon receiving a written request, the commissioner must make available to parents or guardians a copy of their student's actual responses to the test questions for their review.

**History:**

1997 c 138 s 1; 1998 c 386 art 2 s 38; 1998 c 397 art 4 s 2,51; art 11 s 3; 1998 c 398 art 5 s 8; 1999 c 241 art 9 s 3; 2000 c 489 art 6 s 2; 2000 c 500 s 15; 1Sp2001 c 6 art 2 s 4; 2003 c 129 art 1 s 7,8; 2003 c 130 s 12; 2004 c 294 art 6 s 2; 1Sp2005 c 5 art 2 s 21-23; 2007 c 146 art 2 s 9; 2009 c 96 art 2 s 8

**NOTE:** Subdivision 1, paragraph (b), clause (1), item (ii), as added by Laws 2009, chapter 96, article 2, section 8, is not effective until July 1, 2010, and the legislature specifically authorizes the number, subject area, grade level, and consequence of a high school mathematics assessment program. If the legislature does not authorize the assessment program by July 1, 2010, the graduation-required assessment for diploma in grade 11 for mathematics under subdivision 1, paragraph (c), remains in effect. Laws 2009, chapter 96, article 2, section 8, the effective date.

**NOTE:** Subdivision 1, paragraph (d), as added by Laws 2009, chapter 96, article 2, section 8, applies to the 2009-2010 through 2013-2014 school years only. Laws 2009, chapter 96, article 2, section 8, the effective date.

**(F)(3) – Exhibit H: *Minn. Stat. § 122A.72 Teacher Centers***

**122A.72 TEACHER CENTERS.**

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**Subdivision 1. Teacher defined.**

For the purposes of this section, "teacher" has the meaning given it in section 179A.03, subdivision 18.

**Subd. 2. Establishment.**

A teacher center may be established by one or more school boards and the exclusive representatives of the teachers. The teacher center shall serve at least ten districts or 3,000 teachers.

**Subd. 3. Policy board membership.**

Representatives of exclusive representatives and representatives of the school boards shall mutually determine the composition of the policy board according to the guidelines in this subdivision. A majority of the policy board must be teachers. The number of policy board members from each participating district must be in proportion to the number of teachers in each district. The board shall be composed of elementary teachers, secondary teachers, and other teachers, parents, and representatives of school boards, postsecondary education, business, and labor. At least one teacher from each participating district shall be a member of the board.

**Subd. 4. Policy board powers and duties.**

The policy board shall develop policy, designate a fiscal agent, adopt a budget, expend funds to accomplish the purposes of the center, contract for technical and other assistance, and perform other managerial or supervisory activities consistent with the rules of the commissioner of education. The policy board may employ staff or contract with consultants for services.

**Subd. 5. Center functions.**

(a) A teacher center shall perform functions according to this subdivision. The center shall assist teachers, diagnose learning needs, experiment with the use of multiple instructional approaches, assess pupil outcomes, assess staff development needs and plans, and teach school personnel about effective pedagogical approaches. The center shall develop and produce curricula and curricular materials designed to meet the educational needs of pupils being served, by applying educational research and new and improved methods, practices, and techniques. The center shall provide programs to improve the skills of teachers to meet the special educational needs of

pupils. The center shall provide programs to familiarize teachers with developments in curriculum formulation and educational research, including how research can be used to improve teaching skills. The center shall facilitate sharing of resources, ideas, methods, and approaches directly related to classroom instruction and improve teachers' familiarity with current teaching materials and products for use in their classrooms. The center shall provide in-service programs.

(b) Each teacher center must provide a professional development program to train interested and highly qualified elementary, middle, and secondary teachers, selected by the employing school district, to assist other teachers in that district with mathematics and science curriculum, standards, and instruction so that all teachers have access to:

(1) high quality professional development programs in mathematics and science that address curriculum, instructional methods, alignment of standards, and performance measurements, enhance teacher and student learning, and support state mathematics and science standards; and

(2) research-based mathematics and science programs and instructional models premised on best practices that inspire teachers and students and have practical classroom application.

**History:**

1989 c 329 art 11 s 11; 1998 c 397 art 8 s 5, 101; 1998 c 398 art 5 s 55; 2003 c 130 s 12; 2007 c 146 art 2 s 14

**(F)(3) – Exhibit I: *Minn. Stat. § 122A.60 Staff Development Program***

**122A.60 STAFF DEVELOPMENT PROGRAM.**

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**Subdivision 1. Staff development committee.**

A school board must use the revenue authorized in section 122A.61 for in-service education for programs under section 120B.22, subdivision 2, or for staff development plans under this section. The board must establish an advisory staff development committee to develop the plan, assist site professional development teams in developing a site plan consistent with the goals of the plan, and evaluate staff development efforts at the site level. A majority of the advisory committee and the site professional development team must be teachers representing various grade levels, subject areas, and special education. The advisory committee must also include nonteaching staff, parents, and administrators.

**Subd. 1a. Effective staff development activities.**

(a) Staff development activities must:

(1) focus on the school classroom and research-based strategies that improve student learning;

(2) provide opportunities for teachers to practice and improve their instructional skills over time;

(3) provide opportunities for teachers to use student data as part of their daily work to increase student achievement;

(4) enhance teacher content knowledge and instructional skills;

(5) align with state and local academic standards;

(6) provide opportunities to build professional relationships, foster collaboration among principals and staff who provide instruction, and provide opportunities for teacher-to-teacher mentoring; and

(7) align with the plan of the district or site for an alternative teacher professional pay system.

Staff development activities may include curriculum development and curriculum training programs, and activities that provide teachers and other members of site-based teams training to enhance team performance. The school district also may implement other staff development activities required by law and activities associated with professional teacher compensation models.

(b) Release time provided for teachers to supervise students on field trips and school activities, or independent tasks not associated with enhancing the teacher's knowledge and instructional skills, such as preparing report cards, calculating grades, or organizing classroom materials, may not be counted as staff development time that is financed with staff development reserved revenue under section 122A.61.

**Subd. 2. Contents of plan.**

The plan must include the staff development outcomes under subdivision 3, the means to achieve the outcomes, and procedures for evaluating progress at each school site toward meeting education outcomes, consistent with relicensure requirements under section 122A.18, subdivision 2, paragraph (b). The plan also must:

- (1) support stable and productive professional communities achieved through ongoing and schoolwide progress and growth in teaching practice;
- (2) emphasize coaching, professional learning communities, classroom action research, and other job-embedded models;
- (3) maintain a strong subject matter focus premised on students' learning goals;
- (4) ensure specialized preparation and learning about issues related to teaching students with special needs and limited English proficiency; and
- (5) reinforce national and state standards of effective teaching practice.

**Subd. 3. Staff development outcomes.**

The advisory staff development committee must adopt a staff development plan for improving student achievement. The plan must be consistent with education outcomes that the school board determines. The plan must include ongoing staff development activities that contribute toward continuous improvement in achievement of the following goals:

- (1) improve student achievement of state and local education standards in all areas of the curriculum by using best practices methods;
- (2) effectively meet the needs of a diverse student population, including at-risk children, children with disabilities, and gifted children, within the regular classroom and other settings;
- (3) provide an inclusive curriculum for a racially, ethnically, and culturally diverse student population that is consistent with the state education diversity rule and the district's education diversity plan;

(4) improve staff collaboration and develop mentoring and peer coaching programs for teachers new to the school or district;

(5) effectively teach and model violence prevention policy and curriculum that address early intervention alternatives, issues of harassment, and teach nonviolent alternatives for conflict resolution; and

(6) provide teachers and other members of site-based management teams with appropriate management and financial management skills.

**Subd. 4. Staff development report.**

(a) By October 15 of each year, the district and site staff development committees shall write and submit a report of staff development activities and expenditures for the previous year, in the form and manner determined by the commissioner. The report, signed by the district superintendent and staff development chair, must include assessment and evaluation data indicating progress toward district and site staff development goals based on teaching and learning outcomes, including the percentage of teachers and other staff involved in instruction who participate in effective staff development activities under subdivision 3.

(b) The report must break down expenditures for:

(1) curriculum development and curriculum training programs; and

(2) staff development training models, workshops, and conferences, and the cost of releasing teachers or providing substitute teachers for staff development purposes.

The report also must indicate whether the expenditures were incurred at the district level or the school site level, and whether the school site expenditures were made possible by grants to school sites that demonstrate exemplary use of allocated staff development revenue. These expenditures must be reported using the uniform financial and accounting and reporting standards.

(c) The commissioner shall report the staff development progress and expenditure data to the house of representatives and senate committees having jurisdiction over education by February 15 each year.

**History:**

1Sp1985 c 12 art 8 s 23, 61; 1987 c 398 art 8 s 27, 28; 1Sp1987 c 4 art 1 s 3; 1988 c 486 s 73, 74; 1990 c 562 art 4 s 8; 1991 c 265 art 7 s 30-32; 1992 c 499 art 1 s 19; 1992 c 571 art 10 s 4, 5; 1993 c 224 art 7 s 24; 1994 c 647 art 7 s 10, 11; 1Sp1995 c 3 art 8 s 9; 1996 c 412 art 9 s 11; 1998 c 397 art 8 s 95, 96, 101; art 11 s 3; 1998 c 398 art 5 s 13; 1999 c 241 art 5 s 3; 1999 c 241 art 9 s 17; 1Sp2005 c 5 art 2 s 44-46; 2009 c 96 art 2 s 28

**(F)(3) – Exhibit J: Minn. Stat. § 122A.61 – Reserved Revenue for Staff Development**

**122A.61 RESERVED REVENUE FOR STAFF DEVELOPMENT.**

**Subdivision 1. Staff development revenue.**

A district is required to reserve an amount equal to at least two percent of the basic revenue under section 126C.10, subdivision 2, for in-service education for programs under section 120B.22, subdivision 2, for staff development plans, including plans for challenging instructional activities and experiences under section 122A.60, and for curriculum development and programs, other in-service education, teachers' workshops, teacher conferences, the cost of substitute teachers staff development purposes, preservice and in-service education for special education professionals and paraprofessionals, and other related costs for staff development efforts. A district may annually waive the requirement to reserve their basic revenue under this section if a majority vote of the licensed teachers in the district and a majority vote of the school board agree to a resolution to waive the requirement. A district in statutory operating debt is exempt from reserving basic revenue according to this section. Districts may expend an additional amount of unreserved revenue for staff development based on their needs. With the exception of amounts reserved for staff development from revenues allocated directly to school sites, the board must initially allocate 50 percent of the reserved revenue to each school site in the district on a per teacher basis, which must be retained by the school site until used. The board may retain 25 percent to be used for district wide staff development efforts. The remaining 25 percent of the revenue must be used to make grants to school sites for best practices methods. A grant may be used for any purpose authorized under section 120B.22, subdivision 2, 122A.60, or for the costs of curriculum development and programs, other in-service education, teachers' workshops, teacher conferences, substitute teachers for staff development purposes, and other staff development efforts, and determined by the site professional development team. The site professional development team must demonstrate to the school board the extent to which staff at the site have met the outcomes of the program. The board may withhold a portion of initial allocation of revenue if the staff development outcomes are not being met.

**Subd. 2. Career teacher staff development.**

Of a district's basic revenue under section 126C.10, subdivision 2, an amount equal to \$5 times the number of resident pupil units must be reserved by a district

operating a career teacher program according to sections 124D.25 to 124D.29. The revenue may be used only to provide staff development for the career teacher program.

**Subd. 3. Coursework and training.**

A school district may use the revenue reserved under subdivision 1 for grants to the district's teachers to pay for coursework and training leading to certification as a college in the schools or concurrent enrollment teacher. In order to receive a grant, the teacher must be enrolled in a program that includes coursework and training focused on teaching a core subject.

**History:**

1987 c 398 art 1 s 18; 1989 c 329 art 7 s 6; 1991 c 130 s 37; 1991 c 265 art 1 s 25; 1992 c 499 art 1 s 18; art 7 s 31; art 12 s 29; 1992 c 571 art 10 s 3; 1993 c 224 art 4 s 33; art 7 s 14; 1994 c 647 art 7 s 3; 1Sp1995 c 3 art 1 s 49; 1998 c 397 art 8 s 4,101; art 11 s 3; 1998 c 398 art 1 s 36,39; 1Sp1998 c 3 s 19; 1999 c 241 art 1 s 54; art 5 s 4; 2000 c 489 art 2 s 1,28; 1Sp2001 c 5 art 3 s 82; 1Sp2001 c 6 art 1 s 42; art 3 s 3; 2007 c 146 art 2 s 13

**(F)(3) – Exhibit K: *Minn. Stat. § 120B.31 – System Accountability and Statistical Adjustments***

**120B.31 SYSTEM ACCOUNTABILITY AND STATISTICAL ADJUSTMENTS.**

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**Subdivision 1. Educational accountability and public reporting.**

Consistent with the direction to adopt statewide academic standards under section 120B.02, the department, in consultation with education and other system stakeholders, must establish a coordinated and comprehensive system of educational accountability and public reporting that promotes greater academic achievement, preparation for higher academic education, preparation for the world of work, citizenship under sections 120B.021, subdivision 1, clause (4), and 120B.024, paragraph (a), clause (4), and the arts.

**Subd. 2. Statewide testing.**

Each school year, all school districts shall give a uniform statewide test to students at specified grades to provide information on the status, needs and performance of Minnesota students.

**Subd. 3. Educational accountability.**

(a) The Independent Office of Educational Accountability, as authorized by Laws 1997, First Special Session chapter 4, article 5, section 28, subdivision 2, is established, and shall be funded through the Board of Regents of the University of Minnesota. The office shall advise the education committees of the legislature and the commissioner of education, at least on a biennial basis, on the degree to which the statewide educational accountability and reporting system includes a comprehensive assessment framework that measures school accountability for students achieving the goals described in the state's high school graduation rule. The office shall determine and annually report to the legislature whether and how effectively:

(1) the statewide system of educational accountability uses multiple indicators to provide valid and reliable comparative and contextual data on students, schools, districts, and the state, and if not, recommend ways to improve the accountability reporting system;

(2) a value-added growth indicator of student achievement over time estimates the effects of the school and school district on student achievement

and measures school performance, consistent with section 120B.35, subdivision 3, paragraph (b);

(3) data are available on students who do not pass one or more of the state's required GRAD tests and do not receive a diploma as a consequence, and these data are categorized according to gender, race, eligibility for free or reduced lunch, and English language proficiency; and

(4) the requirements under section 127A.095, subdivision 2, are met.

(b) When the office reviews the statewide educational accountability and reporting system, it shall also consider:

(1) the objectivity and neutrality of the state's educational accountability system; and

(2) the impact of a testing program on school curriculum and student learning.

**Subd. 4. Statistical adjustments; student performance data.**

In developing policies and assessment processes to hold schools and districts accountable for high levels of academic standards under section 120B.021, the commissioner shall aggregate student data over time to report student performance and growth levels measured at the school, school district, and statewide level. When collecting and reporting the performance data, the commissioner shall: (1) acknowledge the impact of significant demographic factors such as residential instability, the number of single parent families, parents' level of education, and parents' income level on school outcomes; and (2) organize and report the data so that state and local policy makers can understand the educational implications of changes in districts' demographic profiles over time. Any report the commissioner disseminates containing summary data on student performance must integrate student performance and the demographic factors that strongly correlate with that performance.

**History:**

1996 c 412 art 7 s 2; 1997 c 1 s 2; 1998 c 397 art 4 s 3,4,51; art 11 s 3; 1998 c 398 art 5 s 10,55; 2003 c 130 s 12; 1Sp2005 c 5 art 11 s 1; 2007 c 146 art 2 s 10; 2009 c 96 art 2 s 9-11

**(F)(3) – Exhibit L: Minn. Stat. § 120B.024 Graduation Requirements: Course Credits**

**120B.024 GRADUATION REQUIREMENTS; COURSE CREDITS.**

(a) Students beginning 9th grade in the 2004-2005 school year and later must successfully complete the following high school level course credits for graduation:

- (1) four credits of language arts;
- (2) three credits of mathematics, encompassing at least algebra, geometry, statistics, and probability sufficient to satisfy the academic standard;
- (3) three credits of science, including at least one credit in biology;
- (4) three and one-half credits of social studies, encompassing at least United States history, geography, government and citizenship, world history, and economics or three credits of social studies encompassing at least United States history, geography, government and citizenship, and world history, and one-half credit of economics taught in a school's social studies, agriculture education, or business department;
- (5) one credit in the arts; and
- (6) a minimum of seven elective course credits.

A course credit is equivalent to a student successfully completing an academic year of study or a student mastering the applicable subject matter, as determined by the local school district.

(b) An agriculture science course may fulfill a science credit requirement in addition to the specified science credits in biology and chemistry or physics under paragraph (a), clause (3).

(c) A career and technical education course may fulfill a science, mathematics, or arts credit requirement in addition to the specified science, mathematics, or arts credits under paragraph (a), clause (2), (3), or (5).

**History:**

2003 c 129 art 1 s 6; 2004 c 294 art 2 s 4; 2006 c 263 art 2 s 4; 2007 c 146 art 2 s 5

**(P)(2) – Exhibit A: *Minnesota STEM Overview***

**Minnesota Department of Education**  
**Introduction to Capacity Building and Sustaining**  
**Minnesota STEM Initiatives**  
**2009**

Minnesota has long been a nation leading state, by many indicators, in K-12 education. However, as global economics and demographics change quickly and dramatically, Minnesota's Governor Pawlenty has issued a call to action to Minnesotans that nation leading is not enough to sustain the same quality of life for future generations; Minnesota needs to move from nation leading to world competing. In 2005, the Governor led the Minnesota legislature to sign into law a requirement that all K-12 academic standards be College Ready and Work Ready and that our state math standards include the requirement that Algebra be taught to all students in the 8<sup>th</sup> grade.

Since then, the Minnesota Department of Education (MDE) has revised its math standards to be more rigorous with the goal of all students graduating proficient on Algebra II. Additionally, Minnesota is now revising its K-12 Academic standards in science to include engineering design standards. A few years ago Minnesota accepted the free gift from Para Technical Corporation of Pro-Engineering Computer Aided Design Software for all interested schools in Minnesota. This gift spawned a growth of interested, trained teachers and programs in pre-engineering and engineering curriculum, including but not limited to Project Lead the Way programs, in schools all over Minnesota. Minnesota's Career and Technical educators have been leaders in bringing rigorous academic math and science to life in these engineering design programs.

To support the increasing rigor and relevance level of the new K-12 Academic standards in math and science as well as technology and engineering, the Minnesota Department of Education has implemented a number of STEM initiatives in professional development for teachers and education leaders to hone their skills in leading STEM initiatives, including school redesign, data driven decision making, professional learning communities and rigorous, relevant lesson planning.

The Minnesota Department of Education, under the leadership of Governor Pawlenty, and in concert with many other state agencies, set out to build a "Nation Leading to World Competing" Minnesota STEM education system in Minnesota in 2004. First Minnesota, increased the rigor and of focus of K-12 Academic Math Standards to expect students to:

- learn the conceptual building blocks of Algebra concepts in the elementary years and

- accomplish **Algebra** standards in the **eighth grade** mathematics like their counterparts do internationally AND
- to pass Algebra II to graduate

As a result, the Minnesota was able to decrease the teaching of math concepts categorized as “other” by more than 85% (source, 2007 TIMMS results).

Next, Minnesota increased the rigor and focus of the K-12 Academic Science Standards to require all students to

- pass Biology to graduate
- pass two other science classes graduate.
- pass either Physics or Chemistry to graduate
- learn the engineering design process standards to the science standards, K-12
- learn technology throughout their science coursework K-12.

As a result, Minnesota students exhibited a 9 % gain in science test proficiency on the Minnesota Comprehensive Assessment Science Exam last year. Minnesota NAEP Scores Compared to 2007 have also show strong performance on both Math and Science:

Minnesota (249) has one of the highest scale scores for fourth grade math behind Massachusetts (252) and New Hampshire (251). No other state had a significantly higher score than Minnesota: Four states had similar scores (Massachusetts, Vermont, New Hampshire and New Jersey) and the rest were significantly lower than Minnesota.

Minnesota fourth-grade students improved math scores by two points (from 247 to 249) exceeding the national average by ten points (249 compare to 239).

In eighth-grade, Minnesota (294) was second in the nation exceeded only by Massachusetts (299). Vermont, North Dakota and New Jersey and New Hampshire scored similar to Minnesota (293), and all other states scoring significantly lower. Eighth-grade students improved in math (from 292 to 294), mirroring the national average increase (from 280 to 282). Minnesota remains 12 points above the national average and only Massachusetts posted results statistically higher than Minnesota.

And, Minnesota benchmarked itself internationally by participating as a nation-state in the Trends in International Math and Science Test in 2007 so that Minnesota could compare its students to the international students whom they will be competing with for jobs. The results were favorable while at the same time, a needed-systems check. Minnesota has experience some national accolades for Minnesota student progress and performance compared to other nations.

- Minnesota's 4<sup>th</sup>-grade performance gain in math was among the largest of any of the 16 countries that participated in both the 1995 and 2007 TIMSS
- In 2007 4<sup>th</sup>-grade math, four nations scored significantly higher than Minnesota; three were not significantly different than Minnesota; and 29 nations score significantly lower than Minnesota
- In 2007 8<sup>th</sup>-grade math, only five nations scored significantly higher than Minnesota; and 44 nations score significantly lower than Minnesota
- In 2007 science, Minnesota maintained its relatively high level of performance being outperformed by very few countries at either 4<sup>th</sup> or 8<sup>th</sup> grade and significantly outperforming the U.S. at grade 8

Minnesota has established a comprehensive system of high school redesign which has resulted in over 40 high schools retooling around STEM and college and career ready strategies for their students. This has led our state not only to continue to outperform the nation as we had in the past but also to see statistically significant increases in the college readiness scores of Minnesota graduates on the Math and Science portions of the ACT

| <b>% of 2009 Students meeting ACT College Readiness Benchmarks</b> |                |                |                    |
|--|----------------|----------------|--------------------|
|  | <u>MN 2005</u> | <u>MN 2009</u> | <u>Nation 2009</u> |
| English  | 76%            | <b>78%</b>     | 67%                |
| <b>Mathematics</b>   | <b>53%</b>     | <b>57%</b>     | 42%                |
| Reading  | 61%            | <b>65%</b>     | 53%                |
| <b>Science</b>   | <b>37%</b>     | <b>39%</b>     | 28%                |
| All four areas   | 29%            | <b>32%</b>     | 23%                |

Under the MDE STEM strategic plan, Minnesota believes that the rigorous and relevant planning, courses and experiences of the students need to be bridged seamlessly for students back and forth across the academics and the relevance strategies for improving STEM equity in the K-12 education system. It is over this seamless bridge, built with systemic reforms of the entire K-12 education system, that the MDE believes we can provide equitable opportunities for STEM across all STEM student groups and narrow the achievement gap once and for all. There for, summarized below is a series of summaries of ongoing STEM initiatives that have created the capacity and infrastructure for the MDE to be at a point now to be able to further our systemic reforms that within a STEM theme through the infrastructure as summarized in these ongoing comprehensive initiatives.

## **Minnesota's Structure of Perkins Consortia**

### ***What is it:***

Envisioning a seamless system of career and technical education programs beginning in high school and continuing into the state's community and technical colleges, Minnesota developed a State Plan under the 2006 reauthorization of the Carl D. Perkins Career and Technical Education Act in which recipients of funds established formal consortia of high schools and colleges. Twenty six consortia were formed, each with at least one secondary school district and at least one Perkins-eligible college, and each has developed a single plan to govern career and technical education programming beginning no later than grade 11 and continuing for at least two years beyond high school. Secondary and postsecondary Perkins funds are combined at the local level to support career and technical education programming.

### ***Positive outcomes:***

Relationships among secondary schools and 2-year colleges have been strengthened and curriculum is aligned between high schools and colleges as never before. Regional articulation agreements are developing as each consortium addresses credit transfer through articulation agreements, concurrent enrollment, or college attendance under Minnesota's postsecondary education options legislation. Secondary and postsecondary leaders are developing collaborative strategies to address accountability measures under Perkins, including nontraditional participation and completion.

## **Career and Technical Education Programs of Study**

### ***What is it:***

A critical component of the Carl D. Perkins Career and Technical Education Act is for states to develop and approve Programs of Study, non-duplicative sequences of courses beginning no later than grade 11 and continuing through at least two years of preparation beyond high school. Programs of Study differ from previous efforts to incorporate academic concepts into career and technical education by expecting collaborative work among career and technical teachers and their academic colleagues to reinforce the academic work completed both within and outside the career and technical education program. Minnesota has made identification and development of Programs of Study a requirement for each consortium under the Perkins Act and has developed many tools that will assist school districts and colleges in this work. Programs of Study templates have been prepared and disseminated both through face-to-face professional development and via electronic means on the state's career and technical education website housed at the Minnesota State Colleges and Universities. An electronic template is also under development in which school districts will be able to download course information to allow students to develop individual plans. Plans are underway to conduct regional workshops on Program of Study development and implementation in the fall of 2008, with each

participating Perkins consortium bringing a team of eight that includes secondary and postsecondary teachers, administrators and counselors. Special emphasis on nontraditional participation and completion will be part of that training. Workshops will also be conducted in the spring of 2009 to help Perkins consortia prepare plans for the 2009-2010 year, and the intent is to again focus on nontraditional participation and completion within those workshops.

***Positive outcomes:***

Through collaborative work among academic and career and technical education teachers, a greater understanding is formed of academic concepts and how they are used in authentic settings. The modeling of collaboration by instructional staff helps students to better see academics used in context and moves learning away from isolated concepts toward holistic understanding. Discussions are occurring around Program of Study development that will help all teachers to understand how their work fits within a broader goal of future student success.

**State Technical Assistance Academy**

***What is it:***

Minnesota applied for, and was selected to participate in, the 2008 State Technical Assistance Academy conducted by the technical assistance team of the Office of Vocational and Adult Education at the US Department of Education, the Academy for Educational Development, MPR Associates Inc., and the National Association of State Directors of Career Technical Education Consortium. The 2008 Academy focused on preparing underrepresented students for success in nontraditional occupations. Minnesota's 6-person team, including the state CTE director, staff from the Minnesota Department of Education and the Minnesota State Colleges and Universities Office of the Chancellor, and the education director for Kraus Anderson Construction, participated fully in this experience and developed an action plan to address five objectives:

1. Raise awareness of the importance and impact of the integration of nontraditional occupations into all Minnesota career and technical education programs.
2. Analyze the problem from a state and local perspective.
3. Identify strategies/tools to address the issues identified in the analysis/self-study.
4. Implement selected strategies/tools which increase integration of equal access and opportunity into the five goals developed under Minnesota's Perkins local application.
5. Evaluate the impact of this intervention plan and provide feedback for the next cycle of improvement strategies.

***Positive outcomes:***

Consensus was gained that issues of nontraditional participation and completion will best be addressed by incorporating equal access and opportunity into all career and technical education planning rather than treat nontraditional issues as a separate topic. This

consensus was timely in that planning for fall Programs of Study workshops was underway and issues of nontraditional participation and completion could be easily incorporated into that training. Individuals involved in programming, in data collection and in employing the completers of career and technical education programming shared thoughts on this issue from their own perspectives and came to agreement on a plan of action.

### **Project Lead The Way**

#### ***What is it:***

Project Lead The Way is a nationally-recognized curriculum of pre-engineering. States that have implemented Project Lead The Way, including Minnesota, have established solid pathways and articulated credit beginning in the middle grades and continuing to the university level. Minnesota has actively promoted Project Lead The Way in its secondary schools and has provided staffing through the Centers of Excellence at Minnesota State University – Mankato and at Bemidji State University to assist schools to implement programs. Several million dollars in equipment support has also been made available to Minnesota schools through the Wisconsin-based Kern Family Foundation. Minnesota has established a Project Lead The Way leadership team involving representatives from the Minnesota Department of Education, the Minnesota State Colleges and Universities, and the University of Minnesota.

#### ***Positive outcomes:***

More than 170 schools in Minnesota have implemented Project Lead The Way courses, with most undergoing certification that will allow credit articulation from high school to the University of Minnesota Institute of Technology. Project Lead The Way was a finalist for a 2007 Tekne Award recognizing leadership in Minnesota's engineering and technology sector.

### **Health Careers Promotion Grant**

#### ***What is it:***

Health careers provide another avenue for students to pursue study in science, technology, engineering and mathematics. The Minnesota Department of Education manages state funds appropriated by the legislature to the Minnesota Department of Health for the purpose of promoting participation in courses leading to careers in health related fields. Through this collaboration between the Minnesota Departments of Education and Health such interesting initiatives have been spawned as the health careers academy being implemented by the Rochester Public Schools and the Mayo Clinic. While health careers tend to be dominated by women, it is an intent of the health careers promotion grants to support participation in health preparation programs by students of both genders, and to promote participation in all areas of health by both women and men.

***Positive outcomes:***

The Department of Health has been able to effectively promote health career opportunities in Minnesota schools through collaboration with the Department of Education. Projects have been implemented throughout the state and in many cases local/regional hospitals and other health providers have teamed with schools through the provision of facilities and personnel for student instruction. Once an area of decline and low participation, health science technology education programs are now among the fastest growing career and technical education programs, and employment opportunities in health care remain among the highest-demand fields in the state.

**STEM Summits**

The Minnesota Department of Education partnered with the Minnesota high Tech Association and the Minnesota State Colleges and University System to conduct Eight Regional STEM Summits all around Minnesota from January 9, 2008 through February 26, 2008. More than 3,500 students, parents and teachers participated. Eight great host locations throughout the state donated space, time, resources, staff, tables, chairs, Internet access, power cords and other equipment to ensure that each summit was a great success.

Over 150 local businesses, higher education institutions, and community organizations provided **interactive and hands-on exhibits** of STEM careers and higher education opportunities.

This last component was key to the success of the STEM summits. The objective of the STEM summits was to provide interactive and hands-on ways to experience what the importance of math and science coursework and relevancy of it is to our every day world. Based on the survey results, the MDE believes that the STEM summits are one of Minnesota’s most effective modes of engaging students in rigorous and relevant STEM careers. Teachers expressed surprise at the level of interactivity offered by the exhibitors – wishing that more of their students could be exposed to and participate in this level of hands-on learning.

Students and teachers were asked to complete evaluations of this event. When asked the question: “What do You Believe was the Most Valuable Thing You Learned at the STEM Summit You Attended?” Students reported:

- “More about jobs that exist in my community” 28%
- 22% Information/resources for students” 22%
- 10% Networking with STEM participants” 10%
- 26% Reported “Better understanding of STEM education requirements/opportunities” 26%

When asked the question, “Rank your interest in pursuing STEM studies and careers after attending the Summit.” Students reported:

- “A lot of interest” 34%
- “Some interest” 53%
- “A small amount of interest” 10%
- “No Interest” 3%

For some students, the experience reinforced a long-standing interest in engineering, forensic science or other disciplines – But also intrigued students like Ashley Brossart, a 10th-grader from Rothsay, who previously thought math and science classes were, “*too much talk and not enough action.*” STEM education leaders in Minnesota have learned a lot from this model and could address the STEM equity pipeline through continued partnerships and activities as these.

These Minnesota STEM summits entailed

- **Working with 5** partners: Minnesota High Tech Association, Minnesota Business Partnership, Minnesota State Colleges and University System, University of Minnesota, Minnesota Chamber of Commerce
- Holding **8** regional forums throughout the state with regional leaders in education and business to develop a STEM strategy
- Holding **8** Regional STEM Summits across the state in 2008 with interactive and hands on exhibits from for students about STEM careers in businesses in their hometown region
  - **Over 10,000** students, parents and teachers participated in events supported by local hosts as well as funding through an NGA grant.
  - **Over 150** Minnesota businesses, higher education institutions, and community organizations participated in the hosting

The resulted in more Minnesota students are interested STEM careers which is good news for a state where 90% of the job growth is in STEM career fields. Minnesota EPAS results indicate that in 2004, only 10.8 % of students were interested in STEM career fields. In 2009, 37% of students were interest in a STEM career field.

## **Lesson Study**

***What is it:***

With the goal of enhancing teacher quality and improving teaching/learning in math and science, 80 math and science (QTN) teachers from various regions across the state were trained in Japanese “Lesson Study” during the 2006-2007 school year. Through this process, they designed and refined lessons to improve student proficiency levels in math and science. Other outcomes included increased time spent on reflection about their own teaching practice, and increased observation of master teachers. Phase II of this initiative, conducted during the 2007-2008 school year, broadened the reach of Lesson Study in Minnesota. Additional training was conducted to further develop science teachers in a “train-the-trainer” model. These new trainers recruited one or more teams of science teachers in their home district to participate in Lesson Study. They then conducted a one-day training in the Lesson Study model and served as coaches for the observation and debriefing process.

***Positive outcomes:***

A cadre of math and science teachers across the state is prepared to provide training in Lesson Study. In a Zoomerang Survey of participants conducted in March of 2007, 79% of respondents reported an increased/greatly increased amount of time reflecting on their own teaching, and 65% reported that Lesson Study was very important/ critical to improving lessons in their content area.

An electronic “clearinghouse” is being created to provide statewide access to the lessons that were developed

**Sally Ride Science Careers Curriculum**

***What is it:***

The Minnesota Department of Education partnered with Sally Ride Science Foundation to pilot a supplementary science curriculum intending to increase student interest in science and science careers. Developed for middle school and upper elementary students, this curriculum is designed to encourage students, especially girls, to expand their interests and consider career possibilities in science through the use of diverse role models, engaging activities, and specific content that supports the Minnesota Science Standards.

Thirteen elementary and/or middle schools were selected to receive pilot classroom sets of supplementary materials. Participating teachers were trained on how to implement the materials and provided with strategies and tools to increase engagement and enhance real world connections to science curriculum.

***Positive outcomes:***

Teachers were enthusiastic participants in a hands-on, engaging approach to encourage and empower young women to pursue their curiosity and interest in math, science, and

technology. Students, both male and female, took a specially designed “Survey of Student Engagement in Science” at the beginning and end of this three month pilot. Data collected at the beginning of the project indicated that 35% of the 753 students involved were interested in a future career in science, technology, or engineering. Additionally, 41% reported that they never or only occasionally were asked to explain science information in their own words; 53% indicated they never or only occasionally were asked to apply science information to new ideas or problems; and, 61% reported they never or only occasionally were asked to organize and combine science information to come up with new ideas and projects. Data collected at the end of the pilot is currently being collated to measure the impact of the training on student interest and teacher practice.

### **STEM Innovative Grants:**

#### ***What is it:***

As part of a National Governor’s Association Honor State Grant, the Minnesota Department of Education awarded a total of 28 incentive grants to high schools across the state. Grants were available in the following areas: Digital Content, Lighthouse Action Research, Technology/Engineering Design, Transition Point Remediation in Mathematics and Science, and Career and Technical Education programs that lead to industry certification. The term of each grant was from spring 2005 to July, 2008.

T.E.D. (Technology/Engineering/Design) and S.T.E.M. (Science/ Technology/ Engineering/ Mathematics) Course Development Grants were designed for the purpose of developing new high school courses in T.E.D. or S.T.E.M. or for embedding T.E.D. in existing science and/or mathematics courses. The intent is to enhance the rigor and relevance of these courses as well as to increase enrollment in and completion of high school courses in these disciplines.

Transition Point Remediation for Mathematics and Science Grants provided funds for the purpose of expanding existing or establishing new mathematics and/or science remediation programs at the 8-to-9 and/or the 12-to-postsecondary grade levels. Recipients are expected to share program information and student achievement results.

Model Digital Content Program Grants were designed to encourage development of model digital content programs. The programs encompass one or more of grades 9-12 and include increasing technology-based collaborations for high school students and a long-term increase in student interest in mathematics and science.

Lighthouse High Schools—STEM Curriculum Grants were provided for four high schools to implement action research driven initiatives to improve student learning in mathematics and science courses. Site action plans included a report of current data about student learning, the implementation of changes in teaching practices, and a report on the measurable results of these changes on student achievement and engagement/motivation in mathematics and science courses.

Career and Technical Education Industry Certification Program Grants were developed to expand the number and quality of career and technical education programs in Minnesota high schools that lead to recognized industry certifications/credentials. An assessment was conducted of regional strengths and needs related to career and technical education programs leading to industry certification, and of regional partnerships involving high schools, postsecondary institutions, and businesses that assist in the development and expansion of career and technical education programs leading to industry certification. Following the survey, eight contracts for regional development/expansion of certification programs in career and technical education were awarded.

***Positive outcomes:***

Specific results from each site are being collected and posted on the MDE website. Grantees have agreed to serve as models and have shared tools, strategies, plans, and data with other high schools across the state. A STEM Symposium was held in June, 2007, for these sites to network and dialogue about current progress and implications of their work.

**STEM Cohort Schools**

***What is it:***

The *Systemic STEM School Redesign* grant program was designed to enhance the innovative capacity of Minnesota's economy by providing support for the redesign of K-12 education through STEM initiatives. Awards were made in January, 2008 to twelve proposals for "STEM cohort schools" that integrated the revised Minnesota math standards into a new or existing course(s) or series of linked learning opportunities so that all students discover, explore, and/or solve real-life problems through the integration of science, technology, engineering and mathematics content. These schools have also agreed to provide technical assistance to other schools and/or districts and serve as STEM models for other schools and/or districts. Models must focus on rigor and relevance to ensure that every student is STEM-literate upon graduation from high school, and that a greater number of students move onto postsecondary education or advanced training in STEM-related fields.

***Positive outcomes:***

Participating schools have agreed to the following:

- Integration of revised math standards into other disciplines, programs, and learning activities
- Participation in on-going, job-embedded professional development in mathematics provided by the regional math and science teacher academy

- Collaboration with higher education, parents, community members, businesses and other non K-12 partners
- Creation of personalized learning environments for all students, with the support of parents and other adult mentors
- Provision of technical assistance to help other schools implement STEM initiatives
- Agreement to serve as a STEM model for other Minnesota schools

Minnesota has developed and supported:

- **A total of 52 Schools Minnesota schools have taken on significant redesign efforts around STEM:**
- **12 regional STEM innovation schools across the state have retooled around STEM**
- 7 incentive grants for technology-engineering-design (TED) programs
- 3 incentive grants for new Lighthouse High Schools as models for STEM
- 5 incentive grants for high school programs using digital content
- 5 incentive grants for model programs in math, science remediation at transitions points
- 8 incentive grants for career pathways leading to industry certification
- 12 middle schools piloted high interest supplementary materials designed to increase student engagement in science
  - 300 middle school girls participated in a day of learning with astronaut Sally Ride
  - Over 1000 Minnesota students participated in a state fair activity of technical and engineering learning activity by **building an electrical circuit and over 1,000 motorized fans**

## Surveys of Enacted Curriculum

### *What is it:*

The Math SEC/ Data Retreat Project was designed to assist selected school districts to examine their math curriculum and instruction and analyze it in light of the current and new Minnesota Math Standards. This pilot project, which took place from January to March, 2008, involved a partnership between the Minnesota Department of Education (MDE) and the Southeast Service Cooperative (SSC). It included facilitators from all of the Minnesota Service Cooperatives (MSC) and 16 public schools districts throughout the state of Minnesota. The goal was for participating school district teams to be empowered with knowledge and skills, using data analyses produced by the Surveys of Enacted Curriculum and other data, to plan targeted math professional and curriculum development aligned with the new state mathematics standards. The purpose of the initiative was also to pilot a process of fitting SEC data into the context of a data workshop attended by a district leadership team.

***Positive outcomes:***

The results of this pilot project will inform future state and district use of the Surveys of Enacted Curriculum as well as provide foundational information in the development of a state data retreat model.

**www.getSTEM-mn.com**

***What is it?***

MDE is working with Thomson Reuters and the Minnesota High Tech Association to develop “GetSTEM”, an online clearinghouse portal, to connect students and teachers with business resources. Clearinghouse opportunities will include professional development, job shadowing, internships and best practices locally and across the state.

Key components of the tool include:

- *Just Ask: Request List*- a place for teachers to ask the business community or peers for resources and services
- *Just Offer: Give List*- a site for businesses looking to help educators by offering materials and supplies or services (such as internships and informational interviews)
- *STEM Events*- a STEM calendar that can be filtered
- *STEM Successes* - repository for best practices related to STEM, including teacher, student, and business spotlights
- *My STEM*- a system that tags specific information personalized and requested by the user and avoids system overload





### ***Positive Outcomes:***

The system is currently being tested by teachers from the STEM Cohort Schools. The plan is continue to populate the site with collaborating partners and information during the 2008-2009 school year. Minnesota High Tech Association will coordinate the site and monitor pilot site implementation, in partnership with the Minnesota Department of Education.

Communicating with Business partners to develop a first of its kind digital STEM Clearinghouse for teachers and businesses, connecting needs of teacher with offers of support by the business at [www.getSTEM-mn.com](http://www.getSTEM-mn.com) has resulted in

- 60,583 Total Website Views, 7,772 of these are from the past month
- 10,242 Total Unique Visitors to the website in 9 months
- 134 individual's volunteer hours committed to STEM in less than a year
- 165 Total teachers Postings of requests for business resources
- 608 Total getSTEM Profiles
- 368 Educator Profiles
- 240 Business Profiles

**Result: Since February, 112 Minnesota classrooms have received STEM resources from Minnesota Businesses totaling as much as \$400,000 in contributions and priceless real world connections for Minnesota classrooms.**

### **MN Model of Data Analysis and Decision Making**

The MN Model of Data Analysis and Decision Making empower school and district leadership teams to use their own data to inform their school improvement process. This process provides foundational information about retreat framework, procedures and outcomes. Districts are able to identify of data patterns, strengths, and gaps, and use data analysis for the development of school's educational plans, staff development plans, professional learning communities, and/or grade/dept level groups planning. A key component of the model is its ability to focus school and district work on the critical learning needs of students and align professional development plans, resources and time towards the solution. Through careful data analysis this process will allow teachers to set professional growth goals that will enhance their skills and abilities to teach the STEM disciplines. Additionally, establish professional learning communities to focus on meeting student achievement goal(s) while embedding a data analysis and decision-making process.

### **STEM Mentor Program**

The University of Minnesota Science, Technology and Mathematics Mentorship Program (STEMMP), initially supported through a Minnesota's Department of Education's National Governors Association Grant, was designed and implemented to provide one-year online mentoring support for untenured secondary math, science, career and technical education teachers throughout Minnesota. The program goals focused on improving teacher job satisfaction to increase teacher retention and teacher effectiveness. STEMMP used an online learning management system for meeting different program goals: (1) mentor-mentee chat space for unstructured conversations, (2) small learning communities organized by subject matter and grade level to for structured case discussions on dilemmas of practice, (3) professional inquiries into individualized areas of concern or an area of teaching they would like to improve and (4) blogs for weekly entries of teacher reflection. Since the grant funded year, the University has continued the program with a focus on new science teachers and expanded the use of technology to increase interactions between mentors, mentees and with others in the learning communities.

### **Principal's Role in Professional Learning Communities**

Although the purpose of leadership is the improvement of instructional practice and performance regardless of role, research supports a need to amplify principal influence in the work of professional learning communities. The Math and Sciences Teacher Academies Grant Program includes state department training for school administrators to adopt, adapt, and expand mathematics professional learning communities by understanding the supporting conditions and strategies necessary to effectively implement and sustain professional learning community work. The training will be expanded to other content areas. In the training administrators think anew about instructional "quality" which places adult and student learning at the center of schools. A balance between encouraging autonomy and innovation for teachers with the need for professional accountability in shared governance schools is an essential training component. Live networks to share best practices are being initiated.

### **MSP (Math and Science Partnership) Grants**

The Math and Science Partnership Grants are federally funded grants administered by the Academic Improvement and Teacher Quality Program (AITQ) in the Office of Elementary and Secondary Education (OESE) under the No Child Left Behind Act of 2001, Title II, Part B. The MSP grants support partnerships between the mathematics, science, and /or engineering faculty of institutions of higher education and **high need** school districts. The program's goal is to increase student achievement through increasing teachers' content knowledge and pedagogical skills. Currently Minnesota is funding 5 active three year MSP grants. All MSP grants are reviewed annually. Success is measured on pre and post testing of teacher content knowledge and student success is based on state testing performance. Minnesota currently funds one MSP grant in science that proposes a 3-year professional development project for thirty grades 5-8 math and science teachers statewide

servicing large populations of American Indian students. This grant has the intention of impacting an average of 5,000 students each year, the majority of which are American Indian. While all five of our current grants target high need school districts, this grant also targets a particular population to measure success. Minnesota recognizes the need to expand options for women and girls in science, technology, engineering and math. Minnesota believes the important next step in our quest for proficiency for all students in STEM literacy is its acceptance as a new state in the STEM Equity Pipeline Project and the assistance this project would provide.

### **MSTA (Math and Science Teacher Academy)**

The Math and Science Teacher Academy is a new initiative in our state that is administered through state funds and NGA grant money for the purpose of: emphasizing the development of a statewide Teacher Center infrastructure focused on the improvement of mathematics and science instruction and learning to fulfill the requirements of the 2007 Minnesota Statutes § 122A.72 Teacher Centers. Teacher Centers, as identified in the statute, are expected to use quality professional development and technical assistance to assist teachers in:

- a) learning about effective pedagogical approaches to implement Minnesota's content standards;
- b) mastering the use of multiple instructional approaches to differentiate instruction as well as engage students; and,
- c) improving skills to diagnose student learning needs using assessment of student performance.

The first year of this initiative is focused on mathematics and requires partnerships that include at least one Minnesota institution of higher education (representation from higher education must include at least one member of the mathematics faculty OR the mathematics education department) AND at least one K-12 public school district OR regional education service cooperative. The Math and Science Teacher Academy (MSTA) is comprised of 9 regional teacher centers. MSTA regional teacher centers need to specifically demonstrate implementation of a:

- Plan for formation of the Teacher Center infrastructure-including supporting and capitalizing on the plan for STEM cohort schools in their region
- Plan to refine and deliver the grades 6-8 Algebra Connected to Number module
- Plan to develop an additional K-12 Mathematics Teacher Module
- Plan to provide technical assistance to the region they serve

Currently the Math and Science Teacher Academy is made up of nine regional teacher centers. All centers designed their Teacher Center plans based on the needs of the region they serve. The Minnesota Department of Education is fully prepared to provide technical assistance to its regional teacher centers and their unique needs in our goal of providing a

STEM education for all. Acceptance as a new state in the STEM Equity Pipeline Project would mean valuable insights and training in expanding option for Women and Girls in science, technology, engineering and math.

With more than 4.25 million dollars over 4 years for Math and Science Teacher Academies, teacher mentorship and other training, Minnesota has developed:

- **59** participating schools from 22 districts participated in Middle School Algebra Professional Development of the teacher academies\
- Over **1200** teachers trained to train other teachers in Middle School Algebra teaching strategies
- **100+** teachers trained in ProEngineer computer-aided design software which is used by top national companies like Caterpillar, 3M and many medical technology companies
- **2** Digital Content Conferences- October 2006 at the Science Museum and in Alexandria
- **40** math & science teachers trained in Japanese Lesson Study which is considered the premier teacher development process internationally
- **2000** teachers participated in Surveys of Enacted Curriculum to align their classroom curriculum with state academic standards and best practices
- **75** mentor relationships established among math, science and career and technology teachers

### **Minnesota Department of Education Partnership with the Science Museum of Minnesota**

In June of 2007, the MN State Legislature awarded funding to the Science Museum, via the Minnesota Department of Education, for *MUSE in Minnesota*. *MUSE in Minnesota* is driven by a vision of a STEM-literate Minnesota citizenry and a mission to promote rigorous STEM education for all and to eliminate the racial achievement gap. In addressing this vision and mission, it is designed according to the following Guiding Principles:

- STEM education and 8th grade algebra readiness are critical to success in higher education and the work force.
- Addressing Minnesota's achievement gap in STEM requires explicit attention to cultural competence at both the individual and institutional level.
- All students can learn, and student learning is the arbiter of success.
- Continuity and coherence within STEM curricula, classrooms, schools, districts, and regions are essential components of systems change.

Through *MUSE in Minnesota*, the Museum will expand its capacity to serve as an incubator to mobilize and support partnerships throughout the state. These partnerships – both existing and potential – will deliver rigorous professional development and provide

sustained support for classrooms, schools, and districts engaged in STEM reform. *MUSE in Minnesota* will collaborate with an array of partners including the Minnesota State Colleges and Universities (MnSCU), the University of Minnesota (UMN), SciMathMN, and the Minnesota Department of Education's (MDE) The Math and Science Teacher Academy (MSTA), the associated STEM School Redesign effort, and the Math Science Partnerships (MSP).

Over the course of two years, *MUSE in Minnesota* will work with these partners and districts around the state to create an infrastructure that will provide professional development, enhanced STEM curricular materials through Science House materials, and exemplary classroom and school lessons through the Outreach Program.

Beginning in the winter of 2007–2008, MUSE will: 1) develop and deliver a broad array of STEM workshops and seminars throughout the State, 2) engage schools and districts in a sustained effort of systems change around STEM teaching and learning, 3) conduct regional planning and network building to facilitate and support professional development work, 4) acquire educational resources for Science House materials, and 5) design and implement a system for program and materials distribution throughout the State. The emphasis in Year 1 of this effort will be to build an effective statewide system and to pilot programs; in Year 2 the emphasis will be to implement programs on a broad scale.

Minnesota's acceptance as a new state in the STEM Equity Pipeline Project would help us better focus on expanding options for Women and girls in science, technology, engineering and math in both acquiring resources and materials and designing and implementing programs and to eliminate achievement gaps based on gender.

(P)(2) – Exhibit B: Project Lead the Way Enrollment Report

|  | 09             | 10             | 11             |
|--|----------------|----------------|----------------|
| ESD Seniors                                    | 19             | 20             | 25             |
| ESD Total Students                             | 19             | 36             | 44             |
| ESD Females                                    | 7              | 5              |                |
| ESD Males                                      | 10             | 31             |                |
| ESD Seniors                                    | 29             | 55             | 52             |
| EE Total Students                              | 305            | 321            | 37             |
| EE Females                                     | 115            | 39             |                |
| EE Males                                       | 190            | 52             |                |
| EE Seniors                                     | 26             | 41             | 23             |
| EE Total Students                              | 98             | 94             | 40             |
| EE Females                                     | 23             | 7              |                |
| EE Males                                       | 75             | 87             |                |
| EE Seniors                                     | 47             | 13             | 6              |
| EM Total Students                              | 182            | 192            | 81             |
| EM Females                                     | 17             | 12             |                |
| EM Males                                       | 165            | 75             |                |
| EM Seniors                                     | 129            | 147            | 136            |
| EN Total Students                              | 321            | 358            | 321            |
| EN Females                                     | 58             | 75             |                |
| EN Males                                       | 263            | 283            |                |
| EN Seniors                                     | 149            | 154            | 85             |
| EO Total Students                              | 446            | 402            | 277            |
| EO Females                                     | 44             | 41             |                |
| EO Males                                       | 402            | 361            |                |
| EO Seniors                                     | 261            | 254            | 231            |
| EP Total Students                              | 1,598          | 1,482          | 1,821          |
| EP Females                                     | 730            | 705            |                |
| EP Males                                       | 1,272          | 1,116          |                |
| EP Seniors                                     | 296            | 576            | 286            |
| EP Total Students                              | 2,626          | 2,738          | 1,997          |
| EP Females                                     | 421            | 433            |                |
| EP Males                                       | 2,205          | 2,305          |                |
| G11 9th Grade Total Students                   | 862            | 1,895          |                |
| G11 9th Grade Females                          | 340            | 294            |                |
| G11 9th Grade Males                            | 522            | 602            |                |
| G11 9th Grade Total Students                   | 10,663         | 7,452          | 5,588          |
| G11 9th Grade Females                          | 4,576          | 3,448          |                |
| G11 9th Grade Males                            | 6,087          | 4,004          |                |
| G11 10th Grade Total Students                  | 11,678         | 7,275          | 5,471          |
| G11 10th Grade Females                         | 5,714          | 3,597          |                |
| G11 10th Grade Males                           | 5,964          | 3,678          |                |
| G11 10th Grade Total Students                  | 4,704          | 2,702          | 2,384          |
| G11 10th Grade Females                         | 2,426          | 1,314          |                |
| G11 10th Grade Males                           | 2,278          | 1,388          |                |
| Minority % of PLTW Students Reported           | 25%            | 25%            |                |
| High School Total Students                     | 5,595          | 5,258          |                |
| High School Females                            | 1,895          | 895            |                |
| High School Males                              | 4,500          | 4,363          |                |
| HS 146 Seniors                                 | 1,285          | 1,238          | 1,895          |
| Middle School & G11 Total Students             | 27,907         | 18,445         |                |
| Middle School & G11 Females                    | 13,450         | 8,751          |                |
| Middle School & G11 Males                      | 14,457         | 9,694          |                |
| TOTAL Schools Reporting                        | 116            | 119            | 80             |
| Total Number of PLTW Schools in the State      | 161            |                |                |
| TOTAL PLTW Students Reported                   | 33,582         | 23,783         | 17,253         |
| Total School Population from Schools Reporting | 139,210        | 121,842        | 86,502         |
| <b>MINNESOTA</b>                               | <b>09 Data</b> | <b>10 Data</b> | <b>11 Data</b> |

## Minnesota PLTW Enrollment Report

[www.pltw.org](http://www.pltw.org)

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PLTW in Minnesota 2009-10

| City          | School                          | GTT | IED | POE | DE | CEA | CIM | AERO | BE | EDD |
|---------------|---------------------------------|-----|-----|-----|----|-----|-----|------|----|-----|
| Albert Lea    | Albert Lea HS                   |     | x   | x   |    |     |     |      |    |     |
| Albert Lea    | Albert Lea-Southwest MS         | x   |     |     |    |     |     |      |    |     |
| Albertville   | St Michael-Albertville MS West  | x   |     |     |    |     |     |      |    |     |
| Alexandria    | Alexandria-Discovery MS         | x   |     |     |    |     |     |      |    |     |
| Alexandria    | Alexandria-Jefferson HS         |     | x   | x   |    |     | x   |      |    |     |
| Anoka         | Anoka Hennepin Secondary        |     | x   | x   | x  |     | x   | x    | x  |     |
| Apple Valley  | Apple Valley HS                 |     | x   | x   |    |     |     |      |    |     |
| Badger        | Badger HS                       | x   | x   |     |    |     |     |      | x  |     |
| Bagley        | Bagley Jr Sr HS                 | x   | x   | x   | x  |     | x   |      |    |     |
| Bagley        | Bagley Elementary School        | x   |     |     |    |     |     |      |    |     |
| Baudette      | Lake of the Woods Secondary     | x   | x   | x   |    |     |     |      |    |     |
| Bemidji       | Bemidji MS                      | x   |     |     |    |     |     |      |    |     |
| Bemidji       | Bemidji HS                      |     | x   | x   | x  |     |     |      |    |     |
| Blaine        | Anoka Hennepin-Blaine HS        |     | x   | x   | x  | x   |     |      | x  |     |
| Bloomington   | Bloomington-Jefferson HS        |     | x   | x   | x  | x   |     | x    |    |     |
| bloomington   | Bloomington-Oak Grove MS        | x   |     |     |    |     |     |      |    |     |
| bloomington   | Bloomington-Olson MS            | x   |     |     |    |     |     |      |    |     |
| Bloomington   | Bloomington-Valley View MS      | x   |     |     |    |     |     |      |    |     |
| Bloomington   | Bloomington-Kennedy HS          |     | x   | x   | x  |     |     |      |    |     |
| Blue Earth    | Blue Earth Area HS              |     | x   |     |    |     |     |      |    |     |
| Brainerd      | Brainerd HS                     |     | x   | x   | x  |     |     |      | x  |     |
| Brandon       | Brainerd-Forestview MS          | x   | x   |     |    |     |     |      |    |     |
| Brooklyn Park | Osseo-North View Junior HS      | x   | x   |     |    |     |     |      |    |     |
| Brooklyn Park | Osseo-Park Center Senior HS     |     | x   | x   | x  |     |     |      |    |     |
| Brooklyn Park | Osseo-Brooklyn Junior HS        | x   |     |     |    |     |     |      |    |     |
| Burnsville    | Burnsville Metcalf Junior High  | x   |     |     |    |     |     |      |    |     |
| Burnsville    | Burnsville Nicollet Junior High | x   |     |     |    |     |     |      |    |     |
| Burnsville    | Burnsville Senior HS            | x   |     |     |    |     |     |      |    |     |
| Byron         | Byron HS                        |     | x   | x   |    |     |     |      |    |     |
| Cass Lake     | Cass Lake-Bena HS               |     | x   | x   |    |     |     |      |    |     |
| Champlin      | Anoka Hennepin-Jackson MS       | x   |     |     |    |     |     |      |    |     |
| Chanhassen    | Chanhassen HS                   |     | x   |     |    |     |     |      |    |     |
| Chaska        | Chaska MS West                  | x   |     |     |    |     |     |      |    |     |
| Clearbrook    | Clearbrook Gonvick School       | x   | x   | x   | x  |     |     |      |    |     |
| Cokato        | Dassel-Cokato MS                | x   |     |     |    |     |     |      |    |     |
| Coleraine     | Greenway HS                     |     | x   |     |    |     | x   |      |    |     |
| Cottage Grove | South Washington-Cottage Grove  | x   |     |     |    |     |     |      |    |     |
| Cottage Grove | South Washington-Olman Jr. High |     |     |     |    |     |     |      |    |     |
| cottage grove | South Washington-East Ridge HS  | x   |     | x   |    |     |     |      | x  |     |
| cottage grove | South Washington-Lake Jr. High  | x   |     |     |    |     |     |      |    |     |
| Cottage Grove | Lakeview MS                     | x   |     |     |    |     |     |      |    |     |
| Cottonwood    | Lakeview HS                     | x   |     |     |    |     |     |      |    |     |
| Deer River    | Deer River HS                   |     | x   | x   | x  |     |     |      |    |     |
| Delano        | Delano MS                       | x   |     |     |    |     |     |      |    |     |

|                     |                                   |   |   |   |   |   |   |   |   |   |
|---------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|
| Duluth              | Duluth Central HS                 |   | x | x |   |   |   |   |   |   |
| Duluth              | Duluth East HS                    |   |   |   |   | x |   |   |   |   |
| Duluth              | Duluth-Denfeld HS                 |   | x |   |   | x |   |   |   |   |
| duluth              | Duluth-Morgan Park Middle         | x |   |   |   |   |   |   |   |   |
| Duluth              | Duluth-Woodland MS                | x |   |   |   |   |   |   |   |   |
| Eden Prairie        | Eden Prairie HS                   |   | x | x | x |   |   |   |   |   |
| Edina               | Edina-Valley View MS              | x |   |   |   |   |   |   |   |   |
| Elk River           | Elk River-Salk Pre-Engineering MS | x |   |   |   |   |   |   |   |   |
| Erskine             | Win-E-Mac HS                      |   | x |   | x |   |   |   |   |   |
| Farmington          | Farmington HS                     |   | x | x |   | x |   |   |   |   |
| Fergus Falls        | Fergus Falls Senior HS            | x | x |   |   |   |   |   |   |   |
| Fosston             | Fosston HS                        | x |   |   |   |   |   |   |   |   |
| Fridley             | Fridley HS                        |   | x | x | x |   |   |   |   |   |
| Fridley             | Fridley MS                        | x |   |   |   |   |   |   |   |   |
| Fridley             | Fridley MS                        | x |   |   |   |   |   |   |   |   |
| Gibbon              | GFW MS                            | x |   |   |   |   |   |   |   |   |
| Grand Rapids        | Grand Rapids HS                   |   | x | x | x | x |   |   |   |   |
| Hopkins             | Hopkins HS                        |   | x |   |   | x |   |   |   |   |
| Hopkins             | Hopkins North Junior High         | x |   |   |   |   |   |   |   |   |
| Hopkins             | Hopkins West Junior High          | x |   |   |   |   |   |   |   |   |
| Inver Grove Heights | Inver Grove Heights MS            | x |   |   |   |   |   |   |   |   |
| Long Lake           | Orono HS                          |   |   |   |   |   |   |   |   |   |
| Long Lake           | Orono MS                          | x |   |   |   |   |   |   |   |   |
| Mahtomedi           | Mahtomedi MS                      | x |   |   |   |   |   |   |   |   |
| Mahtomedi           | Mahtomedi HS                      |   |   | x |   |   |   | x | x |   |
| Mankato             | Mankato East HS                   |   | x | x |   | x |   |   |   | x |
| Mankato             | Mankato West HS                   |   | x | x |   | x |   |   |   |   |
| Mankato             | Mankato East Junior High          | x |   |   |   |   |   |   |   |   |
| Maple Grove         | Osseo-Maple Grove Senior HS       |   | x | x |   |   |   |   |   |   |
| Maple Grove         | Osseo-Maple Grove Junior HS       | x |   |   |   |   |   |   |   |   |
| Mapleton            | Maple River Schools               |   | x | x |   |   |   |   |   |   |
| Minneapolis         | Minneapolis South HS              |   | x | x | x | x | x |   |   | x |
| Minneapolis         | Minneapolis-North Community HS    |   | x |   | x |   |   |   |   |   |
| Minneapolis         | Minneapolis-Patrick Henry HS      |   | x | x |   | x | x |   |   |   |
| Minneapolis         | Minneapolis-Washburn HS           |   | x |   | x |   |   |   |   |   |
| Minneapolis         | Minneapolis-Afrocentric           | x |   |   |   |   |   |   |   |   |
| Minneapolis         | Minneapolis-Anthony MS            | x |   |   |   |   |   |   |   |   |
| Minneapolis         | Minneapolis-City View Magnet      | x |   |   |   |   |   |   |   |   |
| Minneapolis         | Minneapolis-Olson MS              | x |   |   |   |   |   |   |   |   |
| Minneapolis         | Minneapolis-Sanford MS            | x |   |   |   |   |   |   |   |   |
| Mankato             | Mankato-Dakota Meadows MS         | x |   |   |   |   |   |   |   |   |
| Moorhead            | Moorhead HS                       |   | x |   | x |   |   |   |   |   |
| Moorhead            | Moorhead-Horizon MS               | x |   |   |   |   |   |   |   |   |
| Nashwauk            | Nashwauk Keewatin HS              |   | x | x |   |   |   |   |   |   |
| Newfolden           | Marshall County Central HS        | x |   |   |   |   |   |   |   |   |
| Northfield          | Northfield HS                     |   | x | x |   |   |   |   |   |   |
| Northfield          | Northfield MS                     | x |   |   |   |   |   |   |   |   |



|          |                            |   |   |   |   |  |  |  |  |  |
|----------|----------------------------|---|---|---|---|--|--|--|--|--|
| Willmar  | Willmar Senior HS          |   | x | x | x |  |  |  |  |  |
| Willmar  | Willmar Junior High        | x |   |   |   |  |  |  |  |  |
| Winona   | Winona Senior HS           |   | x | x |   |  |  |  |  |  |
| Winthrop | Gibbon-Fairfax-Winthrop HS |   | x | x |   |  |  |  |  |  |

\*Highlighted schools indicated that more GTT students registered than were accepted.

MN Total Students Impacted

|              | 2008-09 | 2009-10 |
|--------------|---------|---------|
| <i>MS</i>    | 18,445  | 26,421  |
| <i>HS</i>    | 5,258   | 5,595   |
| <i>Total</i> | 23,703  | 32,016  |

MN Students with Access to PLTW

|                 |       |
|-----------------|-------|
| <i>MS</i>       | 31.1% |
| <i>HS</i>       | 28.5% |
| <i>Combined</i> | 29.5% |

**(P)(3) – Exhibit A: *Early Childhood Education Programs and Funding Overview***

**Early Childhood Family Education (ECFE)** – Minnesota’s parenting education program available through all school districts to all children ages birth to kindergarten entrance and their parents and their relatives. The program began in 1974 in six pilot sites and went statewide in 1984. State aid amount for 2009 is \$22 million; local levy is \$22 million.

**Educate Parents Partnership** – provides all parents, practitioners and child care providers with parent education information, child development resources and activities via the Internet. The legislature appropriated \$80,000 in 2007 to develop the website and \$50,000 each year is appropriated for maintenance and update.

**School Readiness** – Minnesota’s prekindergarten program to prepare children to enter kindergarten available in all school districts to children ages 3 to kindergarten enrollment. The program was established in 1991. State aid for 2009 is \$10 million.

**Head Start** – Minnesota began funding Head Start with state funds in 1988 and is one of 15 states that supplements federal Head Start funds with state funds. Of these states, Minnesota ranks third in amounts provided. State aid amount for 2009 is \$20 million.

**Early Childhood Health and Developmental Screening** – assists parents and communities in improving the educational readiness and health of young children through the early detection of factors that may impede children’s learning, growth and development. All Minnesota children must be screened prior to school enrollment; the state targets children ages 3 and 4 by reimbursing school districts a higher amount. Children are assigned the school district unique identifier at time of screening. Children may be screened in schools, health clinics, physician’s offices and other community settings. The program was established in 1977. State aid amount for 2009 is \$3.5 million.

**Child Care Assistance Program** – helps make child care affordable for low income families below 47% of state median income. The program was established in 1980. State aid amount for 2008 is \$88.8 million.

**Child Care Resource and Referral** – helps parents find child care and provides assistance to child care providers. Established in 1988. State aid amount for 2009 is \$1,210,000.

**Child Care Facility Loans** – provides loans to improve child care facilities, start up or expand services. State aid amount for 2009 is \$163,000.

**Family, Friend and Neighbor grant program** – provides early literacy and school readiness services to children in family, friend and neighbor child care settings. State aid amount for 2009 is \$368,000.

**Migrant child Care Program** is available statewide at locations where migrant families are employed in eligible agricultural work activities. State aid amount for 2009 is \$196,000.

**Early Childhood and School-age Professional Development** – provides professional development opportunities for early childhood care and education providers. State aid amount for 2009 is \$246,000.

**School Readiness Connections** is a pilot program of nine child care centers and five family child care providers serving approximately 225 children with the purpose of improving the quality and continuity of child care provided to children funding by Child Care Assistance Program. State aid amount for 2009 is \$257,000.

**(A)(2) – Exhibit H: *Stakeholder Letters of Support Overview and Letters***



**Race to the Top Letters of Support**

**Education Organizations**

Minnesota Department of Education  
Minnesota School Boards Association  
Minnesota Association of School Superintendents  
Minnesota Elementary School Principals' Association  
Minnesota Association of Secondary Principals  
Association of Metropolitan School Districts  
Minnesota Rural Education Association  
Minnesota Board of Teaching  
Minnesota Board of School Administrators  
Early Childhood Advisory Council  
Minnesota PTA  
Pacer Center  
Friends of Education  
Anoka-Hennepin School District  
Jordan School District  
Evansville School District  
Minnesota Association IB World Schools  
Minnesota Minority Education Partnership, Inc.  
African-American Leadership Forum Education Work Group

**Higher Education**

University of Minnesota  
Minnesota State Colleges and Universities  
Minnesota Private Colleges  
Minnesota Office of Higher Education  
Minnesota Career College Association  
Macalester College  
Center for School Change

**Business**

Minnesota Business Partnership  
Minnesota Chamber of Commerce  
Itasca Project  
Minnesota High Tech Association  
Thrivent Financial for Lutherans  
Qwest Minnesota

**Foundations and Non-Profits**

Bush Foundation

Minneapolis Foundation

Citizens League

Medtronic Foundation

The McKnight Foundation

General Mills Foundation

Volunteers of America

Minnesota Education Funders:

3M Foundation & Community Affairs

The Cargill Foundation

Robins, Kaplin, Miller & Ciresi Foundation

Curtis L. Carlson Family Foundation

LarsonAllen

The Bush Foundation

Qwest Communications

MN Community Foundation & The St. Paul Foundation

Target Community Relations

Travelers Foundation

Thomsen Reuters

**State of Minnesota**

Governor Tim Pawlenty

**Minnesota Congressional Delegation**

Congressman John Kline

Senator Amy Klobuchar

Senator Al Franken

Congresswoman Betty McCollum

Congressman John Paulsen

Congressman Keith Ellison

**Minnesota Legislature**

Representative Kurt Zellers, House Minority Leader

Senator LeRoy Stumpf, Senate E-12 Finance & Policy Chair

Representative Carlos Mariani, House K-12 Committee Chair

Representative Nora Slawik, House Early Childhood Finance and Policy Committee Chair

Senator Chuck Wiger, Senate E-12 Finance & Policy Deputy Chair

Senator Terri Bonoff

Senator Geoff Michel

Senator Kathy Saltzman

Senator Tom Saxhaug

Senator Dan Skogen

Representative Carol McFarlane  
Representative Jerry Newton  
Representative Pat Garofalo  
Representative Bud Nornes  
Representative Connie Doepke  
Representative Denise Dittrich  
Representative Keith Downey  
Representative Jim Abeler  
Representative Jenifer Loon

**Other**

Lakes Country Service Cooperative  
Northeast Country Service Cooperative  
Northwest Service Cooperative

*Minnesota*  
**Department**  
*of* **Education**

January 15, 2009

Arne Duncan, Secretary of Education  
United States Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202

Dear Secretary Duncan:

When President Obama announced his Race to the Top initiative in July of 2009, I knew immediately that Minnesotans would join together and put forward a very aggressive and competitive application. On behalf of the students, parents, teachers and citizens of the State of Minnesota, I respectfully submit our application for this historic grant.

It has been exhilarating to work on a project based on educational philosophies coming from Washington D.C. that so closely align with what we're already doing here in Minnesota.

- The grant asks states to develop nationally recognized academic standards for students in core academic subjects, and we've done that.
- The grant asks states to develop a researched-based alternative pay and evaluation system for teachers, and we've done that.
- The grant asks states to track student progress with a longitudinal data system, and we're building it.
- The grant asks states to close the achievement gap; we've made progress and our plans are in place to get the job done.
- The grant asks states to focus on Science, Technology, Engineering and Math (STEM), and we've done that.

The strongest testament to the quality of our application comes from the overwhelming support we have received from our stakeholders. I am proud to report that over 75 percent of our local education agencies have signed a Memorandum of Agreement, representing nearly 90 percent of our total student population.

I am also proud of the letters of support we've received from our education organizations, foundations, congressional delegation, state legislators, businesses and other elected officials. In keeping with Minnesota tradition, their support will not stop with just a letter of support - they will be there to make sure the reforms of Race to the Top are implemented to benefit the students of our state for years to come.

Minnesota is proud of its leadership position in education reform and with Race to the Top, we look forward to serving as a "lighthouse" state that can demonstrate successful strategies to the rest of our nation.

Thank you for giving careful consideration to Minnesota's Race to the Top application.

Sincerely,  
  
Alice Seagren  
Commissioner

1500 Highway 36 West, Roseville, MN 55113-4266 651-582-8200 TTY: 651-582-8201

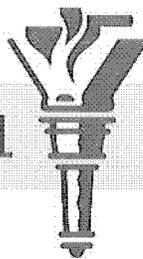
[education.state.mn.us](http://education.state.mn.us)

1900 W. Jefferson Ave.  
St. Peter, Minnesota  
56082-3015

Tel: 507.934.2450  
MN: 800.324.4459

Fax: 507.931.1515  
www.mnmsba.org

# MINNESOTA SCHOOL BOARDS ASSOCIATION



January 11, 2010

## OFFICERS AND DIRECTORS

### PRESIDENT

Jackie Magnuson  
Rosemount-Apple Valley-Eagan

### DIRECTOR DISTRICT 1

Mary Kleis  
Austin

### DIRECTOR DISTRICT 2

Kent Thiesse  
Lake Crystal-Wellcome Memorial

### DIRECTOR DISTRICT 3

Daniel Zimansky  
Tracy

### DIRECTOR DISTRICT 4

Carol Bomben  
Eden Prairie

### DIRECTOR DISTRICT 5

Marilynn Forsberg  
Spring Lake Park

### DIRECTOR DISTRICT 6

Rolf Parsons  
White Bear Lake

### DIRECTOR DISTRICT 7

Roz Peterson  
Lakeville

### DIRECTOR DISTRICT 8

Elena Street-Stewart  
St. Paul

### DIRECTOR DISTRICT 9

Karen Kirschner  
Mora

### DIRECTOR DISTRICT 10

Nancy Dasher  
Frazee-Vergas

### DIRECTOR DISTRICT 11

Walter Haulala  
Mesabi East

### DIRECTOR DISTRICT 12

Gary Lee  
Fertile-Beltrami

### EXECUTIVE DIRECTOR

Bob Meeks  
St. Peter

Commissioner of Education Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113:

Dear Commissioner Seagren:

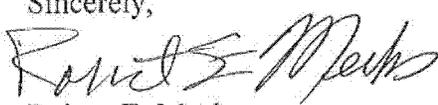
The Minnesota School Boards Association (MSBA) supports an application by the State of Minnesota for participation in the Federal Race To The Top (RTTT) Grant program.

Minnesota Public Education is recognized nationally for our willingness to address the challenges facing our educational program. We have multi-facet student choice programs, a nation leading teacher alternative pay program, charter school and site management schools that are innovative in nature, a commitment to Science, Technology, Engineering and Math (STEM) initiatives and ongoing programs, and nationally recognized state adopted academic standards for students. We are a state that fits the criteria of the RTTT grant program!

By allowing local school districts to determine whether to participate, we will have a local decision as compared to a top down, one size fits all approach to addressing student educational needs. Local school boards, in working with district employees, residents and parents will be able to use the available revenue and the grant program guidelines to strengthen student achievement and reduce/eliminate the student achievement gap within the participating school(s).

We have participated in the state's stakeholder process along with business groups, other education organizations, union leadership, minority community leaders, higher education representative and various levels of elected officials. We believe that the results of this wide ranging participation is a strong and complete response to the participation criteria of the RTTT grant program.

We are committed to supporting the state's efforts in this area. We recognize that closing the achievement gap and increasing academic achievement for all students must, and will be, the number one goal for public education in Minnesota. Participation in the RTTT grant program will allow our public school boards/school districts to move closer to meeting this very important goal.

Sincerely,  
  
Robert E. Meeks  
Executive Director

MSBA's Mission:  
Support, promote, and  
enhance the work of  
public school boards.



# MASA

## Minnesota Association of School Administrators

1884 Como Avenue, Saint Paul, Minnesota 55108

voice/651-645-6272

fax/651-645-7518

email/members@mnasa.org

website/www.mnasa.org

Charles E. Kyte, Ph.D.,  
Executive Director

January 7, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 W  
Roseville, MN 55113

Commissioner,

The Minnesota Association of School Administrators (MASA) is in support of the Minnesota Department of Education (MDE) submitting a Race to the Top Grant for Minnesota. We are appreciative that local school district (LEA's) are being allowed to make a decision to participate at the local level.

The MDE has provided state level education associations ample input into the development of the grant application and has provided numerous opportunities for local school districts to become informed about the process and Minnesota's application. We anticipate, if Minnesota is awarded a grant, that we will work closely with the MDE to implement the Grant in the best possible way to benefit the students of Minnesota.

On behalf of public education,

A handwritten signature in cursive script that reads "Charles Kyte".

Dr. Charles Kyte  
Executive Director, MASA



## Minnesota Elementary School Principals' Association

---

1667 Snelling Ave North, Suite C101  
St. Paul, MN 55108-2131  
[mespa@mespa.net](mailto:mespa@mespa.net)  
[www.mespa.net](http://www.mespa.net)

Phone: (651) 999-7310  
MN Toll-free: 1-800-642-6807  
FAX: (651) 999-7311

Jon Millerhagen, *President*  
P. Fred Storti, *Executive Director*  
Roger J. Aronson, *Legal and Legislative Counsel*

January 12, 2010

Dear Commissioner Seagren,

During the past few months we have had much conversation about the Race to the Top (RTTT) grant. The intent of RTTT grants, as a part of the American Recovery and Reinvestment Act (ARRA) is to close the achievement gap and support the best teachers and principals for every school and student in America. The Minnesota Elementary School Principals' Association (MESPA) and Minnesota Association of Secondary School Principals (MASSP) applaud the intent of this legislation. We appreciate the opportunity to continue to be involved in Minnesota's application for RTTT grant monies.

Additionally, both associations applaud the long overdue acknowledgment that principals are primary catalysts for leading systemic school reform. Research clearly shows that consistent principal leadership is the most important factor leading to improved student learning, second only to effective classroom instruction.

The RTTT grant framework recognizes the importance of principal leadership in school success. However, both MESPA and MASSP have serious concerns regarding the removal of the principal in the four delineated school reform models. We appreciate your commitment to employment due process rights. It is critical that assessment of principal performance includes multiple measures, both quantitative and qualitative, before any decision is made regarding replacement.

In regard to the potential development of a principal evaluation tool, we believe that principals should be evaluated and receive feedback as part of the process for continual professional improvement. Over-reliance on a test score as a primary indicator of principal performance is inadequate, misguided, and not supported by research.

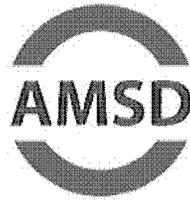
Our associations expect and stand ready to be authentically involved in the development of a future multiple-measure principal evaluation tool that will include: data that measures student growth, school demographics, a 360 assessment by stakeholders, and a satisfaction measure by the school community. It is imperative that a research-based, transparent assessment process be developed when evaluating school leadership.

We support the RTTT goal of providing for the success of every Minnesota public school student. Our objectives are to continue to be involved in shaping the development and implementation of a principal evaluation tool and other elements or components of the grant that affect principals and improve student learning. We look forward to our continued collaboration.

Yours for a better education,

P. Fred Storti  
MESPA Executive Director

Joann Knuth  
MASSP Executive Director



## Association of Metropolitan School Districts

1667 Snelling Ave. N., St. Paul, MN 55108 • 651-999-7325 • fax 651-999-7328 • www.amsd.org

January 13, 2010

Alice Seagren  
Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am pleased to report that the Executive Committee of the Association of Metropolitan School Districts (AMSD) has adopted a position in support of the state of Minnesota's Race to the Top application to the United States Department of Education. The State's Race to the Top application includes important reform initiatives and would provide Minnesota schools with additional resources to implement these important reforms.

AMSD represents 33 independent school districts in the Twin Cities metropolitan area enrolling almost 350,000 students. School districts represented by AMSD have been pioneers in pushing for reform initiatives to increase student achievement. For example, 20 of the 33 independent school districts represented by AMSD have alternative teacher compensation systems already in place with several others actively moving in that direction. In addition, AMSD is strongly supportive of efforts to improve principal and teacher preparation programs and is pleased the State's application includes these needed initiatives.

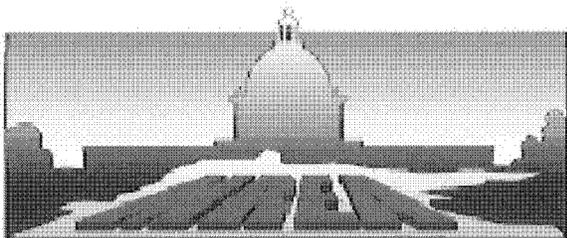
We further believe that the development of the statewide longitudinal data system will provide critical data and information that will help customize student instruction, enhance professional development, and improve teacher training programs. Having the necessary resources to make informed decisions based data and evidence is of paramount importance in raising achievement for all students.

AMSD looks forward to continuing to work with the state of Minnesota and believes the State's Race to the Top application will help raise overall achievement and assist our efforts to close the achievement gap.

Sincerely,

Jon Tynjala  
Chair

AMSD Members: Anoka Hennepin, Bloomington, Brooklyn Center, Burnsville, Columbia Heights, East Metro Integration District 6067, Eden Prairie, Edina, Elk River, Fridley, Hopkins, Intermediate District 287, Intermediate District 917 (Associate Member), Inver Grove Heights, Mahtomedi, Minneapolis, MSU Mankato Center for Engaged Leadership (Associate Member), Minnetonka, Mounds View, Northeast Metro Intermediate School District 916 (Associate Member), North St. Paul/Maplewood/Oakdale, Orono, Osseo Area Schools, Richfield, Robbinsdale, Roseville, Rosemount-Apple Valley-Eagan, Shakopee, South St. Paul, Spring Lake Park, St. Anthony/New Brighton, St. Cloud, St. Louis Park, St. Paul, Stillwater, TIES (Associate Member), Wayzata, West Metro Education Program, West St. Paul, and White Bear Lake



Minnesota Rural Education Association  
PO Box 155  
Brandon, MN 56315  
320-762-6574      office@mnrea.org

January 5, 2009

Alice Seagren, Commissioner of Education  
1500 Highway 36 West  
Roseville, Mn 55113

Dear Commissioner Seagren:

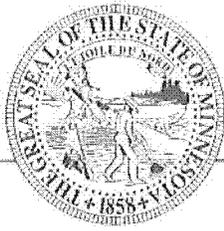
The Minnesota Rural Education Association focuses on putting Learner's First. As part of this vision, we support efforts to help districts do just that. Because of this focus, MREA supports the Minnesota Department of Education's Race to the Top Application.

It is our hope that through this grant, Minnesota can address key issues related to student success. MREA represents 140 rural school districts across all parts of Minnesota.

Sincerely,

*Lee Warne*

Lee Warne, Executive Director  
Minnesota Rural Education Association



# MINNESOTA BOARD OF TEACHING

---

January 15, 2009

Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren,

On behalf of the Minnesota Board of Teaching, I am pleased to convey the enthusiastic support of the Board of Teaching for the Minnesota Department of Education's Race to the Top application. As the regulatory and policy-making body governing teacher preparation and licensing in Minnesota, we have worked steadily over the last several years towards meaningful reform that will further strengthen our teacher preparation, and we believe that this grant provides a timely opportunity to press forward in these reform efforts.

Specifically, we have worked since the fall of 2008 with a team of higher education faculty members to redesign our licensure program approval process. The heart of this work has been to move to a system that is based on measures of candidate competence, focusing on actual performance data. We are moving forward with a conceptual framework that we believe aligns closely with the goals of the Race To The Top criteria. We have launched a rulemaking initiative that will establish this new paradigm in rule.

The Board of Teaching has authorized the launch of two high quality "alternative" routes to licensure: The New Teacher Project's Teaching Fellows and Teach For America. We intend to use the rulemaking initiative as a means of addressing these alternative routes in a more sustainable way, and in a way that fosters a spirit of innovation and provides opportunities for increased flexibility for all programs while holding to common accountability measures.

In addition to the work we have done around program approval, we are also actively engaged in discussions relating to our licensure structure and moving to a tiered system. In 2008-2009, one of the annual Board goals was to look specifically at our license renewal system and requirements. Our efforts were spurred by the 2009 legislative session, when Representative Kath championed legislation for requiring reflective practices. As a result, the Board set a subsequent goal last August for 2009-2010, to review the entire licensure structure. We have held two workshops so far this year, and have begun to engage stakeholders in a meaningful way on these ideas.

The Board of Teaching has a long and unwavering commitment to stakeholder engagement in all of our policy-making efforts, and the Minnesota Department of Education is one of our critical partners. We are pleased to share a common vision for teacher preparation, data-driven policy-making and continuous improvement, and a continuum of professional growth and development for all Minnesota teachers. We look forward to a continued partnership in these profoundly important initiatives.

I had the opportunity to participate as the Board of Teaching representative during the development of the Race to the Top application, and the full Board of Teaching has received updated information throughout the development of the application. On January 15, 2010, the Board authorized me to provide a letter of support on their behalf.

We recognize that the application provides only limited information about the reforms that are proposed. We stand ready to work collaboratively with the Department of Education and numerous additional stakeholders to further develop the proposals and bring them to life.

Sincerely,

A handwritten signature in cursive script that reads "Karen Balmer".

Karen Balmer  
Executive Director

# **Minnesota Board of School Administrators**

1667 Snelling Avenue North

Falcon Heights, MN 55108

January 5, 2010

Race to the Top  
Office of Elementary and Secondary Education  
United States Department of Education  
400 Maryland Avenue South West  
Room 3E108  
Washington, D.C. 20202-3118

Dear Secretary Duncan,

I am writing on behalf of the Minnesota Board of Administrators. Minnesota is very proud of the work we have done in regards to school administrators licensure in the past few years. We are in support of the Minnesota Department of Education's Race to the Top Application and look forward to partnering as this initiative moves forward.

The Board of Administrators has had the opportunity to partner with the Minnesota Department of Education as a stakeholder during the development of the Race to the Top Application. The Board of School Administrators authorized me, as Acting Executive Director, to write a letter of support at the December 10, 2009 Board meeting.

We stand ready to commence the work as proposed in the Race to the Top Application. Specifically this Board governs rules impacted in this application, and as such is prepared to undertake the necessary work to meet the requirements of the Race to the Top Application.

Sincerely,



Marc Boehlke  
Acting Executive Director  
Minnesota Board of Administrators

January 12, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Dear Commissioner Seagren:

The Minnesota Early Childhood Advisory Council (ECAC) wishes to express its support for Minnesota's Race to the Top Grant as submitted by the Department of Education. We heartily agree that early childhood education is a high-impact way to affect the trajectory and success of high-need children.

We are particularly pleased to see the inclusion of aligning the state's early learning standards, *The Early Childhood Indicators of Progress*, to the new common core state K12 standards and training stakeholders to analyze and use data, including early childhood data in Minnesota's proposal. Both items will help move the state forward in the direction envisioned by the council.

If awarded, we hope to work with you to implement the grant activities in the best way possible to benefit the children and families of Minnesota.

Sincerely,



Sarah Caruso  
Chair, Early Childhood Advisory Council  
President and Chief Executive Officer  
Greater Twin Cities United Way

January 13, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren,

On behalf of the over 18,000 parents represented by the Minnesota State Parent Student Teacher Association, I would like to thank you for inviting us to participate in the Race for the Top Grant Writing process. Thank you for recognizing the critical role parents must play in developing our state's education policies.

Our focus is to develop constructive and strong relationships between parents and teachers focused on the academic and social progress of each child. We believe the Minnesota grant proposal helps achieve that goal. In particular, developing data systems which include multiple inputs and are designed to inform parents and teachers on student progress is a strong step forward. We must move beyond the days of criticizing schools and teachers for "failing" too many students without being able to answer the fundamental question why.

The grant Minnesota is submitting moves us in that direction of answering the questions why are certain students achieving at different levels, what are the particular challenges facing certain schools, and why are particular classrooms achieving great success. From that we can determine the best interventions, and the challenges that need to be solved. We can learn from schools that are doing well and teachers whose success can be models for others. We can inform both teachers and parents of how they can work better together for each child's success.

For these reasons, we look forward to working with you in implementing the grant once awarded.

Sincerely,

(b)(6)

Mari Pokornowski  
Minnesota PTA State President

January 5, 2010

Commissioner Alice Seagren  
MN Department of Education  
1500 Hwy 36 W  
Roseville, MN 55113

Dear Alice,

On behalf of PACER Center, we are delighted to have the opportunity to strongly support your proposed **Race to the Top project** for innovation and systemic change in Minnesota schools. We support the goals, objectives and outcomes of the proposed project. I have been pleased to be on your Stakeholders Group for this important program.

PACER Center is Minnesota's U.S. Department of Education, Office of Special Education Programs (OSEP) funded Parent Training and Information Center and has over 30 programs serving children and youth with disabilities and their families. PACER is also a MN PIRC (Parent Information and Resource Center) for engaging parents and families of all children in their child's education. PACER is the National Center for the Technical Assistance Alliance for Parent Centers (Alliance), which provides technical assistance to over 100 U.S. Department of Education, Office of Special Education Programs (OSEP) funded Parent Training and Information Centers on Special Education issues.

PACER will be also working with Hamline University on a Bush Foundation grant to improve teacher quality. We will be helping teachers to work with families, improve cultural competence, use assistive technology and develop innovative thinking.

We are very enthusiastic about this project and have been pleased to work in collaboration with your group of stakeholders to develop a work plan. We will continue to advocate for quality education of children and youth, including those with disabilities.

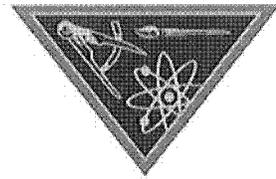
We look forward to working with you on this exciting Race to the Top project.

Sincerely,

(b)(6)

Paula F. Goldberg  
Executive Director

FRIENDS  
OF  
EDUCATION



*R.E. Topoluk*  
*Executive Director*

January 13, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

Aspen Academy  
*Prior Lake*

Beacon Academy  
*Maple Grove*

Beacon Preparatory School  
*Bloomington*

Cologne Academy  
*Cologne*

Cygnus Academy  
*Anoka*

DaVinci Academy  
*Blaine*

Eagle Ridge Academy  
*Eden Prairie*

Emily Charter School  
*Emily*

Long Tieng Academy  
*Minneapolis*

Minneapolis Academy  
*Minneapolis*

New Millennium Academy  
*Minneapolis*

Nova Classical Academy  
*St. Paul*

Paideia Academy  
*Apple Valley*

Prestige Academy  
*Minneapolis*

Seven Hills Classical Academy  
*Bloomington*

St. Croix Preparatory Academy  
*Stillwater*

STRIDE Academy  
*St. Cloud*

Yinghua Academy  
*Minneapolis*

RE: Race to the Top Application

Dear Commissioner Seagren:

Friends of Education unequivocally supports Minnesota's application for federal Race to the Top funds. We participated in Minnesota's stakeholder process as the state reached out to business groups, education organizations, union leadership, minority community leaders, higher education, charter schools and authorizers, and elected officials. We believe the result of this inclusive effort is an aggressive plan that will keep Minnesota at the forefront of education leadership.

Minnesota has consistently led the nation in education reforms, and Minnesota's application demonstrates our state's continued leadership in pursuing aggressive educational reforms to improve achievement for all students. We believe that Minnesota's Race to the Top application capitalizes on our state's demonstrated and historical leadership:

- Minnesota has already developed nationally recognized academic standards for students in math, language arts, science, and social studies that have become the model for other states. In addition, Minnesota assessments remain on the cutting edge of technology, and especially so in science. Minnesota's application continues this leadership by working with other states to adopt similarly high and internationally benchmarked standards.
- More than 30% of Minnesota students are already being taught by teachers participating in the researched-based alternative performance-based pay program called QComp. Minnesota's application proposes to strengthen QComp – and consequently promotes the development of great teachers and leaders -- by including principals and developing a statewide system for evaluating teachers.

- Minnesota pioneered the charter school concept, with the nation's first charter school opening in Minnesota in 1992. According to repeated national studies, Minnesota remains the strongest environment for charter schools in the nation. This pioneering work goes the next step in Minnesota's application by creating a state office dedicated to turning around struggling schools.
- Minnesota's initiatives in Science, Technology, Engineering and Math (STEM) align with the Obama Administration's objectives on this issue. For example, Minnesota established a math and science teaching academy to provide quality professional development in these critical areas. In addition, the getSTEM-mn portal, a collaboration between educators and businesses, matches education needs with business resources.

We support Minnesota's efforts in these areas because they represent the needed next steps to improve the quality of our educational programs, close Minnesota's achievement gap, and enable all students to be competitive in the world arena. Moreover, improving student achievement is critical to our state: we must provide a sustainable Minnesota workforce to grow our economy.

Friends of Education remains committed to supporting Minnesota's leadership and efforts in these critical areas. We believe that working together with other state leaders is the best way to win the Race to the Top, close the achievement gap, and improve achievement for all Minnesota students.

Very truly yours,

(b)(6)



# ANOKA-HENNEPIN SCHOOL DISTRICT

## EDUCATIONAL SERVICE CENTER

11299 Hanson Blvd. NW, Coon Rapids, MN 55433 763-506-1000 TTY: 763-506-1180 Fax: 763-506-1003  
www.anoka.k12.mn.us

January 13, 2010

Commissioner Seagren,

This letter is to express Anoka-Hennepin District #11's full support for Minnesota's grant proposal for Race to the Top grant funding from the United States Department of Education. As a district, we believe that the goals of "Race to the Top" are critical to the success of our schools and our students in the future. We believe that through initiating a well articulated and supported reform strategy and planned assurances, we can make a difference for all students.

I am the Director/ Principal of Anoka-Hennepin STEP (Secondary Technical Education Program). STEP is a high school program for 11<sup>th</sup> and 12<sup>th</sup> grade students in the Anoka Hennepin School District, the largest public school district in the state. STEP is located in a 60,000 square foot high school building on the Anoka Technical College campus in Anoka, Minnesota. Over 900 students from the district attend STEP daily and take career and technical education courses that meet both high school and college credit requirements. As a result of their advanced coursework, these students are able to complete their college technical degree sooner.

The 10-year collaboration between STEP, Anoka Technical College, and other colleges in the Minnesota State Colleges & Universities has made a huge difference in the lives of many young people. We work with many high school students "in the middle"—students who are often overlooked in the learning environment because they learn best by "doing" through contextual learning projects. These students often do not have the confidence to think they can go to college. They often do not have the financial resources to think they have a future in higher education. We help our students believe in themselves. We help them earn college credit by taking rigorous courses in science, engineering, math, and science—ones that are relevant to today's workplace as well as in concert with our college partners.

Minnesota's proposal for the Race to the Top grant focuses on the needs of all learners. With rigorous course offerings and unique applied learning programs, our students can be successful not only at Anoka-Hennepin STEP but across the state of Minnesota. It is for these reasons, that we unreservedly support the Minnesota proposal for this innovative grant.

Respectfully,

Ginny Karbowski, Director of Anoka-Hennepin STEP

Dear Commissioner Seagren:

I am writing to express Jordan School District 717 support of Minnesota's application for the federal Race to the Top funds. Minnesota has lead the nation in education reforms for the last eight years and it is time capitalize on our leadership by putting forward an aggressive application in this federal competition.

Minnesota is well positioned to receive up to \$175 million for our students because of the work we've already done:

- We've developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 40 percent of our students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- We were the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.
- Our recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.

We support our state's efforts in these areas because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

We participated in the state's stakeholder process as they reached out to business groups, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership.

We are committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely,



Kirk Nelson Superintendent Jordan School

January 12, 2010

Dear Commissioner Seagren:

I am writing to express Evansville's support of Minnesota's application for the federal Race to the Top funds. Minnesota has lead the nation in education reforms for the last eight years and it is time capitalize on our leadership by putting forward an aggressive application in this federal competition.

Minnesota is well positioned to receive up to \$175 million for our students because of the work we've already done:

- We've developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 40 percent of our students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- We were the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.
- Our recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.

We support our state's efforts in these areas because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

We participated in the state's stakeholder process as they reached out to business groups, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership.

We are committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely,

(b)(6)

*Commissioner Seagren,  
THANKS FOR ALL  
YOUR WORK FOR THE  
STATE!  
RJD*



Association of IB World Schools

January 14, 2010

**Member Diploma Schools:**

Central High School,  
St. Paul

Champlin Park High  
School, Champlin

Cooper High School,  
Robbinsdale

Fridley High School,  
Fridley

Grand Rapids High  
School, Grand Rapids

Great River School,  
St. Paul

Harding High School,  
St. Paul

Highland Park High  
School, St. Paul

Minnetonka High  
School, Minnetonka

North High School,  
Minneapolis

Park Center High  
School, Osseo

Park High School,  
Cottage Grove

Patrick Henry High  
School, Minneapolis

Roosevelt High  
School, Minneapolis

Thomas Edison High  
School, Minneapolis

St. Bernard's High  
School, St. Paul

St. Louis Park High  
School, St. Louis Park

South St. Paul High  
School, South St. Paul

Southwest High  
School, Minneapolis

Washburn High  
School, Minneapolis

Dear Commissioner Seagren,

The Minnesota Association of IB World Schools supports an application by the State of Minnesota for participation in the federal Race To The Top (RTTT) Grant Program. The International Baccalaureate (IB) supports the four core priorities; but provides particular support in (1) adopting standards and assessments that prepare students to succeed in college and the workplace and to compete in the global economy and in (4) turning around the lowest-achieving schools in Minnesota.

The International Baccalaureate is recognized internationally for offering a continuum of three high quality and challenging educational programmes, from pre-kindergarten to pre-university. IB has an established reputation for high academic standards, and also includes a unique combination of features including a global outlook, an interdisciplinary approach, an emphasis on in-depth research and critical thinking, and a community service component. Programs at all levels – Diploma, Middle Years, and Primary Years – have an aligned and integrated instructional approach which includes professional development, rigorous standards, and internationally benchmarked assessments. Its programs are a key way to meeting the goals of improving student achievement, closing the achievement gap, and ensuring greater college readiness.

IB has a widespread presence in Minnesota, characterized by broad public access, and it is well recognized and supported by Minnesota educators, policymakers, and universities. IB is well aligned with current Minnesota reform initiatives, Partnership for 21<sup>st</sup> Century Skills, and with the priorities outlined by the federal Department of Education RTTT Grant. Participation of Minnesota schools in IB has increased 200 percent in the last five years. IB programs have been particularly beneficial in improving student achievement for highly diverse student and low-income populations. Over 35 percent of the Diploma candidates in Minnesota are non-white students, with even greater percentages of diverse student and low-income populations in Primary Years and Middle Years schools.

The Minnesota IB Association is committed to continuing our support of the state's efforts to provide a world-class education, including skills and content knowledge for students to succeed in a globally competitive world.

Sincerely,

(b)(6)

Mariys Peters-Melius, Executive Director  
Minnesota Association of IB World Schools  
5584 Dunlap Ave N  
Shoreview, MN 55126  
651-784-2340

[mrmelius@comcast.net](mailto:mrmelius@comcast.net)





Minnesota  
Minority  
Education  
Partnership, Inc.

January 13, 2010

Commissioner Alice Scagren  
1500 Highway 36 West  
Roseville, MN 55113-4266

Dear Commissioner Scagren:

The Minnesota Minority Education Partnership, Inc. (MMEP) is the longest-standing, multicultural education collaborative in the state of Minnesota. MMEP is committed to a multi-dimensional approach to addressing racial inequities in education in Minnesota that involves researchers, educators, policymakers, community leaders, youth and families in developing analysis, convening stakeholders to address issues and advocating for social change for improved results with students of color and American Indian students. MMEP has published the "State of Students of Color and American Indian" report for the last nine years and produces large-scale education conferences in Minnesota to continually "lift up" key issues related to education equity.

**As representatives of the Minnesota Minority Education Partnership, Inc. we are writing in support of Minnesota's Race to the Top application.** We believe the proposal offers an unprecedented opportunity for our state to drive practices needed to reform our K12 education system as we simultaneously seek to invest more in our schools. MMEP considers these funds a vital opportunity to begin to fully address systemic issues that underlie and reinforce racial disparities in education in our state.

Throughout the end of 2009, in addition to participating in the Minnesota Department of Education's stakeholder sessions to shape the application, MMEP reached out to several race equity education advocates from across communities of color and throughout Minnesota to engage directly with the Department to offer advice on this historic effort. The culmination of those dialogues is the development of a memorandum with research-based recommendations regarding use of the Race to the Top funds in closing achievement gaps in Minnesota. (See attached memorandum). We understand that several of those recommendations have made their way into the final proposal.

Fundamental in addressing disparities in education moving forward, we must never forget the cultural competency necessary for all educators and policymakers in making decisions about Minnesota's emerging multicultural student population and engaging all communities in guiding reform strategies as well. In the end, MMEP believes that all communities must own and sustain these reforms in order for Minnesota to truly *race to the top*. MMEP board and staff look forward to continual involvement in the implementation phase of the Minnesota Race to the Top proposal.

Sincerely,  
(b)(6)

Carlos Marianni-Rosa  
Executive Director

Jennifer Godinez  
Associate Director

Enc.

CC: MMEP Board of Directors

**AFRICAN-AMERICAN LEADERSHIP FORUM  
EDUCATION WORK GROUP**

8525 Edinbrook Crossing, Suite 104E  
Brooklyn Park, MN. 55443  
(763) 391-6439

January 13, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
St. Paul, MN. 55113

Dear Commissioner Seagren:

In 2009 a group of more than 170 African-American leaders in business, government, non-profit, and philanthropy came together to address issues affecting African-Americans in the areas of Education, Family, Economic Development, etc. Known as the African-American Leadership Forum ("AALF"), the group formed an Education Work Group to address issues specific to education. The mission of the Education Work Group is to "Close the Achievement Gap for African-American Children in Pre-K through 12 in the 7 County Metropolitan Area."

Thank you very much for your leadership and contributions in developing Minnesota's Race to the Top application. Know that we support this endeavor and have great optimism for the State of Minnesota's embrace of key reforms, both those previously implemented and efforts currently underway designed to build more effective and sustainable systems for the improved learning of students statewide.

We fundamentally agree that students enrolled in Minnesota schools need and deserve constructive reform, along with the \$200 million in Race to the Top-funded investments to implement them. We therefore contribute the following points and believe that careful attention to these will help build the strongest submittal possible for Minnesota's Race to the Top application.

Specifically, there is a pressing sense of urgency to recognize the social, cultural, and emotional implications attendant to the historical development of policies and the residual effects these have on our ability to create effective, meaningful change in support of children, adolescents, their families, and the communities in which they reside. Given this, while we support the ideas outlined in the current proposal, we request several modifications that we believe are necessary to enable urban school districts to *dramatically* increase achievement while enhancing Minnesota's prospects of securing Race to the Top funding.

*Offer Alternative Teacher and Administrative Certification*

Evidence emanating from both research and practical experience overwhelmingly supports ensuring multiple pathways for entry into the profession of teaching and educational leadership. This is particularly the case for attracting, carefully screening, and providing critical support systems for high-performing candidates, including those of color, especially in science, math and other high need areas; alternative certification programs have proven particularly effective in assisting the transition to teaching of, for example, mid-career professionals with extensive experience in areas such as science and math. In essence, alternative programs facilitate the recruitment of candidates into the various areas of the profession, often with greater consistency, continuity, and critical support for the preparation, transition, and induction of teachers than traditional education programs. The above is also true with respect to educational administrators.

*We therefore request an alternative teacher and administrative certification provision safeguarded in Minnesota statute, not merely Board of Teaching regulations. Specifically, there should be no restrictions limiting alternative certification placement to "shortage" areas.*

*Provide Critical Support Systems and Incentives*

Research and practical experience also support the necessity of providing incentives and structures that facilitate entry into the profession of candidates with the requisite professional orientation to pursue the knowledge, skills, and dispositions necessary for building greater cohesiveness within the learning environment. Such opportunities therefore lead to increased academic integrity within the systems created and a stronger commitment to quality learning experiences, continuous program improvement, greater efficiency in operations, and impeccable service. In other words, it is simply not enough to talk about policies and practices; we have to make substantive changes that will facilitate the flexibility needed for districts' to respond immediately to the needs of learners, their families, and the communities in which they reside. For this reason,

*We further request substantial fellowship support (similar to programs like KIPP's Fisher Fellowship, and New Leaders for New Schools) to encourage the creation of new high-performing schools to replace or restart persistently low-performing Minnesota schools.*

*Remove Barriers to Successful Implementation*

As previously suggested, despite knowledge amassed thus far regarding student learning and successful pedagogical and leadership practices, one of the most significant barriers to effective change is existing policies and practices that limit institutional access to more sustainable efforts and opportunities for leaders to respond effectively. Once valuable, some existing practices traditionally upheld now stifle progress and consume enormous resources and valuable time, thus further inhibiting districts' ability to effectively and

consistently respond to the immediacy of concerns related to professional practice. Failure to address these concerns also leads to greater inefficiency within schools and adverse effects on student learning. This is particularly the case in urban settings where the intensity of pedagogical and learner demands, coupled with greater complexity within community structures, increases the possibility of disparities in professional practice; this results in low student performance and an increased number of lower performing schools. Of pressing concern, particularly within urban settings, is the necessity for creating policy that provides districts the flexibility needed to sufficiently hire and retain high-performing teachers and address the immediacy of concerns by transitioning those who are not knowledgeable and skilled professionals and responsive to learner needs out of the district and the profession altogether. The issue facing districts is fundamentally a human resource one that requires policy support to sufficiently address sustainable change. Therefore,

*We request that districts in the Twin Cities area be provided a waiver to the state teacher and principal tenure act in order to better position the district for hiring the most promising professionals – those with the knowledge, skills, perspectives, commitment, and perseverance required to effectively address and close one of the nation's largest achievement gaps and effectively transition low performing teachers and administrators out of the district.*

Further, that an achievement gap exists between the expected and actual performance of students is not news. However, what is most troubling and persistently reported is that an achievement gap exists disproportionately among people of specific racial groups, regardless of their parents' income and/or whether or not they speak English as a second language. This is particularly the case for Minnesota, which has an especially large gap in comparison to other states.

The varying degrees of success among schools in meeting students' needs further suggests the possibility of institutionalized policies and practices that inherently prohibit students' academic success. While there is a plethora of literature outlining the social, cultural, and historical reasons for the gap observed, it is abundantly clear that we have not sufficiently addressed the core issues. Hence, quality reform should include, at a minimum, a careful review of existing policies, practices, and services that serve as barriers to meaningful school reform – including a closer look at existing assessments and the extent to which these effectively capture student learning. In essence, we would be remiss to continue advocacy of a singular view of curriculum and learning that inadvertently regulates and contributes to the very thing we are trying to address. A one size fits-all model simply will not suffice and calls into question the necessity for continuous program improvement supportive of the nuances in learning performance among particular groups most affected by the achievement gap. Considering the large percentage of African American students identified as needing assistance within the existing structure in Minnesota, we further recommend that we:

Alice Seagren, Commissioner  
January 13, 2010  
Page 4 (cont.)

*Include specific strategies that are researched and documented to address the academic needs of students-of-color, particularly African Americans.*

As a matter of record, we are aware of and recognize that many other strategies exist and are also important for building quality learning environments. However, the items mentioned above are crucial and research is abundantly clear on the relevance of teacher and school leader quality to student achievement. For this reason, we reiterate the impetus for our correspondence: **Given the urgency of children and adolescents' current needs, it is imperative that Minnesota's application be as strong as possible in defining the selection process of teachers and educational leaders.**

Thank you in advance for your support of these essential changes. As always, we appreciate your leadership in making discerning decisions on our behalf and particularly appreciate the careful consideration and inclusion of the items previously discussed within the current proposal. We look forward to a positive outcome.

If you prefer briefing papers relative to the research referred to in this correspondence, please let us know.

Respectfully,

(b)(6)

Jeffrey A. Hassan, Co-Chair  
Dr. Robert Jones, Co-Chair

ENDORSED BY MEMBERS OF THE EDUCATION WORK GROUP\*

Daniel Bergin, Twin City Public Television  
Sameerah Bilal, Exec. Dir., Early Childhood Resource & Training Center  
Ellis F. Bullock, Executive Director, Grotto Foundation, Inc.  
Kari Davis, Director of Diversity and Inclusion, Greater Twin Cities United Way  
Betty Emarita, Pres., Development and Training Resources  
Bill English, Board Chair, The City Inc.  
Lea Hargett, President, Minn. Black Chamber of Commerce  
Sandy Harris, Director, Diversity & Inclusion, Medtronic, Inc.  
Jeffrey A. Hassan, Attorney and (Outside) Legal Counsel to Mpls. Public Schools  
Dr. Robert Jones, Senior V.P., University of Minnesota  
Lance Knuckles, Sen. Consult., Amalgam Communications  
Janis Lane-Ewart, Exec. Dir., KFAI Radio  
Eric Mahmoud, President/CEO, Harvest Preparatory Charter School  
Kim Nelson, Senior Vice President, General Mills  
Jamice Obianyoy, Dir – Global Sustainability, Global Business Development & Marketing  
Dr. Verna Price, Founder/Director, Girls in Action  
Alana Ramadan, Coordinator, Harvest Preparatory School  
Sondra Samuels, President, Peace Foundation  
Carolyn Smallwood, Exec. Dir., Way to Grow  
Dr. Sheila Wright, Dean, School of Education, Hamline University

Alice Seagren, Commissioner

January 13, 2010

Page 5 (cont.)

\* The views expressed herein are those of the individual in their personal capacity, and are not intended to reflect the views of the institutions with which they are affiliated.

# UNIVERSITY OF MINNESOTA

*Twin Cities Campus*

*Office of the President*

*202 Morrill Hall  
100 Church Street S.E.  
Minneapolis, MN 55455-0110  
Office: 612-626-1616  
Fax: 612-625-3875*

January 13, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Dear Commissioner Seagren:

On behalf of the University of Minnesota, I am writing to express my strong support for our state's Race to the Top proposal. University faculty and staff have participated actively in the outreach process you have conducted to develop the plan, and I am confident that the University of Minnesota will be a strong partner in implementing it when it is funded.

Three years ago, the University launched a major new initiative to increase the number and diversity of Minnesota students who graduate from high school with the knowledge, skills, and habits for success in higher education. To spearhead that agenda, we created the College Readiness Consortium, a dynamic new organization that has already leveraged University expertise and resources to institute important new reforms in K-12 schools and systems. If Minnesota's Race to the Top proposal is funded, the consortium's top priority for the duration of the grant will be coordinating the University's involvement in the many facets of this effort to ensure that the overall proposal is an unqualified success. More specifically, the University is committed and eager to:

- Engage leading University faculty in the development, review, and continuous improvement of new academic standards, assessments, and curricular frameworks;
- Partner with the State of Minnesota, other institutions of higher education, and preK-12 systems to create the nation's most robust longitudinal data system;
- Dramatically enhance the quality of school leadership by taking the University-operated Minnesota Principals Academy program to scale across the entire state;
- Reform teacher preparation in partnership with the Minnesota-based Bush Foundation, from which we recently received a \$4.5 million grant to support our Teacher Education Redesign Initiative; and
- Utilize the University's extensive expertise in evaluation studies to monitor, learn from, and improve upon Race to the Top initiatives.

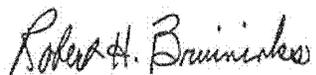
Minnesota has long been a national leader in K-12 educational improvement and outcomes, but the time has come to ensure that our students are competitive not just nationally but internationally. Not incidentally, Minnesota's population is roughly the same size as many of the world's highest performing nations, from New Zealand to Singapore to Finland. We have the scale, the capacity, and the commitment to equal and exceed their achievements over the decade

**Driven to Discover<sup>SM</sup>**

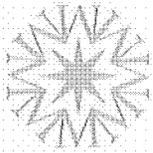
Commissioner Alice Seagren  
Race to the Top  
Page 2

ahead. Minnesota's Race to the Top proposal will enable our state to take a quantum leap toward that goal and I urge the federal reviewers to give it very strong consideration.

Sincerely,

A handwritten signature in cursive script that reads "Robert H. Bruininks".

Robert H. Bruininks  
President



**Minnesota  
STATE COLLEGES  
& UNIVERSITIES**

OFFICE OF THE CHANCELLOR  
JAMES H. MCCORMICK  
Chancellor

WELLS FARGO PLACE  
30 7TH ST. E., SUITE 350  
ST. PAUL, MN 55101-7894

ph 651.296.7974  
fx 651.297.7465  
www.mnscu.edu

January 13, 2010

The Honorable Alice Seagren  
Commissioner  
Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing to express the support of the Minnesota State Colleges and Universities for Minnesota's Race to the Top application. An investment in Minnesota would allow the state to aggressively pursue the type of "all-hands-on-deck approach" President Barack Obama expects of Race to the Top partners.

For many years, Minnesota has been at the forefront of education innovation. It is here that both the first statewide dual enrollment program and the nation's first charter school legislation came to fruition. Minnesota must now capitalize on its history of leadership by advancing an aggressive application in this federal competition.

Minnesota is well positioned to move ahead because of the work we have already done:

- Developed nationally recognized academic standards in math, language arts, science, and social studies that have become a model for other states. Our assessments are also on the cutting edge of technology, especially in science. Postsecondary education has played a strong role in these efforts.
- Delivered a solid track record in teacher preparation. Minnesota leads the nation in the percentage of teachers who are fully licensed in the disciplines in which they are teaching. In partnership with Minnesota's Bush Foundation and P-12 educators, many of our public and private teacher preparation institutions are engaged in an ambitious redesign to enhance preparation and induction. Minnesota is also primed to expand QComp, an alternative pay program through which more than 40 percent of the state's students already are being taught.
- Established long-standing, successful collaborations among postsecondary and P-12 educators, business leaders, and community members in the areas of science, technology, engineering, and math. Our efforts are aligned with the Obama administration's goals in these areas and offer potential for greater collaborations.

**STATE UNIVERSITIES**

Bemidji State University  
Metropolitan State University  
Minnesota State University,  
Mankato  
Minnesota State University,  
Moorhead  
St. Cloud State University  
Southwest Minnesota  
State University  
Wisconsin State University

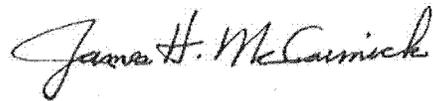
**STATE COLLEGES**

Alexandria Technical College  
Anoka-Bellevue Community  
College  
Anoka Technical College  
Central Lakes College  
Century College  
Dakota County Technical  
College  
Fond du Lac Tribal  
& Community College  
Hennepin Technical College  
Hugoboss Community College  
Lake Superior College  
Minnesota Community  
& Technical College  
Minnesota State College-  
Southeast Technical  
Minnesota State Community  
& Technical College  
Minnesota West Community  
& Technical College  
Mnstateofa Community  
College  
North Hennepin  
Community College  
Northeast Higher Education  
District  
Oriskany Community College  
Itasca Community College  
Mesabi Range Community  
& Technical College  
Rainy River Community  
College  
Vermilion Community  
College  
Westland Community  
& Technical College  
Northwest Technical College\*  
Pine Technical College  
Tadoussac College  
Richtland Community College  
Roddick Community  
& Technical College  
St. Cloud Technical College  
Saint Paul College  
South Central College  
\*Northwest Technical College  
is aligned with Hennepin  
Community College

The Minnesota State Colleges and Universities system realizes the critical role it plays in statewide initiatives designed to eliminate the achievement gap and help students reach their potential. Education reforms such as those outlined in the Race to the Top application will help to ensure our graduates are ready to compete against the world's best and will secure Minnesota's place in the broadening global marketplace.

I believe the broad-based stakeholder process has resulted in a strong plan that will keep Minnesota at the forefront of education leadership. I, therefore, offer the support and commitment of the Minnesota State Colleges and Universities system. We look forward to working with other national leaders to reach new plateaus in educational excellence.

Sincerely,

A handwritten signature in cursive script that reads "James H. McCormick". The signature is written in black ink and is positioned above the printed name.

James H. McCormick



MINNESOTA'S PRIVATE COLLEGES  
COUNCIL • FUND • RESEARCH FOUNDATION

January 13, 2010

*Providing a Tradition of Quality  
for a Changing World,  
One Student at a Time*

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36W  
Roseville, MN 55113

Commissioner Seagren:

The Minnesota Private College Council supports the Minnesota Department of Education's grant proposal for the Race to the Top program. The proposal, developed in partnership between the Department of Education and numerous education stakeholders throughout the state, is a strong plan that will move Minnesota forward in critical areas, including education accountability, teacher quality and system performance.

Minnesota has a long history of being a national leader in education reform, and the challenges the state faces – both demographic and fiscal – require us to, yet again, evaluate and redefine what the future of education is for Minnesota and our citizens. The reforms are already taking place through such efforts as the Bush Foundation's teacher effectiveness initiative, as well as numerous other philanthropic and system reform efforts already moving forward. By investing Race to the Top funds in Minnesota, the U.S. Department of Education will not only target its investment in a state with a long track record of positive education reform, but in a state where it can also leverage the strong resources of our philanthropic foundations, institutions of higher education, businesses, and citizens.

We look forward to our continued partnership with the Minnesota Department of Education on this effort.

Sincerely,

Paul Cerkvenik  
President

PDC/llz

Augsburg College

Bethany Lutheran College

Bethel University

Carleton College

College of Saint Benedict

College of St. Catherine

College of St. Scholastica

Concordia College, Moorhead

Concordia University, St. Paul

Gustavus Adolphus College

Hamline University

Macalester College

Minneapolis College  
of Art and Design

Saint John's University

Saint Mary's University  
of Minnesota

St. Olaf College

University of St. Thomas

Bremner Tower

445 Minnesota Street, Suite 500

Saint Paul, Minnesota 55101

Phone: 651-228-9061

Fax: 651-228-0379

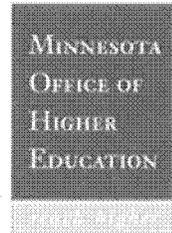
E-mail: [colleges@mnprivatecolleges.org](mailto:colleges@mnprivatecolleges.org)

Web site: [www.mnprivatecolleges.org](http://www.mnprivatecolleges.org)

1450 Energy Park Drive, Suite 350  
St. Paul, MN 55108-5227

Tel: 651-642-0567  
800-657-3866  
Fax: 651-642-0675

E-mail: [info@ohe.state.mn.us](mailto:info@ohe.state.mn.us)  
Web: [www.ohe.state.mn.us](http://www.ohe.state.mn.us)



January 13, 2010

Ms. Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Dear Commissioner Seagren:

The Minnesota Office of Higher Education supports the application by the Minnesota Department of Education for the federal Race to the Top grant program. Our agency has participated in the state's stakeholder process along with postsecondary education leaders, business groups, union leadership, community leaders and various levels of elected officials. We believe that the results of this broad participation have yielded a strong and comprehensive response to the participation criteria of the Race to the Top.

The Minnesota Office of Higher Education has worked closely with the Minnesota Department of Education on development of a statewide longitudinal data system to support real time data-driven decisions in classrooms across Minnesota. The new system's governance and operations plan have been approved and are ready for implementation. Minnesota is bold in its commitment to training and empowering K-12 educators statewide to use data to guide teaching and learning at the school and classroom level. The collaboration and commitment to closing the achievement gap in Minnesota are stronger than at any time in the state's history. It's our collective and number one goal. The demographic changes upon us make the changes supported by Race to the Top even more urgent and essential.

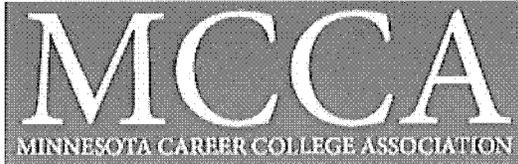
Participation in this program will enable Minnesota to accelerate quickly to move its well-researched and coordinated plans into action. We fully endorse the state's Race to the Top application and look forward to implementing this broad initiative and serving as a resource for other states.

Sincerely,

A handwritten signature in black ink, appearing to read "David R. Metzen". The signature is fluid and cursive, with a large, stylized initial "D".

David R. Metzen  
Director

DRM:kb



January 11, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Dear Commissioner Seagren:

I am writing to express Minnesota Career College Association's (MCCA) support of Minnesota's application for the federal Race to the Top funds. Minnesota has lead the nation in education reforms for the last eight years and it is time capitalize on our leadership by putting forward an aggressive application in this federal competition.

Minnesota is well positioned to receive up to \$175 million for our students because for the work we've already done:

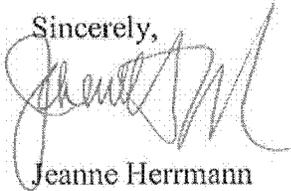
- We've developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 40% of our students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- We were the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.
- Our recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.
- We have brought all sectors of education together including representatives of public, private and for-profit higher education to create a longitudinal data system. This will allow the state to match student data from pre-kindergarten through completion of postsecondary education in order to help us make more informed decisions regarding curriculum, college and workforce readiness, and college participation rates as well as transfer of credit and college success rates among others.

We support our state's efforts in these areas because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

We participated in the state's stakeholder process as they reached out to business groups, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership. We are fortunate to be in a state that values all sectors of education as we work to educate students for the future and prepare them for the global workforce.

We are committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely,



Jeanne Herrmann

*Past Chair and Selected Representative to P-20 and HEAC*  
**Minnesota Career College Association (MCCA)**

MACALESTER COLLEGE



THE PRESIDENT  
1600 GRAND AVENUE  
SAINT PAUL, MINNESOTA  
55105-1899

TEL: 651-696-6207 FAX: 651-696-6500  
E-MAIL: [rosenbergb@macalester.edu](mailto:rosenbergb@macalester.edu)  
[www.macalester.edu](http://www.macalester.edu)

January 12, 2010

Ms. Alice Seagren  
Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

Dear Commissioner Seagren:

Macalester College is pleased to support the Center for School Change's participation in the Minnesota Department of Education's Race to the Top application for support of public educational improvements. The Center's recent move to Macalester from the University of Minnesota insures continuation of its positive, pioneering work. Macalester is committed to the Center, its mission and the leadership of Joe Nathan. The plan he has outlined in conjunction with the Race to the Top application promotes cooperation among Minnesota educational professionals, insuring that best practices developed by the Center will inform ongoing reform efforts.

This work will certainly be challenging. I believe the careful planning undertaken by the Center and the positive outcomes the Center's participation will produce warrant the investment of federal resources. As the home of the Center, Macalester is fully supportive of its efforts in conjunction with the Race to the Top initiative.

Thank you for including the Center for School Change as a catalyst for the meaningful reforms the Minnesota Department of Education will accomplish through Race to the Top. Should you have any questions about Macalester's involvement, please contact Helen Warren, Director of Corporate and Foundation Relations at (651) 696-6071 or [warrenh@macalester.edu](mailto:warrenh@macalester.edu).

I wish you all the best as you complete this important application and undertake the important work it will support.

Sincerely,

A handwritten signature in black ink, appearing to read 'B.C. Rosenberg'.

Brian C. Rosenberg

# MACALESTER COLLEGE



ADVANCEMENT OFFICE  
1600 GRAND AVENUE  
SAINT PAUL, MN  
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TOLL FREE: 888-242-9351  
www.macalester.edu

January 12, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

Dear Commissioner Seagren:

Based on 39 years as a public school teacher, administrator, PTA president, researcher and advocate, and in my capacity as Director of the Center for School Change at Macalester College, I strongly endorse Minnesota's Race to the Top Application.

Minnesota is well positioned to make excellent use of funds to help more young people achieve their potential and reduce achievement gaps. Because of the courage of education leaders such as yourself:

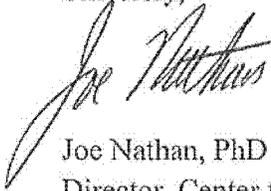
- \*Minnesota has used public school choice carefully to help more than 110,000 students take college courses while still in high school;
- \*The National Alliance for Public Charter Schools has just rated our chartered school law the nation's best;
- \*We've brought together district, charter and higher education faculty to learn from each other in math and science;
- \*Growing numbers of charter and district public school educators are participating in Q-Comp;
- \*The New York Times recently profiled the Center's school leadership program we developed, which among other things, matches current and prospective school leaders with strong mentors from the education and business communities.
- \*We track what percentage of students from each Minnesota high school have to take remedial courses in colleges and universities, and provide this information to the public and to the schools.

The Center for School Change supports these efforts as the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

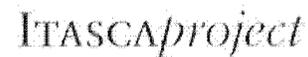
The Center for School Change participated in the state's stakeholder process as they reached out to business groups, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership.

We are committed to supporting the state's efforts in this area. Thank you for the extensive work you have done to develop a collaborative proposal, involving Minnesotans from public schools, community, parent and business groups. We are eager to work with you, and believe that Minnesota's Race to the Top application is an investment that will have many positive returns.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joe Nathan".

Joe Nathan, PhD  
Director, Center for School Change  
Macalester College



January 12, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

We are writing on behalf of the Minnesota Business Partnership, the Minnesota Chamber of Commerce and the Itasca Project to express support of Minnesota's Race to the Top application. With active support from our organizations, Minnesota has a 25-year track record of bipartisan education reform and innovation consistent with Race to the Top's goals and objectives. This long history of reform includes charter schools, post-secondary enrollment options, statewide standards and assessments, and performance pay for teachers, among others.

**Minnesota's Future Initiative – Reaching for World-Class Education**

Currently, through the Minnesota's Future Initiative, our organizations and the Bush Foundation are supporting several initiatives aimed at bringing Minnesota's education system up to world-class levels. Our commitment to this multi-year initiative focuses on the following elements, which are well aligned with Race to the Top:

- Transform teacher recruitment, training and placement to make it more selective and rigorous while also extending training through the first few years of a new teacher's career.
- Recruit top teaching talent for high-need subjects and areas.
- Provide top-quality principal leadership development.
- Use data to improve student performance.

**Minneapolis Public Schools Partnership – Focused Support for a Challenged Urban District**

We have worked extensively with the Minneapolis School District to develop and now implement a five-year strategic plan aimed at raising the achievement level for all students and closing the achievement gap. The strategic plan identifies nine key reform strategies, which are consistent with the goals of Race to the Top, including:

- Raise expectations and academic rigor; aligning programs to college readiness goal.
- Develop high performing teaching corps and provide professional development and support.
- Develop highly effective principal corps and ensure they have the capacity to establish and lead outstanding instructional teams.
- Set clear expectations for staff; reward success, provide support, but remove low performers when required.
- Restructure the lowest performing 25 percent of schools. Increase flexibility and autonomy for lowest and highest performing schools.

The District has made significant progress on these and other reform strategies, and we look forward to continuing our partnership to accomplish the District's goals.

**Trends in International Math and Science Study – Global Comparison Shows Dramatic Improvement**

We drove – and helped fund – Minnesota’s participation in the 2007 Trends in International Math and Science Study (TIMSS), which documented dramatic improvement in math education since Minnesota last participated in TIMSS in 1995. Extensive analysis by Michigan State University Professor William Schmidt credits reforms that our organizations have advocated – and are consistent with Race to the Top – for this success, including:

- Rigorous statewide standards
- Standards-based curriculum
- High-stakes tests

We are now working with SciMath<sup>MN</sup> – a statewide education and business coalition advocating for quality K-12 science, mathematics and technology education based on research, national standards and effective practices – to implement recommendations from the TIMSS analysis. We also support numerous programs to increase student interest, and improve achievement, in science, technology, engineering and math courses and careers.

**Not Just Policy – Employers Commit Financial and Human Capital to Education**

These are just three recent examples of how Minnesota employers have joined with other stakeholders to advocate and support education reforms that are consistent with Race to the Top. Beyond public policy support, Minnesota employers and foundations provided \$246 million in grants to education in 2007, according to the Minnesota Council on Foundations, with more than half of that coming from corporate giving programs. The Minnesota Business Gives program has helped almost three dozen greater Minnesota communities establish business giving programs. Supporting the local school district is frequently the focus of these largely small business giving programs.

In addition, Minnesota is a leader in youth mentoring, with more than 400 youth mentoring programs across the state, according to the Mentoring Partnership of Minnesota. Nearly half of those programs are school-business collaborations connecting thousands of at-risk students with caring adults committed to helping young people reach their academic potential.

Whether it is through public policy, financial support or human capital, Minnesota employers value education and are deeply committed to ensuring that all students are prepared for higher education or a career.

We would like to thank the Obama Administration for this opportunity and the Minnesota Department of Education for its extensive effort and inclusive process in developing Minnesota’s Race to the Top application.

On behalf of Minnesota employers, we assure you that a grant for Minnesota would be greeted with enthusiasm and redoubled efforts to close the achievement gap and bring our education system up to world-class levels.

Sincerely,

(b)(6)

Charlie Weaver  
Executive Director  
Minnesota Business Partnership

David Olson  
President  
Minnesota Chamber of Commerce

Mary Brainerd  
Itasca Project Co-Chair  
President & CEO, HealthPartners

Suite 100  
2470 Highcrest Road  
Roseville, MN 55113  
Phone: 952.230.4555  
Fax: 952.230.4550  
E-mail: [info@mhta.org](mailto:info@mhta.org)  
Website: [www.mhta.org](http://www.mhta.org)  
January 13, 2010



Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

The Minnesota High Tech Association (MHTA) is proud to support Minnesota's application for the federal ***Race to the Top*** funds. Minnesota has led the nation in education reform and it is time to capitalize on our leadership by putting forward an aggressive application in this federal competition.

MHTA supports the growth, sustainability and global competitiveness of Minnesota's technology-based economy through advocacy, education and collaboration. The nearly 350 member companies include organizations of every size, who recognize the great education initiatives that our state has already implemented:

- Minnesota has developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. These assessments are on the cutting edge of technology, especially in science.
- More than 40 percent of our students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- Minnesota was the first to pioneer the charter school concept and still has the strongest environment for charter schools in the nation.
- Our recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue. The fact that we are discussing getSTEM with more than 10 other states and regions is an excellent example.

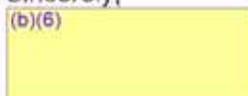
Minnesota is well positioned to receive significant ***Race to the Top*** funds for our students. MHTA supports our state's efforts in these areas because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the ***Race to the Top*** application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

MHTA participated in the state's stakeholder process as you reached out to business groups, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership, and serve as a model for others.

MHTA is committed to supporting the state's efforts in this area. Working together with other state leaders is an excellent model for participation in ***Race to the Top***, to close the achievement gap and improve achievement for all Minnesota students. Thanks for taking on this huge opportunity; we look forward to continuing to help with implementation of the programs outlined here.

Sincerely,

(b)(6)



Kate Rubin, MHTA President



## Thrivent Financial for Lutherans

625 Fourth Ave. S., Minneapolis MN 55415-1665

Bruce J. Nicholson, FSA  
Chairman, President and  
Chief Executive Officer  
Phone: 612-844-5480  
Fax: 612-844-4337  
bruce.nicholson@thrivent.com

January 14, 2010

Alice Seagren, Commissioner  
MN Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing to express Thrivent Financial for Lutherans' support of Minnesota's application for the federal Race to the Top funds. Minnesota has led the nation in education reforms and it is time to capitalize on our leadership by putting forward an aggressive application in this federal competition.

As you know, I am part of the Itasca Project, and I serve on the steering committee of the Itasca-Minnesota Business Partnership joint initiative to improve K-12 education in Minnesota. I have had the pleasure of meeting with you on more than one occasion to discuss education reform in Minnesota. I have also held meetings with many local foundation leaders who also support education reform. We are well aware of the critical need for educational reform in Minnesota, and I appreciate your leadership in helping to bring about those reforms. Obviously, receiving Race to the Top funding is critical to these efforts.

Minnesota is well positioned to receive up to \$175 million for our students because of the work we have already done, including:

- The State has developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 40 percent of our students are already being taught by teachers participating in the researched-based alternative pay program called Q Comp. Minnesota's application proposes to strengthen Q Comp by including principals and developing a statewide system for evaluating teachers.
- The State was the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.

Commissioner Alice Seagren

Page 2

January 14, 2010

- The State's recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.

Thrivent Financial for Lutherans supports the state's efforts in these areas, because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential.

We participated in the state's stakeholder process as they reached out to business groups, foundations, education organizations, union leadership, minority community leaders, higher education and elected officials.

Thrivent is committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely

(b)(6)

Bruce J. Nicholson

BJN:acp

**Qwest**  
200 South 5th Street, Suite 2100  
Minneapolis, MN 55402  
Phone 612-663-6911  
Fax 612-663-6331  
john.stanoch@qwest.com

**John M. Stanoch**  
Qwest State President  
Minnesota/North Dakota



January 12, 2010

Alice Seagren, Commissioner  
MN Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing to express Qwest's support of Minnesota's application for the federal Race to the Top funds intended to reward a state's education innovation and reform.

Minnesota is a recognized leader in education reform and innovation particularly in the areas of strong academic standards, alternative pay programs for educators, robust data systems used to track student academic achievement, nationally-acclaimed charter schools, as well as an emphasis on Science, Technology, Engineering and Math. It is appropriate that our state be recognized for accomplishments already achieved and we look forward to taking the next steps in education innovation. Reforms outlined in Minnesota's Race to the Top application will keep Minnesota a leader in education; more importantly, these reforms are critical in helping all of our students reach their full potential.

Qwest supports Minnesota's efforts in the areas of education and reform; in fact, they are aligned with our corporation's deep commitment to improve education across our service territory. As Qwest's charitable giving organization, the focus of the Qwest Foundation is pre-kindergarten through 12<sup>th</sup>-grade education, with the particular goal of ensuring that every student has a chance to succeed in school and beyond. We believe that bringing innovative uses of technology to life for students is one route to the future success of our state; hence, the Qwest Foundation developed Qwest Teachers and Technology grant program, which offers \$100,000 in grants to Minnesota public school teachers who find new ways to help their students succeed through technology in their classroom.

We participated in Minnesota's stakeholder process to develop the plan that will keep our state at the forefront of education leadership. We believe the result is a public/private collaborative effort that will drive further innovation and, more importantly, improve our educational system and results for all Minnesota students.

Sincerely,

(b)(6)

John Stanoch  
Qwest President - Minnesota



332 Sulte St. Paul, Tel: 651-227-0891  
Minnesota East 900 Minnesota Fax: 651-297-6485  
Street 55101

## Bush Foundation

January 14, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing to offer the Bush Foundation's enthusiastic support for Minnesota's Race to the Top application, and to congratulate you on the inclusive and thoughtful process by which you developed the application along with many key stakeholders across the state. We are very optimistic about the future of education in Minnesota, and believe that our state's commitment to excellence and innovation in education makes our state an ideal candidate for Race to the Top support.

As you know, the Bush Foundation has a longstanding commitment to education, and recently made educational achievement one of our top three goals for this decade. We are committed to increasing by 50% the percentage of students prepared for college, and to eliminating achievement gaps. Our strategy for reaching these goals is the improvement of teacher preparation.

Over the past few months we have launched a groundbreaking initiative to dramatically change teacher preparation programs in Minnesota, North Dakota and South Dakota. Working with fourteen partner institutions (both public and private universities), we will invest over \$40 million to create new models for teacher recruitment, training, placement and support. In addition, we have invested over \$3 million in value-added research to determine the effectiveness of these innovations over the next ten years. We will also soon be launching a marketing campaign to raise the profile of the teaching profession and to recruit high-quality applicants that match the needs of the K-12 institutions in our region.

I am inspired by the willingness of our partner institutions to take on the tough challenge of dramatically restructuring their programs – and committing to testing their effectiveness. In fact, these partners have committed to guaranteeing to us and their K-12 partners that the teachers they produce will be effective, defined as adding one year's worth of learning for each year spent in the classroom. This spirit is a testament to the potential we have in our state to once again become the nation's model for educational reform and performance. Race to the Top can provide the opportunity for us to reach this potential and to address the urgent need to close achievement gaps.

We are pleased to have been able to provide financial support to the development of the Race to the Top application, we are optimistic about Minnesota's chances, and we look forward to the opportunity to implement the plans we have developed together.

Sincerely,  
(b)(6)

Peter Hutchinson  
President  
Bush Foundation



January 13, 2010

Commissioner Alice Seagren  
MN Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

The Minneapolis Foundation is writing to express its strong support of Minnesota's application for the federal Race to the Top grant program. As you may know, The Minneapolis Foundation, its donors and its funding partners have a long history of supporting education in Minnesota. With its unrestricted resources and because of our deep commitment to closing the achievement gap, The Minneapolis Foundation has been deeply engaged for over a decade with both school districts and has committed over \$1 million to Minneapolis and St. Paul Public Schools.

While Minnesota has been a national leader in education performance and reform, Race to the Top provides an excellent opportunity for us to not only build on our students' overall performance, but also re-double our efforts to close unacceptable achievement gaps between students.

The Minneapolis Foundation has a long-term commitment to ensuring all our students will be prepared for success in an increasingly diverse global environment. The reforms proposed in Minnesota's Race to the Top application, ranging from a focus on closing achievement gaps, to improving teacher quality and instruction, to broadening student involvement in STEM education and careers are very consistent with our own efforts to invest in transforming education.

We would like to applaud the Obama Administration for its commitment to the expectation that all students should graduate prepared for higher education, vocational education, or a career, and for working with states that are willing to make the needed changes with a greater sense of urgency.

We would also like to thank you, Commissioner, for your Department's extensive effort and inclusive process for developing Minnesota's application. We are particularly pleased to have participated in many of the input and planning sessions and our support of this application is based on the detailed knowledge of its content. Given Minnesota's strong tradition of educational leadership our state has both the capacity and the commitment to implement reforms described in our Race to the Top application.

January 13, 2010

We are hopeful for a positive review by the Obama administration and we are committed to our continued support of Minnesota's quest for the development of a world class educational system that educates all children for a bright future.

Please feel free to contact me if I can provide additional information. I can be reached at (612) 672-3838 or [svargas@mplsfoundation.org](mailto:svargas@mplsfoundation.org). Thank you.

Sincerely,

(b)(6)

Sandra L. Vargas  
President and CEO  
The Minneapolis Foundation

January 13, 2010



Mrs. Alice Seagren  
Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

555 N. Wabasha St., Suite 240  
St. Paul, MN 55102  
Phone: (651) 293-0575  
Fax: (651) 293-0576  
Email: info@citizensleague.org  
Web: www.citizensleague.org

Re: Race to the Top Application

Dear Commissioner:

In 1989, the Citizens League first developed the recommendations for chartered schools, which have obviously gone on to become a national model for innovations in education. This innovative idea wouldn't have been possible without the support of broad and diverse political, administrative and community leadership.

Twenty years later, we think the need for innovative and effective educational policies and implementation tools is more important than ever.

We have reviewed the Race to the Top application that you have coordinated for Minnesota, and are very supportive for the work the Minnesota Department of Education has done in this process. It has not only been inclusive of the wide range of stakeholders in this effort, but set clear goals that will renew Minnesota's role as a state that can innovate and achieve in education.

Please don't hesitate to contact me with any questions.

Sincerely,

(b)(6)

Sean Kershaw  
Executive Director

Thanks so much  
for your leadership!

2010 Board of Directors

- Brian Bell
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- Emmett Coleman
- Steve Dornfeld
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Sean Kershaw, Executive Director

January 13, 2010



Ms. Karen Klinzing  
Assistant Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113-4266

555 N. Wabasha St., Suite 240  
St. Paul, MN 55102  
Phone: (651) 233-0575  
Fax: (651) 293-0576  
Email: info@citizensleague.org  
Web: www.citizensleague.org

Re: Race to the Top Application

Dear Ms. <sup>Karen</sup>Klinzing:

In 1989, the Citizens League first developed the recommendations for chartered schools, which have obviously gone on to become a national model for innovations in education. This innovative idea wouldn't have been possible without the support of broad and diverse political, administrative and community leadership.

Twenty years later, we think the need for innovative and effective educational policies and implementation tools is more important than ever.

We have reviewed the Race to the Top application that you have coordinated for Minnesota, and are very supportive for the work the Minnesota Department of Education has done in this process. It has not only been inclusive of the wide range of stakeholders in this effort, but set clear goals that will renew Minnesota's role as a state that can innovate and achieve in education.

Please don't hesitate to contact me with any questions.

Sincerely,

(b)(6)

Sean Kershaw  
Executive Director

Great work!

2010 Board of Directors

Brian Bell  
Laura Bishop  
Judy Blasag  
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Kevin Goodno, Chair  
Peggy Gurne  
Tess Hohman  
Thomas Horner  
Bob Josephson  
Shells Kiscaden  
Leslie Kupchella  
Acooa Leo  
Sarah Lufman  
Kathy Meck  
Alberto Manserrate  
Jeff Peterson  
Zech Pettus  
Kerri Prowman  
Kathryn Roberts  
Carolyn Smallwood  
Nena Street  
Tom Teigen  
Judy Titcoyrb  
Diana Traa  
Donna Zimmerman

Sean Kershaw, Executive Director



The Medtronic Foundation  
710 Medtronic Parkway, MS LC110  
Minneapolis, MN 55432.5604 USA  
[www.medtronic.com/foundation](http://www.medtronic.com/foundation)

tel 763.505.2639  
fax 763.505.2648

January 11, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing on behalf of Medtronic and the Medtronic Foundation to express our enthusiastic support of Minnesota's application for Race to the Top funding.

Ensuring that all Minnesotans are receiving the best education they can is fundamental to our philanthropic mission, and imperative for continued success of Medtronic and the Minnesota competitive working environment.

We recognize that Race to the Top funds represent a significant opportunity to complement, and accelerate, Minnesota's nationally recognized leadership in educational reform.

The state's recent efforts (and successes) in STEM education clearly align with the Race to the Top objectives, and is of particular interest to Medtronic. We all agree that we can do a better job in making STEM subjects more accessible and approachable for our children. Yet no single entity can do it alone. For real change, we can't be afraid to explore new ways of doing things, and tap into all available resources.

We understand the STEM component of the Race to the Top application is very competitive. Given Minnesota's existing strategic partnerships with the STEM community – primary, secondary and higher education, government, business and philanthropy – it's clear we all have unique perspectives, talents and contributions to bring to the table. Minnesota has embraced these resources. We hope the federal funding will continue to strengthen this commitment.

We also believe that the key to improved opportunities for all students centers on teacher quality. Getting and keeping the best, brightest and most inspiring teachers in the classroom is paramount, and we applaud Minnesota's leadership in this area

However, we are not immune to the issues that face educational systems around the country. As a state renowned for academic prowess, it should concern us that some of our largest school districts are falling behind the rest of the country in achievement. Medtronic and the Medtronic Foundation support the state's innovative efforts to close Minnesota's achievement gap and help all students reach their potential.

Minnesota should be well positioned to receive up to \$175 million for our students because of the work already done, and because we all are committed to supporting the state's continued efforts.

Sincerely,

(b)(6)

David D. Etwiler  
Vice President, Medtronic Community Affairs  
Executive Director, Medtronic Foundation

RECEIVED  
MN DEPT OF EDUCATION  
2010 JAN 15 PM 2:35

THE MCKNIGHT FOUNDATION

January 8, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

710 Second Street South  
Suite 400  
Minneapolis,  
Minnesota 55401  
612-333-4220  
612-332-3833 fax  
www.mcknight.org

Dear Commissioner Seagren:

The Obama-Biden administration's Race to the Top initiative presents a historic opportunity to engage our educational, civic, business, and community leadership in competing for significant federal resources to advance and reward education innovation and reform. The goal is clear — it's about the kids. We applaud the collective work to prepare Minnesota's strongest application and wish to add The McKnight Foundation's voice of support.

Rather than try and summarize the merits of the application, let me briefly explain why its innovation and resource objectives are important to this Foundation's complementary investment. McKnight is a Minnesota-based family foundation with a long history of funding early childhood care and education and school-readiness. Recently, our board directed our philanthropic investments to promote and increase third-grade literacy.

This goal advances a demonstrated indicator of achievement for on-track graduation and post-secondary success, and is a significant predictor of academic success as defined by high school graduation. In the last decade, our priorities have included improvements in early childhood quality, access, and affordability, and include, for example, support for the Parent Aware/Quality Rating System, the Minnesota Initiative Foundation's statewide early childhood initiative, the national BUILD effort of the Early Childhood Funders' Collaborative, and other policy efforts to establish a sustainable governance and funding system for early childhood. In the future, we will supplement this work with new and complementary efforts that focus on transitions from kindergarten through third grade, as well as research-based reading instruction in and beyond the classroom to close early literacy gaps in the Twin Cities.

The Race to the Top proposal priorities — and, hopefully, accompanying resources — are the platform upon which the Foundation's focused investment will have the greatest impact. Innovation and reform in the educational system is necessary for achievement and for lifetime learning.

Again, we fully support the State of Minnesota's Race to the Top efforts as a critical next step for the future of our children, our economy, and our civic well-being.

Sincerely,

(b)(6)

Kate Wolford  
President

KFW/kk



ELLEN GOLDBERG LUGER  
Executive Director, General Mills Foundation  
Vice President, General Mills

---

## GENERAL MILLS FOUNDATION

January 11, 2010

Alice Seagren, Commissioner  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

On behalf of the General Mills Foundation, I am writing to express our support of Minnesota's application for the federal Race to the Top program. I have had the pleasure of directly supporting many encouraging education reform initiatives in this state. With that perspective, I know that now is the time to capitalize on our state's leadership by putting forward an aggressive application in this federal competition.

Minnesota is well positioned to receive up to \$175 million for our students because of the strong base of reform we have built, the aggressive proposals outlined in the state plan, and support of the community from institutions like the General Mills Foundation. Specifically:

- The State has developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 40 percent of our students are already being taught by teachers participating in the researched-based alternative pay program called Q Comp. Minnesota's application proposes to strengthen Q Comp by including principals and developing a statewide system for evaluating teachers.
- The State was the first to pioneer the charter school concept and still has the strongest environment for charter schools in the nation.
- The State's recent efforts in Science, Technology, Engineering and Math (STEM) align perfectly with what the Obama Administration is looking for in state leadership on this issue.

Last fiscal year, General Mills and the General Mills Foundation funded or committed to fund over \$6 million to education initiatives in Minnesota, including direct support for efforts in all of these areas. This support includes:

- A \$600,000 commitment to Teach For America, bringing this innovative program to some of lowest-achieving schools in Minneapolis;
- Multi-year operating support for the Principal's Academy, a key tool to recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most; and
- Direct operating support for innovative charter schools like the KIPP Academy and Harvest Prep.

Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

We participated in the state's stakeholder process as they reached out to business groups, foundations, education organizations, union leadership, minority community leaders, higher education and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership.

We are committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely,

(b)(6)

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January 13, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

I am writing to express Volunteers of America of Minnesota's support of Minnesota's application for the federal Race to the Top funds. Our organization has participated fully in the stakeholder meetings and has been thoroughly impressed with the level of thoughtful and strategic planning that has gone into the development of the application. Minnesota has long been a leader in education reforms and this is a critical opportunity to capitalize on our leadership by putting forward an aggressive application in this federal competition.

Minnesota is well positioned to receive Race to the Top funding for our students because of the work we've already done:

- We've developed nationally recognized academic standards for students in math, language arts, science and social studies that have become the model for other states. Our assessments are also on the cutting edge of technology, especially in science.
- More than 30% of our students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- We were the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.
- Our recent efforts in Science, Technology, Engineering and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.

We support our state's efforts in these areas because they represent the next steps needed to close Minnesota's achievement gap and help all students reach their potential. Reforms such as those outlined in the Race to the Top application are necessary to improve the quality of our education programs and produce graduates who are ready to compete

Commissioner Alice Seagren  
January 13, 2010  
Page Two

against the world's best. Improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

The state's stakeholder process reached out to business groups, education organizations, union leadership, minority community leaders, higher education, charter schools and authorizers and elected officials. The result of this inclusive effort is a strong plan that will keep Minnesota at the forefront of education leadership.

We are committed to supporting the state's efforts in this area. Working together with other state leaders is the best way to win the Race to the Top, close the achievement gap and improve achievement for all Minnesota students.

Sincerely,

(b)(6)

A large rectangular area of the document is redacted with a solid yellow background. The text "(b)(6)" is written in the top-left corner of this redacted area.

Michael Weber  
President and CEO  
Volunteers of America of Minnesota



# STATE OF MINNESOTA

## Office of Governor Tim Pawlenty

130 State Capitol ♦ 75 Rev. Dr. Martin Luther King Jr. Boulevard ♦ Saint Paul, MN 55155

January 15, 2010

Secretary Arne Duncan  
Office of the Secretary  
U.S. Department of Education  
LBJ Education Building, Room 7W311  
400 Maryland Avenue Southwest  
Washington, DC 20202

Dear Secretary Duncan:

Minnesotans are rightfully proud of their education system. We lead the nation in many categories of student achievement and have pioneered reforms that have become models for other states. I am equally proud of our application for the Race to the Top grant from the U.S. Department of Education.

Over the past seven years, my Administration, with bipartisan help from the Legislature, has implemented many reforms with the goal of closing the achievement gap between minorities and children in poverty and their more affluent, white classmates. We have:

- established new rigorous academic standards and increased our graduation requirements.
- embraced the reforms in No Child Left Behind that target help and resources to specific subgroups of students who are falling behind.
- fundamentally changed the way we pay teachers by rewarding achievement and encouraging research-based professional development.
- focused on science, technology, engineering, and math to prepare students for success in these important fields.
- expanded public school choice, promoting entrepreneurship in our schools and giving parents more options.

These efforts have raised student achievement and helped close the achievement gap. It is these reforms that make our application for Race to the Top so strong.

Secretary Arne Duncan

Page 2

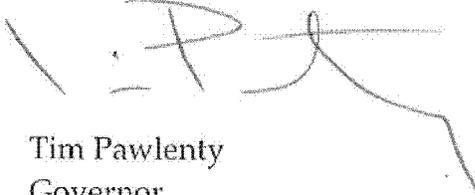
January 15, 2010

While this grant may represent radical change for some states, Minnesota is already on course to implement the reforms asked for in Race to the Top.

I am also proud of the way our state came together to support this application. We involved stakeholders from K-12 education, higher education, the teachers union, the business community, minority groups, and foundations. The overwhelming response from school districts and charter schools shows that Minnesota's education leaders are ready to take on this challenge. We have included many letters of support demonstrating how the rest of our state is ready to help them meet this challenge.

I urge your strong consideration for Minnesota's Race to the Top application. We stand ready to once again lead the nation in implementing education reform and helping all students reach their highest level of academic achievement.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Pawlenty', written over a horizontal line.

Tim Pawlenty  
Governor

Congress of the United States  
Washington, DC 20515

January 15, 2010

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren:

We are writing to express our support of Minnesota's application for federal Race to the Top funds. We understand education leaders in Minnesota have put together an application that will improve academic achievement for all students by investing in key supports that 1) refine the state's current rigorous state standards; 2) provide new supports for teachers and principals aimed at improving effectiveness; 3) enhance and coordinate local data systems with state data systems; and 4) dramatically improve the state's persistently lowest-achieving schools.

As Members of Congress, we support the administration's focus on improving achievement in Minnesota schools through increased accountability, and we know Minnesota educators are up to the challenge articulated in the Race to the Top competition.

- Minnesota boasts nationally recognized academic standards for students in math, language arts, science, and social studies that have become the model for other states. Minnesota assessments are also on the cutting edge of technology, especially in science.
- More than 40 percent of Minnesota students are already being taught by teachers participating in the researched-based alternative pay program called QComp. Minnesota's application proposes to strengthen QComp by including principals and developing a statewide system for evaluating teachers.
- Minnesota was the first to pioneer the charter school concept and still have the strongest environment for charter schools in the nation.
- Recent efforts in Science, Technology, Engineering, and Math (STEM) match up perfectly with what the Obama Administration is looking for in state leadership on this issue.

Minnesota has a strong history of education reform, and we believe that improving student achievement at all levels is necessary to improve Minnesota's workforce and grow our economy.

We are committed to supporting the state's efforts in this area and wish you and our schools good luck with Minnesota's Race to the Top application.

Sincerely,



---

Congressman John Kline



---

Senator Amy Klobuchar



---

Senator Al Franken



---

Congresswoman Betty McCollum



---

Congressman Erik Paulsen

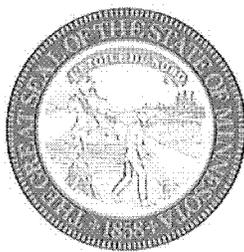


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Congressman Keith Ellison

**Kurt Zellers**  
State Representative  
House Republican Leader

District 32B  
Hennepin County



# Minnesota House of Representatives

January 15, 2009

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren:

As Minority Leader of the Minnesota House of Representatives, I am writing to express my support for Minnesota's application for the federal Race to the Top funds. I participated in the state's stakeholder process as they reached out to teachers, elected officials, education organizations, union leadership, business groups, minority community leaders, higher education officials and others.

The result of this effort is a strong plan that will keep Minnesota at the forefront of education leadership - leadership that has produced college-ready academic standards, a researched-based alternative pay program called Q Comp, a strong environment for charter schools, and new efforts in Science, Technology, Engineering and Math (STEM).

Minnesota has a strong history of education reform, and improving student achievement through increased accountability at all levels is necessary to improve Minnesota's workforce and grow our economy. I am confident that Minnesota educators are up to the challenge articulated in the Race to the Top competition.

On behalf of the students, parents and teachers I represent as Minority Leader of the Minnesota House of Representatives, I support Minnesota's Race to the Top application.

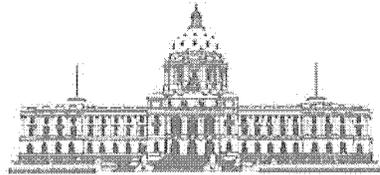
Sincerely,

A handwritten signature in cursive script that reads "Kurt Zellers".

Representative Kurt Zellers  
Minority Leader, Minnesota House of Representatives



LeROY STUMPF  
Senator 1st District  
12501 240th Avenue SE  
Phumner, Minnesota 56748  
and  
208 - State Capitol  
75 Dr. Martin Luther King, Jr. Blvd.  
St. Paul, Minnesota 55155-1606  
Phone: (651) 296-8660  
Fax: (651) 225-7566



## Senate

State of Minnesota

January 15, 2010

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren:

As Chair of the Minnesota Senate's E-12 Education Budget and Policy Division, I am writing to formally express my support of Minnesota's application for the State Incentive Grant funding, commonly known as Race to the Top. The State of Minnesota has always been a nationwide leader and innovator in effective education policies. Given the high quality of public school administrators, educators and students in our state today, rest assured that every dollar allocated to this state will be used to help every student reach their maximum potential.

While I am disappointed with the federal government's decision to make the application process the exclusive domain of the states' executive administrative agencies, I credit the Minnesota Department of Education with their willingness to work with the Minnesota Senate and their ability to address the concerns of Minnesota's various education stakeholders. In addition, I am pleased to see that Minnesota's leadership and innovative successes in education have afforded the Minnesota Department of Education the ability to fashion the application in a way that it is able to stand on its own without requiring changes to existing law.

Although our committee has some unanswered questions regarding the ultimate outcome of Race to the Top, I support the Obama administration's dedication to enhancing standards, increasing educator effectiveness and turning around struggling schools. In supporting Minnesota's Race to the Top application, I have the utmost faith that through the hard work of the Minnesota Department of Education, the commitment of the Minnesota Senate and stewardship of the U.S. Department of Education, we can utilize the Race to the Top funds to truly make a difference for the children of Minnesota.

Sincerely,

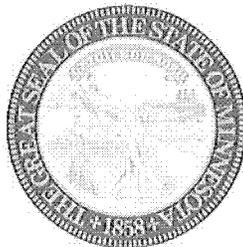
A handwritten signature in dark ink that reads "LeRoy Stumpf". The signature is written in a cursive style with a large, prominent "L" and "S".

LeRoy Stumpf



**Carlos Mariani Rosa**  
State Representative

District 65B  
Ramsey County St. Paul



# Minnesota House of Representatives

COMMITTEES: CHAIR, K-12 EDUCATION POLICY AND OVERSIGHT; WAYS AND MEANS; EARLY CHILDHOOD FINANCE AND POLICY DIVISION; K-12 EDUCATION FINANCE DIVISION

January 13, 2010

Commissioner Alice Seagren  
1500 Highway 36 West  
Roseville, MN 55113-4266

Dear Commissioner Seagren:

I am writing in support of Minnesota's Race to the Top application. I believe the proposal offers a powerful way for our state to drive practices needed to reform our K-12 education system as we simultaneously seek to invest more into our schools.

Given that Minnesota's constitution directs the legislature to provide for public schools and the governor to faithfully execute state laws, I expect MDE to work collaboratively with the House K-12 Education Policy Committee and the state legislature during the 2010 legislative session to identify state education policies and laws implicated in the application, and to recommend changes and clarifications where needed.

I have reviewed the proposal and support many of its components. I have three primary issues of concern that I trust we can address together:

1. That these new efforts keep a strong focus on closing racial inequalities in academic outcomes ("closing gaps").
2. That we responsibly discern beforehand the major consequences – especially for students - of premising a significant part of teacher and principal tenure, licensure and evaluation on MCA scores. These new performance evaluation systems must be created in true partnership with teachers and principals and be based on good research. They should also incorporate the use of multiple measures established in Minnesota statutes.
3. Minnesotans must be provided with an objective understanding of the pros and cons of adopting national standards and assessments. I had suggested in an earlier communiqué that RTTT funds should be used to create an independent policy research entity that could inform us on these matters. Perhaps the OTAS can fulfill this function?

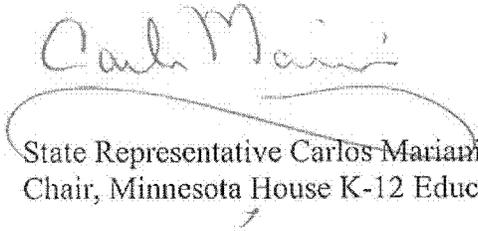
Finally, RTTT should encourage greater investment in early childhood education for all that nurtures young students to be ready for school. Such programs should align to the goals of high academic standards in K-12 schools.

I stand in solidarity with you in working to close the academic achievement gaps between all groups of students and to end race based inequalities in our state's K-12 education system. I appreciate the Minnesota Department of Education's (MDE) efforts to engage stakeholders,



including myself, in the application process and look forward to remaining engaged throughout the RTTT process.

Sincerely,



State Representative Carlos Mariam  
Chair, Minnesota House K-12 Education Policy and Oversight Committee

Cc: Minnesota House Speaker Margaret Anderson Kelliher  
Senate Majority Leader Larry Pogemiller  
Members Minnesota House of Representatives  
Members Minnesota Senate



## Senate

State of Minnesota

**SENATOR CHUCK WIGER**

Senate District 55  
Capitol Building, Room 323  
75 Rev. Dr. Martin Luther King, Jr. Blvd.  
St. Paul, MN 55155-1606  
(651) 296-6820

January 15, 2010

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren:

As Deputy Chair of the Minnesota Senate's E-12 Education Budget and Policy Division, I am writing to formally express my support of Minnesota's application for the State Incentive Grant funding, commonly known as Race to the Top. The State of Minnesota has always been a nationwide leader and innovator in effective education policies. Given the high quality of public school administrators, educators and students in our state today, rest assured that every dollar allocated to this state will be used to help every student reach their maximum potential.

While I am disappointed with the federal government's decision to make the application process the exclusive domain of the states' executive administrative agencies, I credit the Minnesota Department of Education with their willingness to work with the Minnesota Senate and their ability to address the concerns of Minnesota's various education stakeholders. In addition, I am pleased to see that Minnesota's leadership and innovative successes in education have afforded the Minnesota Department of Education the ability to fashion the application in a way that it is able to stand on its own without requiring changes to existing law.

Although our committee has some unanswered questions regarding the ultimate outcome of Race to the Top, I support the Obama administration's dedication to enhancing standards, increasing educator effectiveness and turning around struggling schools. In supporting Minnesota's Race to the Top application, I have the utmost faith that through the hard work of the Minnesota Department of Education, the commitment of the Minnesota Senate and stewardship of the U.S. Department of Education, we can utilize the Race to the Top funds to truly make a difference for the children of Minnesota.

Sincerely,

Senator Chuck Wiger



**TERRI BONOFF**  
Senator District 43  
Vice Chair, E-12 Education Finance  
325 State Capitol Building  
St. Paul, MN 55155-1606  
Office: (651) 296-4314  
Fax: (651) 767-0924  
E-mail: sen.terri.bonoff@senate.mn



## Senate

State of Minnesota

January 13, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren,

I am writing in support of the Minnesota Race to the Top application.

I have participated in preparing this application for the past six months. I have attended stakeholder meetings, participated on U.S. Department of Education conference calls, attended a National Conference of State Legislatures seminar on Race to the Top and even briefly met with Secretary Duncan regarding Minnesota participation.

My support is based on my comprehensive understanding of how this application was written, its diverse and broad stakeholder group support and its potential to serve a catalytic role in transforming Minnesota's educational system.

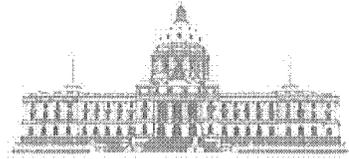
We currently have an achievement gap that is unacceptable. We are failing our "at-risk" children. We are joined by most states in our failure. I trust that, should we receive this grant, we will exponentially improve the educational and lifetime outcomes for these children. That is why I heartily endorse this application and profoundly thank all who have worked on it.

Sincerely,

A handwritten signature in cursive script that reads "Terri Bonoff".

Senator Terri E. Bonoff  
Vice Chair – Education Finance Committee

cc: Senator Larry Pogemiller – Senate Majority Leader  
Senator Leroy Stumpf – Chair; Education Finance Committee



## Senate

State of Minnesota

January 15, 2009

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Commissioner Seagren:

As members of the Minnesota Senate Education Committee, we write to express our support of Minnesota's application for the federal Race to the Top funds. We participated in the state's stakeholder process as they reached out to teachers, elected officials, education organizations, union leadership, business groups, minority community leaders, higher education officials and others.

The result of this effort is a strong plan that will keep Minnesota at the forefront of education leadership - leadership that has produced college-ready academic standards, a researched-based alternative pay program called Q Comp, a strong environment for charter schools and new efforts in Science, Technology, Engineering and Math (STEM).

We support the Obama administration's focus to improve academic achievement through increased accountability. We are confident that Minnesota educators are up to the challenge articulated in the Race to the Top competition.

On behalf of the students, parents and teachers we represent as members of the Minnesota Senate, we support Minnesota's Race to the Top application.

Sincerely,

A handwritten signature in cursive script that reads "Terri Bonoff".

Senator Terri Bonoff

A handwritten signature in cursive script that reads "Geoff Michel".

Senator Geoff Michel

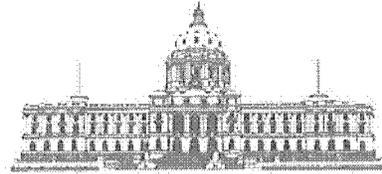
A handwritten signature in cursive script that reads "Kathy Saltzman".

Senator Kathy Saltzman

A handwritten signature in cursive script that reads "Tom Saxhaug".

Senator Tom Saxhaug

DAN SKOGEN  
Senate District 10  
303 State Capitol  
75 Rev. Dr. Martin Luther King, Jr. Blvd.  
St. Paul, MN 55155-1606  
(651) 296-6655 Fax (651) 225-7574  
E-Mail: sen.dan.skogen@senate.mn



# Senate

State of Minnesota

January 15, 2009

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, Minnesota 55113

Commissioner Seagren:

As members of the Minnesota Senate, we write to express our support of Minnesota's application for the federal Race to the Top funds. We participated in the state's stakeholder process as they reached out to teachers, elected officials, education organizations, union leadership, business groups, minority community leaders, higher education officials and others.

The result of this effort is a strong plan that will keep Minnesota at the forefront of education leadership - leadership that has produced college-ready academic standards, a researched-based alternative pay program called Q Comp, a strong environment for charter schools and new efforts in Science, Technology, Engineering and Math (STEM).

We support the Obama administration's focus to improve academic achievement through increased accountability. We are confident that Minnesota educators are up to the challenge articulated in the Race to the Top competition.

On behalf of the students, parents and teachers we represent as members of the Minnesota Senate, we support Minnesota's Race to the Top application.

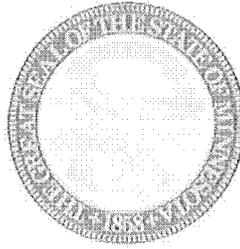
SINCERELY,

A handwritten signature in cursive script that reads "Dan Skogen".

DAN SKOGEN  
STATE SENATOR  
DISTRICT 11

January 15, 2009

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113



# Minnesota House of Representatives

Commissioner Seagren:

As members of the Minnesota House of Representatives Education Committee, we write to express our support of Minnesota's application for the federal Race to the Top funds. We participated in the state's stakeholder process as they reached out to teachers, elected officials, education organizations, union leadership, business groups, minority community leaders, higher education officials and others.

The result of this effort is a strong plan that will keep Minnesota at the forefront of education leadership - leadership that has produced college-ready academic standards, a researched-based alternative pay program called Q Comp, a strong environment for charter schools and new efforts in Science, Technology, Engineering and Math (STEM).

We support the Obama administration's focus to improve academic achievement through increased accountability. We are confident that Minnesota educators are up to the challenge articulated in the Race to the Top competition.

On behalf of the students, parents and teachers we represent as members of the Minnesota House of Representatives, we support Minnesota's Race to the Top application.

Sincerely,

Handwritten signature of Carol McFarlane in cursive.

Representative Carol McFarlane

Handwritten signature of Jerry Newton in cursive.

Representative Jerry Newton

Handwritten signature of Pat Garofalo in cursive.

Representative Pat Garofalo

Handwritten signature of Bud Nornes in cursive.

Representative Bud Nornes

Handwritten signature of Connie Doepke in cursive.

Representative Connie Doepke

Handwritten signature of Denise Dittrich in cursive.

Representative Denise Dittrich

Handwritten signature of Keith Downey in cursive.

Representative Keith Downey

Handwritten signature of Jim Abeler in cursive.

Representative Jim Abeler

Handwritten signature of Jenifer Loon in cursive.

Representative Jenifer Loon

Handwritten signature of Marsha Swails in cursive.

Representative Marsha Swails

**Nora Slawik**  
State Representative

District 55B  
Ramsey and Washington Counties  
Oakdale and southern Maplewood



# Minnesota House of Representatives

COMMITTEES: CHAIR, EARLY CHILDHOOD FINANCE AND POLICY DIVISION  
HEALTH CARE AND HUMAN SERVICES FINANCE DIVISION  
K-12 EDUCATION POLICY AND OVERSIGHT  
FINANCE

January 14, 2010

Alice Seagren  
Commissioner of Education  
1500 Highway 36 West  
Roseville, MN 55113

Commissioner Seagren:

As the Chair of the Early Childhood Finance and Policy Committee of the Minnesota House of Representatives, I am writing in support of Minnesota's application for the federal Race to the Top funds. I participated in the state's stakeholder process that included teachers, elected officials, education organizations, union leadership, business groups, minority community leaders, higher education officials and others.

While this plan offers Minnesota the opportunity to reform the K-12 system so students can achieve and learn based on college-ready academic standards and performance measures are developed in strong partnership with teachers and principals, there is a lack of the best education reform we can make, investing in early care and education. To truly close the education gap, Minnesota and all states must invest in early education. Only this way will we close the achievement gap before our students ever enter the K-12 system.

I hope our state and federal governments will seriously consider the consequences for not including early education in educational reform funding such as Race to the Top.

Sincerely,

A handwritten signature in black ink that reads "Nora Slawik".

Rep. Nora Slawik

Cc:

House Speaker Margaret Kelliher  
Rep. Mindy Greiling, Chair, K-12 Education Finance  
Rep. Carlos Mariani, Chair, K-12 Policy  
Members of the Early Childhood Finance and Policy Committee  
Patty Phillips, Superintendent, ISD 622  
Nancy Livingston, School Board Chair, ISD 622



# Lakes Country Service Cooperative



*Joshua Nelson, Manager of Educational Services*

1001 E. Mount Faith | Fergus Falls, MN 56537

Phone: (218) 739-3273 | Fax: (218) 739-2459 | [www.lcsc.org](http://www.lcsc.org)

January 7, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

Please consider this a letter of support for Minnesota's application for the Race to the Top grant through the U.S. Department of Education.

We share your belief that the Race to the Top initiative in Minnesota would support our state's efforts in raising student achievement for all students. Our statewide partnerships with K-12 public and private education, post-secondary education, The Minnesota Service Cooperatives and the Minnesota Department of Education has allowed us to efficiently and effectively improve teacher instruction; resulting in increased student assessment scores. The Math Science Teacher Partnership (MSTP), Science, Technology, Engineering and Math (STEM) initiatives and School Improvement – Annual Yearly Progress state-wide support efforts are three of many examples of our successful partnerships. We welcome organized efforts to continue momentum toward improving our schools.

Lakes Country Service Cooperative supports your efforts to improve schools through the Race to the Top initiative. We are prepared and excited to work with you on this project to systematically reform our Minnesota schools.

Sincerely,  
(b)(6)

Jeremy Kovash  
Executive Director

## Service Cooperative Board of Directors

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# Northeast Service Cooperative

*Collaborating to meet your changing needs*

*Central Office:*  
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*Executive Director:*  
Paul Brinkman

*Board Chairperson:*  
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*Charles Rick,*  
Superintendent  
St. Louis County Schools

January 4, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

On December 16, 2009, the Board of Directors of the Northeast Service Cooperative authorized me to write this letter of support to you for your efforts to secure a Race to the Top grant through the U.S. Department of Education.

We share your assessment that Minnesota is well-positioned to receive federal funding due to recent investments in education. The Race to the Top initiative would both strengthen and broaden our efforts in education innovation and reform; securing a broader, deeper impact on Minnesota's students, teachers and schools.

We have appreciated the commitment from the Minnesota Department of Education in developing effective partnerships in science, technology, engineering and math (STEM) as well as adequate yearly progress support under No Child Left Behind. Along with wishing the best in your efforts, we want to assure you that we are prepared to work with you to help transform this proposal into a national model for systemic reform.

Kindest personal regards,

(b)(6)

Paul Brinkman, Executive Director  
Northeast Service Cooperative



# Northwest Service Cooperative

114 First Street West  
Thief River Falls, MN 56701-1911  
218-681-0900  
218-681-0915 (fax)  
[www.nw-service.k12.mn.us](http://www.nw-service.k12.mn.us)

"Your Resource and Learning Partner"

Executive Director  
LLOYD STYRWOLL

## DIRECT LINES

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## EXTENSIONS

218-681-0900

*EDUCATION CONSULTANT*  
Becky Smith Ext. 107  
Tom Cox Ext. 102

*MEDIA SERVICES*  
Alice Hofstad Ext. 113  
Ginger Bendickson Ext. 114

*FINANCE & HR SERVICES*  
Roger DeLap  
Ext. 124

*ACCOUNTS RECEIVABLE*  
Bev Thompson  
Ext. 110

*ACCOUNTS PAYABLE*  
Jaci Jorde  
Ext. 120

*PROGRAM CLERICAL*  
Val Mattison  
Ext. 123

*RECEPTIONIST/CLERICAL*  
Dawn Kasprawicz  
Ext. 101

January 5, 2010

Commissioner Alice Seagren  
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113

Dear Commissioner Seagren:

The Northwest Service Cooperative would like to convey this letter of support to you for your efforts to secure a Race to the Top grant through the U.S. Department of Education.

We share your assessment that Minnesota is well-positioned to receive federal funding due to recent investments in education. The Race to the Top initiative would both strengthen and broaden our efforts in education innovation and reform; securing a broader, deeper impact on Minnesota's students, teachers and schools.

We have appreciated the commitment from the Minnesota Department of Education in developing effective partnerships in science, technology, engineering and math (STEM) as well as adequate yearly progress support under No Child Left Behind. Along with wishing the best in your efforts, we want to assure you that we are prepared to work with you to help transform this proposal into a national model for systemic reform.

Sincerely,

(b)(6)

Lloyd Styrwoll, Director  
Northwest Service Coop

**(A)(1) – Exhibit I: *Detailed Table for (A)(1) including participating LEAs, enrollment, etc. (see end of appendix)***

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |           |            |             |            |           |            |             |            |           |            |           |           |        |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|-----------|-------------------------------------|---|--------|-----------|------------|-------------|------------|-----------|------------|-------------|------------|-----------|------------|-----------|-----------|--------|
|                                     | # of Schools     | # of K-12 Students | # of Students In Poverty | Non-Charter        |                       | Charter                |                    |                       |           |                                     | Charter Authorizer  | (B)(3) | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (C)(1)(iv) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(5)(i) | (E)(2) |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board |           |                                     |   |        |           |            |             |            |           |            |             |            |           |            |           |           |        |
| ST. PAUL PUBLIC SCHOOL DISTRICT     | 102              | 38,108             | 27,866                   | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y         |        |
| MINNEAPOLIS PUBLIC SCHOOL DIST.     | 96               | 34,424             | 22,340                   | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y         |        |
| ANOKA-HENNEPIN PUBLIC SCHOOL DIST.  | 57               | 39,825             | 11,414                   | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| OSSEO PUBLIC SCHOOL DISTRICT        | 28               | 20,902             | 7,306                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y         |        |
| ROCHESTER PUBLIC SCHOOL DISTRICT    | 30               | 16,022             | 5,125                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| ROBBINSDALE PUBLIC SCHOOL DISTRICT  | 19               | 11,948             | 4,999                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| ROSEMOUNT-APPLE VALLEY-EAGAN        | 34               | 27,487             | 4,989                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A       |        |
| ST. CLOUD PUBLIC SCHOOL DISTRICT    | 18               | 9,469              | 4,590                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| NORTH ST PAUL-MAPLEWOOD SCHOOL DIST | 20               | 10,797             | 4,206                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| DULUTH PUBLIC SCHOOL DISTRICT       | 29               | 9,506              | 3,908                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| BLOOMINGTON PUBLIC SCHOOL DISTRICT  | 17               | 10,263             | 3,662                    | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| BURNSVILLE PUBLIC SCHOOL DISTRICT   | 22               | 10,050             | 3,472                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N          | #         | Y          | Y         | Y         |        |
| BRAINERD PUBLIC SCHOOL DISTRICT     | 12               | 6,817              | 2,924                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| MOUNDS VIEW PUBLIC SCHOOL DISTRICT  | 24               | 10,090             | 2,778                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| ELK RIVER PUBLIC SCHOOL DISTRICT    | 25               | 12,702             | 2,575                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| SOUTH WASHINGTON COUNTY SCHOOL DIST | 26               | 16,711             | 2,569                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A       |        |
| MANKATO PUBLIC SCHOOL DISTRICT      | 19               | 7,362              | 2,536                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| BEMIDJI PUBLIC SCHOOL DISTRICT      | 13               | 4,944              | 2,504                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| RICHFIELD PUBLIC SCHOOL DISTRICT    | 10               | 4,004              | 2,466                    | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| ROSEVILLE PUBLIC SCHOOL DISTRICT    | 13               | 6,564              | 2,397                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N          | N         | Y          | Y         | N/A       |        |
| AUSTIN PUBLIC SCHOOL DISTRICT       | 11               | 4,514              | 2,298                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| HOPKINS PUBLIC SCHOOL DISTRICT      | 12               | 7,308              | 2,284                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| WHITE BEAR LAKE SCHOOL DISTRICT     | 19               | 8,259              | 2,111                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | N           | #          | Y         | Y          | N/A       |           |        |
| WILLMAR PUBLIC SCHOOL DISTRICT      | 9                | 4,163              | 2,095                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| COLUMBIA HEIGHTS PUBLIC SCHOOL DIST | 6                | 2,933              | 2,092                    | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| SHAKOPEE PUBLIC SCHOOL DISTRICT     | 9                | 6,833              | 1,970                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| MOORHEAD PUBLIC SCHOOL DISTRICT     | 10               | 5,504              | 1,795                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| CAMBRIDGE-ISANTI PUBLIC SCHOOL DIST | 10               | 5,098              | 1,749                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| OWATONNA PUBLIC SCHOOL DISTRICT     | 10               | 4,932              | 1,709                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | Y          | Y         | Y         |        |
| WEST ST. PAUL-MENDOTA HTS.-EAGAN    | 10               | 4,476              | 1,685                    | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| BUFFALO PUBLIC SCHOOL DISTRICT      | 11               | 5,878              | 1,551                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| EDEN PRAIRIE PUBLIC SCHOOL DISTRICT | 11               | 9,825              | 1,550                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N/A        | Y         | Y          | Y         | N/A       |        |
| WAYZATA PUBLIC SCHOOL DISTRICT      | 16               | 10,379             | 1,545                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A       |        |
| MINNESOTA TRANSITIONS CHARTER SCH   | 8                | 3,223              | 1,537                    | -                  | -                     | -                      | X                  | X                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y         |        |
| GRAND RAPIDS PUBLIC SCHOOL DISTRICT | 16               | 3,909              | 1,528                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| FOREST LAKE PUBLIC SCHOOL DISTRICT  | 14               | 6,924              | 1,527                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| BROOKLYN CENTER SCHOOL DISTRICT     | 3                | 2,249              | 1,510                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y         |        |
| ST. FRANCIS PUBLIC SCHOOL DISTRICT  | 9                | 5,487              | 1,500                    | X                  | X                     | X                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |
| FRIDLEY PUBLIC SCHOOL DISTRICT      | 7                | 2,851              | 1,495                    | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A       |        |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |        |        |        |        |        |        |        |        |         |         |         |         |         |   |   |     |     |     |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|-----------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---|---|-----|-----|-----|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |           | Uses Standard Terms and Conditions?   | (B)(1) | (B)(2) | (B)(3) | (B)(4) | (B)(5) | (B)(6) | (B)(7) | (B)(8) | (B)(9) | (B)(10) | (B)(11) | (B)(12) | (B)(13) | (B)(14) |   |   |     |     |     |
|                                     |                  |                    |                          | Superintendent     | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |           |   |        |        |        |        |        |        |        |        |        |         |         |         |         |         |   |   |     |     |     |
| SPRING LAKE PARK PUBLIC SCHOOLS     | 11               | 4,815              | 1,495                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| WORTHINGTON PUBLIC SCHOOL DISTRICT  | 5                | 2,417              | 1,494                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| ALBERT LEA PUBLIC SCHOOL DISTRICT   | 10               | 3,309              | 1,480                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| EASTERN CARVER COUNTY PUBLIC SCHOOL | 15               | 8,981              | 1,444                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| ST. LOUIS PARK PUBLIC SCHOOL DIST.  | 10               | 4,447              | 1,435                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | Y   |     |
| SOUTH ST. PAUL PUBLIC SCHOOL DIST.  | 5                | 3,290              | 1,347                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| RED LAKE PUBLIC SCHOOL DISTRICT     | 9                | 1,411              | 1,242                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | Y   |     |
| WINONA AREA PUBLIC SCHOOL DISTRICT  | 10               | 3,395              | 1,240                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | Y   |     |
| STILLWATER AREA PUBLIC SCHOOL DIST. | 17               | 8,505              | 1,219                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | N       | # | Y | Y   | N/A |     |
| LAKEVILLE PUBLIC SCHOOL DISTRICT    | 16               | 11,269             | 1,215                    | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | Y | Y | Y   | Y   | N/A |
| INVER GROVE HEIGHTS SCHOOLS         | 8                | 3,825              | 1,187                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| CENTENNIAL PUBLIC SCHOOL DISTRICT   | 11               | 6,879              | 1,170                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| SAUK RAPIDS PUBLIC SCHOOL DISTRICT  | 5                | 3,716              | 1,158                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| FARMINGTON PUBLIC SCHOOL DISTRICT   | 9                | 6,525              | 1,103                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | Y   |     |
| NORTH BRANCH PUBLIC SCHOOLS         | 7                | 3,633              | 1,095                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| DETROIT LAKES PUBLIC SCHOOL DIST.   | 9                | 2,826              | 1,081                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| PRINCETON PUBLIC SCHOOL DISTRICT    | 4                | 3,459              | 1,040                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| MONTICELLO PUBLIC SCHOOL DISTRICT   | 7                | 4,059              | 1,039                    | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| HIBBING PUBLIC SCHOOL DISTRICT      | 5                | 2,383              | 1,013                    | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| BIG LAKE PUBLIC SCHOOL DISTRICT     | 4                | 3,529              | 986                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| ST. LOUIS COUNTY SCHOOL DISTRICT    | 14               | 2,018              | 982                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | Y | Y | Y   | Y   | Y   |
| HASTINGS PUBLIC SCHOOL DISTRICT     | 11               | 4,843              | 965                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| NORTHFIELD PUBLIC SCHOOL DISTRICT   | 7                | 3,881              | 919                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| CLOQUET PUBLIC SCHOOL DISTRICT      | 10               | 2,424              | 915                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| CASS LAKE-BENA PUBLIC SCHOOLS       | 4                | 1,128              | 910                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | Y   |     |
| INTERMEDIATE SCHOOL DISTRICT 287    | 48               | 1,730              | 905                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| HUTCHINSON PUBLIC SCHOOL DISTRICT   | 9                | 2,998              | 810                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| RED WING PUBLIC SCHOOL DISTRICT     | 7                | 2,841              | 804                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| STAPLES-MOTLEY SCHOOL DISTRICT      | 4                | 1,283              | 770                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| FERGUS FALLS PUBLIC SCHOOL DISTRICT | 6                | 2,563              | 762                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| THIEF RIVER FALLS SCHOOL DISTRICT   | 4                | 2,023              | 743                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| CHISAGO LAKES SCHOOL DISTRICT       | 8                | 3,504              | 742                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| MILACA PUBLIC SCHOOL DISTRICT       | 3                | 1,837              | 738                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| ST. MICHAEL-ALBERTVILLE SCHOOL DIST | 9                | 5,093              | 731                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| MARSHALL PUBLIC SCHOOL DISTRICT     | 5                | 2,203              | 726                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| MINNETONKA PUBLIC SCHOOL DISTRICT   | 10               | 8,465              | 720                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | N       | #       | Y | Y | N/A |     |     |
| MORA PUBLIC SCHOOL DISTRICT         | 4                | 1,817              | 718                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| PERHAM PUBLIC SCHOOL DISTRICT       | 4                | 1,458              | 680                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |
| WASECA PUBLIC SCHOOL DISTRICT       | 6                | 1,949              | 677                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y       | Y       | Y       | Y       | Y       | # | Y | Y   | N/A |     |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |           |            |             |              |              |              |              |              |           |            |             |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|-----------|-------------------------------------|---|--------|-----------|------------|-------------|--------------|--------------|--------------|--------------|--------------|-----------|------------|-------------|
|                                     | # of Schools     | # of K-12 Students | # of Students In Poverty | Non-Charter        |                       | Charter                |                    |                       |           |                                     | Charter Authorizer  | (E)(2) | (D)(1)(i) | (D)(1)(ii) | (D)(1)(iii) | (D)(2)(i)(a) | (D)(2)(i)(b) | (D)(2)(i)(c) | (D)(2)(i)(d) | (D)(2)(i)(e) | (D)(3)(i) | (D)(3)(ii) | (D)(3)(iii) |
|                                     |                  |                    |                          | Superintendent     | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board |           |                                     |   |        |           |            |             |              |              |              |              |              |           |            |             |
| FAIRMONT AREA SCHOOL DISTRICT       | 3                | 1,687              | 672                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| ST. PETER PUBLIC SCHOOL DISTRICT    | 8                | 1,850              | 664                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| GLENCOE-SILVER LAKE SCHOOL DISTRICT | 4                | 1,747              | 658                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| PINE CITY PUBLIC SCHOOL DISTRICT    | 4                | 1,626              | 656                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| LITCHFIELD PUBLIC SCHOOL DISTRICT   | 5                | 1,786              | 654                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| VIRGINIA PUBLIC SCHOOL DISTRICT     | 3                | 1,576              | 642                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | N            | Y            | Y         | N/A        |             |
| HIGHER GROUND ACADEMY               | 1                | 676                | 638                      | -                  | -                     | -                      | -                  | X                     | X         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| EDINA PUBLIC SCHOOL DISTRICT        | 12               | 8,098              | 615                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| LONG PRAIRIE-GREY EAGLE SCHOOL DIST | 3                | 1,055              | 597                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| ST. JAMES PUBLIC SCHOOL DISTRICT    | 3                | 1,096              | 591                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| WADENA-DEER CREEK SCHOOL DISTRICT   | 2                | 1,028              | 589                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| CROSBY-IRONTON PUBLIC SCHOOL DIST.  | 2                | 1,167              | 578                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | Y          |             |
| BECKER PUBLIC SCHOOL DISTRICT       | 5                | 2,758              | 575                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| COMMUNITY OF PEACE ACADEMY          | 2                | 683                | 574                      | -                  | -                     | -                      | -                  | X                     | X         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| GREENWAY PUBLIC SCHOOL DISTRICT     | 4                | 1,127              | 573                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | Y          |             |
| PINE RIVER-BACKUS SCHOOL DISTRICT   | 5                | 926                | 565                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| ROCORI PUBLIC SCHOOL DISTRICT       | 5                | 2,094              | 563                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| AITKIN PUBLIC SCHOOL DISTRICT       | 96               | 1,293              | 560                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| FOLEY PUBLIC SCHOOL DISTRICT        | 3                | 1,738              | 560                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |
| SIBLEY EAST SCHOOL DISTRICT         | 4                | 1,196              | 559                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| HINCKLEY-FINLAYSON SCHOOL DISTRICT  | 3                | 1,035              | 558                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| MONTEVIDEO PUBLIC SCHOOL DISTRICT   | 4                | 1,387              | 539                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |
| DEER RIVER PUBLIC SCHOOL DISTRICT   | 2                | 892                | 534                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| BLUE EARTH AREA PUBLIC SCHOOL       | 5                | 1,269              | 530                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| PEQUOT LAKES PUBLIC SCHOOLS         | 3                | 1,581              | 524                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| BAGLEY PUBLIC SCHOOL DISTRICT       | 3                | 1,012              | 519                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| SARTELL-ST. STEPHEN SCHOOL DISTRICT | 4                | 3,485              | 519                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |
| PIPESTONE AREA SCHOOL DISTRICT      | 5                | 1,171              | 514                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| HMONG COLLEGE PREP ACADEMY          | 2                | 545                | 510                      | -                  | -                     | -                      | -                  | X                     | X         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | Y          |             |
| NEW PRAGUE AREA SCHOOLS             | 5                | 3,739              | 505                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | Y            | Y            | Y         | Y          |             |
| DULUTH PUBLIC SCHOOLS ACADEMY       | 3                | 984                | 504                      | -                  | -                     | -                      | -                  | X                     | X         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| LAKE SUPERIOR PUBLIC SCHOOL DIST.   | 5                | 1,421              | 497                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| EVELETH-GILBERT SCHOOL DISTRICT     | 4                | 1,198              | 490                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |
| NEW ULM PUBLIC SCHOOL DISTRICT      | 4                | 2,027              | 490                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| PROCTOR PUBLIC SCHOOL DISTRICT      | 6                | 1,809              | 485                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| EAST METRO INTEGRATION DISTRICT     | 2                | 927                | 476                      | X                  | X                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |
| ONAMIA PUBLIC SCHOOL DISTRICT       | 4                | 730                | 468                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | Y          |             |
| PRAIRIE SEEDS ACADEMY               | 1                | 552                | 466                      | -                  | -                     | -                      | -                  | X                     | X         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | Y            | #            | Y            | Y         | N/A        |             |
| WARROAD PUBLIC SCHOOL DISTRICT      | 5                | 1,106              | 457                      | X                  | -                     | -                      | -                  | -                     | -         | Y                                   | Y   | Y      | Y         | Y          | Y           | Y            | Y            | N            | #            | Y            | Y         | N/A        |             |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms and Conditions <sup>7</sup> | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |           |            |             |           |            |             |            |           |           |            |             |        |  |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|---------------------------------------|---|--------|-----------|------------|-------------|-----------|------------|-------------|------------|-----------|-----------|------------|-------------|--------|--|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |                                       | Uses Standard   | (B)(3) | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(3)(i) | (D)(3)(ii) | (D)(3)(iii) | (E)(2) |  |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |                                       |   |        |           |            |             |           |            |             |            |           |           |            |             |        | Standard Terms and Conditions <sup>7</sup> |
| BRAMHAM PUBLIC SCHOOL DISTRICT      | 3                | 940                | 453                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| PIERZ PUBLIC SCHOOL DISTRICT        | 2                | 1,069              | 448                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| MAHNOMEN PUBLIC SCHOOL DISTRICT     | 3                | 631                | 447                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| FRAZEE-VERGAS PUBLIC SCHOOL DIST.   | 2                | 922                | 446                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| NEW LONDON-SPICER SCHOOL DISTRICT   | 4                | 1,484              | 445                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| HOUSTON PUBLIC SCHOOL DISTRICT      | 5                | 1,834              | 444                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| TRITON SCHOOL DISTRICT              | 3                | 1,113              | 434                      | X                  | -                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| INTERNATIONAL FALLS SCHOOL DISTRICT | 2                | 1,284              | 429                      | X                  | -                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| MENAHGA PUBLIC SCHOOL DISTRICT      | 2                | 782                | 429                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| TRACY-BALATON                       | 2                | 827                | 427                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| JORDAN PUBLIC SCHOOL DISTRICT       | 4                | 1,719              | 422                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| PELICAN RAPIDS PUBLIC SCHOOL DIST.  | 2                | 927                | 421                      | X                  | -                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| PAYNESVILLE PUBLIC SCHOOL DISTRICT  | 3                | 1,057              | 417                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| PRIOR LAKE-SAVAGE AREA SCHOOLS      | 11               | 7,073              | 416                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | -           |        |  |
| DILWORTH-GLYNDON-FELTON             | 4                | 1,402              | 414                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| EXCELL ACADEMY CHARTER              | 1                | 473                | 412                      | -                  | -                     | -                      | X                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| MAPLE RIVER SCHOOL DISTRICT         | 4                | 1,127              | 406                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y         | Y          | N/A         |        |  |
| TAREK IBN ZIYAD ACADEMY             | 2                | 519                | 406                      | -                  | -                     | -                      | X                  | X                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| REDWOOD AREA SCHOOL DISTRICT        | 3                | 1,203              | 405                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y         | Y          | N/A         |        |  |
| NOBLE ACADEMY                       | 1                | 449                | 403                      | -                  | -                     | -                      | X                  | X                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| SAUK CENTRE PUBLIC SCHOOL DISTRICT  | 3                | 1,015              | 402                      | X                  | -                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| YELLOW MEDICINE EAST                | 2                | 898                | 402                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| LIVERNE PUBLIC SCHOOL DISTRICT      | 5                | 1,227              | 401                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| STEWARTVILLE PUBLIC SCHOOL DISTRICT | 5                | 1,772              | 400                      | X                  | -                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | #         | Y          | Y           | N/A    |  |
| ANNANDALE PUBLIC SCHOOL DISTRICT    | 3                | 1,708              | 399                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| JACKSON COUNTY CENTRAL SCHOOL DIST. | 4                | 1,151              | 396                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| LESUEUR-HENDERSON SCHOOL DISTRICT   | 6                | 1,183              | 394                      | X                  | X                     | X                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N         | #          | Y           | Y      | N/A  |
| WESTONKA PUBLIC SCHOOL DISTRICT     | 5                | 2,254              | 390                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N         | #          | Y           | Y      | N/A  |
| MESABI EAST SCHOOL DISTRICT         | 2                | 865                | 389                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y         | Y          | Y           | Y      | Y  |
| COMMUNITY SCHOOL OF EXCELLENCE      | 1                | 451                | 383                      | -                  | -                     | -                      | X                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| EDEN VALLEY-WATKINS SCHOOL DISTRICT | 3                | 906                | 381                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | Y         | Y          | Y           | N/A    |  |
| ROSEAU PUBLIC SCHOOL DISTRICT       | 2                | 1,270              | 375                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| LAKE CITY PUBLIC SCHOOL DISTRICT    | 2                | 1,303              | 372                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | #         | Y          | Y           | N/A    |  |
| A.C.G.C.                            | 5                | 826                | 370                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | #         | Y          | Y           | N/A    |  |
| BLACKDUCK PUBLIC SCHOOL DISTRICT    | 2                | 638                | 369                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| WALKER-HACKENSACK-AKELEY SCHL. DIST | 3                | 784                | 367                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | Y           |        |  |
| DELANO PUBLIC SCHOOL DISTRICT       | 3                | 2,317              | 360                      | X                  | X                     | X                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |
| PLAINVIEW-ELGIN-MILLVILLE           | 4                | 1,543              | 360                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | #         | Y          | Y           | N/A    |  |
| ST. ANTHONY-NEW BRIGHTON SCHOOLS    | 3                | 1,794              | 353                      | X                  | X                     | -                      | -                  | -                     | -                  | -                                     | Y   | Y      | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y         | Y          | N/A         |        |  |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms and Conditions <sup>7</sup> | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |           |            |           |            |             |            |           |            |           |           |        |     |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|---------------------------------------|---|--------|-----------|------------|-----------|------------|-------------|------------|-----------|------------|-----------|-----------|--------|-----|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |                                       | Uses Standard Terms and Conditions <sup>7</sup>                             | (B)(3) | (C)(9)(i) | (C)(9)(ii) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(5)(i) | (E)(2) |     |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |                                       |   |        |           |            |           |            |             |            |           |            |           |           |        |     |
| G.F.W.                              | 3                | 835                | 351                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | Y         | Y         |        |     |
| OSAKIS PUBLIC SCHOOL DISTRICT       | 2                | 804                | 350                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| WINDOM PUBLIC SCHOOL DISTRICT       | 3                | 933                | 350                      | X                  | X                     | X                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| ALBANY PUBLIC SCHOOL DISTRICT       | 4                | 1,623              | 349                      | X                  | -                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| ACHIEVE LANGUAGE ACADEMY            | 1                | 411                | 348                      | -                  | -                     | -                      | -                  | X                     | X                  | X                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| CHISHOLM PUBLIC SCHOOL DISTRICT     | 3                | 739                | 346                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| HOPE COMMUNITY ACADEMY              | 1                | 420                | 345                      | -                  | -                     | -                      | -                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| UNITED SOUTH CENTRAL SCHOOL DIST.   | 2                | 721                | 343                      | X                  | -                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BELGRADE-BROOTEN-ELROSA SCHOOL DIST | 2                | 714                | 338                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| N.R.H.E.G. SCHOOL DISTRICT          | 2                | 937                | 334                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| NASHWAUK-KEEWATIN SCHOOL DISTRICT   | 3                | 578                | 332                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| SLEEPY EYE PUBLIC SCHOOL DISTRICT   | 2                | 641                | 332                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BIRD ISLAND-OLIVIA-LAKE LILLIAN     | 2                | 772                | 327                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WACONIA PUBLIC SCHOOL DISTRICT      | 5                | 3,232              | 325                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| LAC QUI PARLE VALLEY SCHOOL DIST.   | 4                | 847                | 321                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WOODSON INSTITUTE FOR EXCELLENCE CH | 1                | 355                | 321                      | -                  | -                     | -                      | -                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| FOSSTON PUBLIC SCHOOL DISTRICT      | 2                | 678                | 317                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| NEW YORK MILLS PUBLIC SCHOOL DIST.  | 2                | 697                | 316                      | X                  | X                     | X                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| MONTGOMERY-LONSDALE SCHOOL DISTRICT | 4                | 1,123              | 315                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| GLOBAL ACADEMY                      | 1                | 341                | 312                      | -                  | -                     | -                      | -                  | X                     | X                  | X                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| SEBEKA PUBLIC SCHOOL DISTRICT       | 2                | 506                | 312                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| NEW MILLENNIUM ACADEMY CHARTER SCH  | 1                | 352                | 311                      | -                  | -                     | -                      | -                  | X                     | X                  | X                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BENSON PUBLIC SCHOOL DISTRICT       | 5                | 960                | 310                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| NEVIS PUBLIC SCHOOL DISTRICT        | 2                | 526                | 309                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| ACADEMIA CESAR CHAVEZ CHARTER SCH.  | 1                | 317                | 308                      | -                  | -                     | -                      | -                  | X                     | X                  | X                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| MINNESOTA INTERNSHIP CENTER         | 4                | 309                | 308                      | -                  | -                     | -                      | -                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| MOUNTAIN IRON-BUHL SCHOOL DISTRICT  | 4                | 586                | 307                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| NEW SPIRIT SCHOOLS                  | 2                | 330                | 306                      | -                  | -                     | -                      | -                  | X                     | X                  | X                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| ROYALTON PUBLIC SCHOOL DISTRICT     | 2                | 796                | 305                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BELLE PLAINE PUBLIC SCHOOL DISTRICT | 4                | 1,545              | 302                      | X                  | X                     | X                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| HARVEST PREP SCHOOL/SEED ACADEMY    | 1                | 348                | 302                      | -                  | -                     | -                      | -                  | X                     | X                  | -                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WATERVILLE-ELYSIAN-MORRISTOWN       | 4                | 893                | 302                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BRECKENRIDGE PUBLIC SCHOOL DISTRICT | 3                | 792                | 291                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | Y         | Y         | Y      | N/A |
| HOWARD LAKE-WAVERLY-WINSTED         | 5                | 1,042              | 291                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WAUBUN PUBLIC SCHOOL DISTRICT       | 4                | 611                | 289                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| N.E. METRO INTERMEDIATE DIST. 916   | 16               | 612                | 288                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| LACRESCENT-HOKAH SCHOOL DISTRICT    | 4                | 1,326              | 287                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| BERTHA-HEWITT PUBLIC SCHOOL DIST.   | 2                | 437                | 286                      | X                  | X                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WESTBROOK-WALNUT GROVE SCHOOLS      | 2                | 506                | 283                      | X                  | -                     | -                      | -                  | -                     | -                  | Y                                     | Y   | Y      | Y         | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | Y   |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |           |            |             |            |           |            |             |            |           |            |           |            |        |     |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|-----------|-------------------------------------|---|-----------|------------|-------------|------------|-----------|------------|-------------|------------|-----------|------------|-----------|------------|--------|-----|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |           |                                     | (B)(3)  | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (C)(1)(iv) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(3)(ii) | (E)(2) |     |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorized |           |                                     |   |           |            |             |            |           |            |             |            |           |            |           |            |        |     |
| PARTNERSHIP ACADEMY, INC.           | 1                | 283                | 280                      | -                  | -                     | -                      | X                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| RUSH CITY PUBLIC SCHOOL DISTRICT    | 2                | 878                | 280                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | -      |     |
| ST. CHARLES PUBLIC SCHOOL DISTRICT  | 2                | 1,004              | 280                      | X                  | X                     | X                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| HERMANTOWN PUBLIC SCHOOL DISTRICT   | 5                | 2,089              | 276                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | -          | #         | Y          | Y      | N/A |
| NORTHLAND COMMUNITY SCHOOLS         | 3                | 439                | 276                      | -                  | -                     | -                      | X                  | X                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| MAHTOMEDI PUBLIC SCHOOL DISTRICT    | 6                | 3,235              | 271                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| BROWERVILLE PUBLIC SCHOOL DISTRICT  | 2                | 492                | 270                      | X                  | X                     | X                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | Y          | Y         | Y          | N/A    |     |
| LAKE OF THE WOODS SCHOOL DISTRICT   | 2                | 553                | 269                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| MORRIS PUBLIC SCHOOL DISTRICT       | 2                | 1,059              | 269                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| BUFFALO LAKE-HECTOR SCHOOL DISTRICT | 2                | 630                | 268                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| LAKE CRYSTAL-WELLCOME MEMORIAL      | 2                | 782                | 266                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | Y          | Y         | Y          | N/A    |     |
| LEWISTON-ALTURA PUBLIC SCHOOL DIST. | 3                | 755                | 265                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| WEST CENTRAL AREA                   | 4                | 719                | 264                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| MCGREGOR PUBLIC SCHOOL DISTRICT     | 3                | 389                | 262                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| RENVILLE COUNTY WEST SCHOOL DIST.   | 2                | 569                | 260                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| MOOSE LAKE PUBLIC SCHOOL DISTRICT   | 2                | 730                | 259                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| MADELIA PUBLIC SCHOOL DISTRICT      | 2                | 568                | 258                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| ADA-BORUP PUBLIC SCHOOL DISTRICT    | 3                | 548                | 255                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| LIGHTHOUSE ACADEMY OF NATIONS       | 1                | 255                | 255                      | -                  | -                     | -                      | X                  | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| M.A.C.C.R.A.Y. SCHOOL DISTRICT      | 4                | 744                | 251                      | X                  | X                     | X                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| SOJOURNER TRUTH ACADEMY             | 1                | 258                | 248                      | -                  | -                     | -                      | X                  | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| ISLE PUBLIC SCHOOL DISTRICT         | 3                | 518                | 247                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| MURRAY COUNTY CENTRAL SCHOOL DIST.  | 2                | 759                | 247                      | X                  | X                     | X                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| UNDERWOOD PUBLIC SCHOOL DISTRICT    | 2                | 546                | 243                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| CROOKSTON PUBLIC SCHOOL DISTRICT    | 6                | 1,317              | 241                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| MARTIN COUNTY WEST SCHOOL DISTRICT  | 4                | 758                | 239                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| WATERTOWN-MAYER PUBLIC SCHOOL DIST. | 4                | 1,609              | 238                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| OGILVIE PUBLIC SCHOOL DISTRICT      | 2                | 613                | 236                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| CANBY PUBLIC SCHOOL DISTRICT        | 2                | 534                | 235                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| BLOOMING PRAIRIE PUBLIC SCHOOL DIST | 2                | 717                | 234                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| LAKE PARK AUDUBON SCHOOL DISTRICT   | 2                | 609                | 231                      | X                  | X                     | X                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| KINGSLAND PUBLIC SCHOOL DISTRICT    | 3                | 696                | 230                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| MOUNTAIN LAKE PUBLIC SCHOOLS        | 2                | 475                | 226                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| HIGH SCHOOL FOR RECORDING ARTS      | 1                | 248                | 225                      | -                  | -                     | -                      | X                  | X                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| MAPLE LAKE PUBLIC SCHOOL DISTRICT   | 2                | 1,005              | 224                      | X                  | -                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| CONCORDIA CREATIVE LEARNING ACADEMY | 1                | 268                | 223                      | -                  | -                     | -                      | X                  | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | Y      |     |
| KIMBALL PUBLIC SCHOOL DISTRICT      | 2                | 727                | 222                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | N          | #         | Y          | Y      | N/A |
| ORONO PUBLIC SCHOOL DISTRICT        | 5                | 2,743              | 221                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | N/A    |     |
| INTERMEDIATE SCHOOL DISTRICT 917    | 12               | 683                | 219                      | X                  | X                     | -                      | -                  | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y          | Y         | #          | Y         | Y          | -      |     |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms | Preliminary Scope of Work - Participation in each applicable Plan Criterion |        |        |           |            |        |           |            |             |            |           |            |           |           |        |     |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|-----------|---|--------|--------|-----------|------------|--------|-----------|------------|-------------|------------|-----------|------------|-----------|-----------|--------|-----|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |           | Uses Standard Terms and Conditions?   | (B)(2) | (B)(3) | (C)(1)(i) | (C)(1)(ii) | (D)(1) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(5)(i) | (E)(2) |     |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |           |   |        |        |           |            |        |           |            |             |            |           |            |           |           |        |     |
| SPRINGFIELD PUBLIC SCHOOL DISTRICT  | 2                | 582                | 218                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| PARKERS PRAIRIE PUBLIC SCHOOL DIST. | 2                | 532                | 216                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | -          | #         | Y         | Y      | -   |
| CEDAR MOUNTAIN SCHOOL DISTRICT      | 2                | 473                | 212                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| WABASHA-KELLOGG PUBLIC SCHOOL DIST. | 2                | 627                | 212                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WILLOW RIVER PUBLIC SCHOOL DISTRICT | 3                | 435                | 211                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| KERKHOVEN-MURDOCK-SUNBURG           | 2                | 548                | 208                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| DAWSON-BOYD PUBLIC SCHOOL DISTRICT  | 2                | 516                | 207                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| ORTONVILLE-BELLINGHAM               | 2                | 522                | 207                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| RED ROCK CENTRAL SCHOOL DISTRICT    | 2                | 471                | 207                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| RTR PUBLIC SCHOOLS                  | 3                | 561                | 207                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| LAKEVIEW SCHOOL DISTRICT            | 2                | 591                | 205                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| WIN-E-MAC SCHOOL DISTRICT           | 2                | 452                | 205                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| ODYSSEY ACADEMY                     | 1                | 256                | 204                      | -                  | -                     | -                      | -                  | X                     | X                  | X         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| UBAH MEDICAL ACADEMY CHARTER SCHOOL | 1                | 204                | 204                      | -                  | -                     | -                      | -                  | X                     | X                  | -         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | -          | #         | Y         | Y      | -   |
| ROCHESTER MATH & SCIENCE ACADEMY    | 1                | 218                | 203                      | -                  | -                     | -                      | -                  | X                     | -                  | -         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| SOUTH KOOCHICHING SCHOOL DISTRICT   | 4                | 370                | 202                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | N         | Y         | Y      | N/A |
| NORWOOD PUBLIC SCHOOL DISTRICT      | 3                | 1,020              | 200                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | #         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| EAGLE VALLEY PUBLIC SCHOOL DISTRICT | 2                | 312                | 198                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BATTLE LAKE PUBLIC SCHOOL DISTRICT  | 2                | 509                | 195                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | Y   |
| LOVEWORKS ACADEMY FOR ARTS          | 1                | 259                | 194                      | -                  | -                     | -                      | -                  | X                     | X                  | -         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| CLEARBROOK-GONVICK SCHOOL DISTRICT  | 2                | 469                | 192                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| ELY PUBLIC SCHOOL DISTRICT          | 2                | 539                | 192                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| GREENBUSH-MIDDLE RIVER SCHOOL DIST. | 4                | 452                | 192                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | Y         | Y         | Y      | Y   |
| LAPORTE PUBLIC SCHOOL DISTRICT      | 2                | 270                | 191                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| FILLMORE CENTRAL                    | 4                | 564                | 189                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| HILL CITY PUBLIC SCHOOL DISTRICT    | 2                | 297                | 188                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| MARSHALL COUNTY CENTRAL SCHOOLS     | 3                | 396                | 188                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| SWANVILLE PUBLIC SCHOOL DISTRICT    | 3                | 374                | 184                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| FERTILE-BELTRAMI SCHOOL DISTRICT    | 2                | 460                | 182                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| BARNESVILLE PUBLIC SCHOOL DIST.     | 2                | 804                | 178                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| KELLIHER PUBLIC SCHOOL DISTRICT     | 2                | 224                | 175                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| CLINTON-GRACEVILLE-BEARDSLEY        | 4                | 375                | 174                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| MINNEOTA PUBLIC SCHOOL DISTRICT     | 2                | 469                | 173                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| ALDEN-CONGER PUBLIC SCHOOL DISTRICT | 2                | 482                | 171                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |
| NEW VISIONS CHARTER SCHOOL          | 1                | 191                | 169                      | -                  | -                     | -                      | -                  | X                     | X                  | X         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | N         | Y         | Y      | Y   |
| RED LAKE FALLS PUBLIC SCHOOL DIST.  | 2                | 373                | 168                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| UPSALA PUBLIC SCHOOL DISTRICT       | 2                | 423                | 167                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | Y   |
| NORMAN COUNTY EAST SCHOOL DISTRICT  | 2                | 325                | 161                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y      | N/A |
| WARREN-ALVARADO-OSLO SCHOOL DIST.   | 2                | 440                | 161                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y   | Y      | Y      | Y         | Y          | Y      | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y      | N/A |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |           |            |             |           |            |             |            |           |            |           |            |             |        |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|-----------|-------------------------------------|---|-----------|------------|-------------|-----------|------------|-------------|------------|-----------|------------|-----------|------------|-------------|--------|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |           |                                     | (B)(3)  | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(3)(ii) | (D)(3)(iii) | (E)(2) |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |           |                                     |   |           |            |             |           |            |             |            |           |            |           |            |             |        |
| LEARNING FOR LEADERSHIP CHARTER     | 1                | 184                | 159                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| HENNING PUBLIC SCHOOL DISTRICT      | 2                | 365                | 158                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| JANESVILLE-WALDORF-PEMBERTON        | 3                | 570                | 154                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | Y         | Y          | Y         | Y          |             |        |
| EMILY O. GOODRIDGE-GREY ACCELERATED | 1                | 156                | 152                      | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| TRUMAN PUBLIC SCHOOL DISTRICT       | 2                | 308                | 150                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| NORTH SHORE COMMUNITY SCHOOL        | 1                | 310                | 148                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| STEPHEN-ARGYLE CENTRAL SCHOOLS      | 2                | 348                | 148                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| FLOODWOOD PUBLIC SCHOOL DISTRICT    | 2                | 315                | 147                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | Y         | N/A        |             |        |
| STRIDE ACADEMY CHARTER SCHOOL       | 1                | 264                | 143                      | -                  | -                     | -                      | X                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| HAWLEY PUBLIC SCHOOL DISTRICT       | 3                | 899                | 141                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| KIPP MINNESOTA CHARTER SCHOOL       | 1                | 156                | 138                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| BUTTERFIELD PUBLIC SCHOOL DISTRICT  | 2                | 237                | 134                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y          |             |        |
| COLLEGE PREPARATORY ELEMENTARY      | 1                | 141                | 134                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | Y         | N/A        |             |        |
| WRENSHALL PUBLIC SCHOOL DISTRICT    | 2                | 336                | 132                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| NORMAN COUNTY WEST SCHOOL DISTRICT  | 2                | 271                | 130                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| FULDA PUBLIC SCHOOL DISTRICT        | 2                | 381                | 129                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| PLUMMER PUBLIC SCHOOL DISTRICT      | 1                | 205                | 128                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| STONEBRIDGE COMMUNITY SCHOOL        | 1                | 138                | 128                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| WHEATON AREA PUBLIC SCHOOL DISTRICT | 2                | 417                | 128                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| LANESBORO PUBLIC SCHOOL DISTRICT    | 2                | 347                | 126                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| LYLE PUBLIC SCHOOL DISTRICT         | 2                | 233                | 125                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| HERON LAKE-OKABENA SCHOOL DISTRICT  | 2                | 320                | 124                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| LESTER PRAIRIE PUBLIC SCHOOL DIST.  | 2                | 395                | 124                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| WABASSO PUBLIC SCHOOL DISTRICT      | 4                | 430                | 124                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| TRI-COUNTY SCHOOL DISTRICT          | 2                | 244                | 122                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| GLENVILLE-EMMONS SCHOOL DISTRICT    | 2                | 326                | 121                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| ESKO PUBLIC SCHOOL DISTRICT         | 2                | 1,162              | 119                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| CITY ACADEMY                        | 1                | 128                | 118                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| FRIENDSHIP ACDMY OF FINE ARTS CHTR. | 1                | 120                | 117                      | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | -          |             |        |
| LEROY PUBLIC SCHOOL DISTRICT        | 2                | 296                | 117                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y          |             |        |
| BADGER PUBLIC SCHOOL DISTRICT       | 2                | 236                | 116                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| HILLS-BEAVER CREEK SCHOOL DISTRICT  | 2                | 348                | 116                      | X                  | X                     | X                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |
| SPRING GROVE SCHOOL DISTRICT        | 2                | 323                | 113                      | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | -          |             |        |
| BLUESKY CHARTER SCHOOL              | 1                | 734                | 112                      | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | Y          |             |        |
| MABEL-CANTON PUBLIC SCHOOL DIST.    | 2                | 313                | 111                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| GRANADA HUNTLEY-EAST CHAIN          | 2                | 234                | 108                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| CLIMAX PUBLIC SCHOOL DISTRICT       | 2                | 154                | 104                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| E.C.H.O. CHARTER SCHOOL             | 1                | 179                | 104                      | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | #         | Y          | Y         | N/A        |             |        |
| OKLEE PUBLIC SCHOOL DISTRICT        | 2                | 152                | 102                      | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | N          | #         | Y          | Y         | N/A        |             |        |

Detailed Table for (A)(1)

| Name                                 | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms and Conditions? | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |           |            |             |           |            |             |              |              |               |               |                |                |        |     |     |
|--------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|---------------------------|-------------------------------------|---|-----------|------------|-------------|-----------|------------|-------------|--------------|--------------|---------------|---------------|----------------|----------------|--------|-----|-----|
|                                      | # of Schools     | # of K-12 Students | # of Students In Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |                           |                                     | (B)(1)  | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (D)(1)(i) | (D)(1)(ii) | (D)(1)(iii) | (D)(2)(i)(a) | (D)(2)(i)(b) | (D)(2)(ii)(a) | (D)(2)(ii)(b) | (D)(2)(iii)(a) | (D)(2)(iii)(b) | (E)(2) |     |     |
|                                      |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |                           |                                     |   |           |            |             |           |            |             |              |              |               |               |                |                |        |     |     |
| NICOLLET PUBLIC SCHOOL DISTRICT      | 2                | 360                | 99                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| LANCASTER PUBLIC SCHOOL DISTRICT     | 2                | 178                | 98                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | N              | #              | Y      | Y   | N/A |
| TREKNORTH HIGH SCHOOL                | 1                | 168                | 98                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| NAYTAHWAUSH COMMUNITY SCHOOL         | 1                | 101                | 96                       | -                  | -                     | -                      | -                  | -                     | -                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| RANDOLPH PUBLIC SCHOOL DISTRICT      | 2                | 551                | 96                       | X                  | X                     | X                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| BRANDON PUBLIC SCHOOL DISTRICT       | 2                | 281                | 93                       | X                  | -                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| ROTHSAY PUBLIC SCHOOL DISTRICT       | 3                | 200                | 90                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| ASHBY PUBLIC SCHOOL DISTRICT         | 2                | 270                | 89                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| SCHOOLCRAFT LEARNING COMMUNITY CHTR  | 1                | 178                | 89                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | N              | Y              | Y      | N/A |     |
| PACT CHARTER SCHOOL                  | 2                | 596                | 87                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| NEW DISCOVERIES MONTESSORI ACADEMY   | 1                | 166                | 85                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| BREWSTER PUBLIC SCHOOL DISTRICT      | 1                | 156                | 83                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| BROWNS VALLEY PUBLIC SCHOOL DIST.    | 2                | 125                | 83                       | X                  | X                     | X                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| ULEN-HITTERDAL PUBLIC SCHOOL DIST    | 2                | 299                | 83                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| DUNWOODY ACADEMY                     | 1                | 152                | 81                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| EL COLEGIO CHARTER SCHOOL            | 1                | 90                 | 80                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| HARBOR CITY INTERNATIONAL CHARTER    | 1                | 200                | 78                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| LONG TIENG ACADEMY                   | 1                | 79                 | 77                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| HENDRICKS PUBLIC SCHOOL DISTRICT     | 1                | 146                | 76                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| NORTH LAKES ACADEMY                  | 2                | 287                | 76                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| TEAM ACADEMY                         | 1                | 136                | 76                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| BEACON ACADEMY                       | 1                | 393                | 75                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| SEVEN HILLS CLASSICAL ACADEMY        | 1                | 387                | 75                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| ZUMBRO EDUCATION DISTRICT            | 4                | 142                | 73                       | X                  | -                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| COMFREY PUBLIC SCHOOL DISTRICT       | 2                | 160                | 72                       | X                  | X                     | X                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| LYND PUBLIC SCHOOL DISTRICT          | 1                | 114                | 72                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| NOVA CLASSICAL ACADEMY               | 2                | 572                | 72                       | -                  | -                     | -                      | -                  | X                     | -                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| RIVERWAY LEARNING COMMUNITY CHTR     | 2                | 88                 | 72                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| CAMPBELL-TINTAH PUBLIC SCHOOL DIST.  | 2                | 130                | 71                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| EAST RANGE ACADEMY OF TECH & SCIENCE | 1                | 134                | 70                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| GENERAL JOHN VESSEY JR LEADERSHIP    | 1                | 113                | 70                       | -                  | -                     | -                      | -                  | X                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| CROSSLAKE COMMUNITY CHARTER SCHOOL   | 1                | 126                | 69                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| ELLSWORTH PUBLIC SCHOOL DISTRICT     | 2                | 178                | 69                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | N             | #              | Y              | Y      | N/A |     |
| NORTHERN LIGHTS COMMUNITY SCHOOL     | 1                | 97                 | 69                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| KITTSOON CENTRAL SCHOOL DISTRICT     | 3                | 293                | 68                       | X                  | X                     | -                      | -                  | -                     | -                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | B   |     |
| PRESTIGE ACADEMY CHARTER SCHOOL      | 1                | 73                 | 68                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| JENNINGS COMMUNITY LEARNING CENTER   | 1                | 83                 | 67                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | Y   |     |
| LAKES INTERNATIONAL LANGUAGE ADMY    | 1                | 552                | 67                       | -                  | -                     | -                      | -                  | X                     | X                  | X                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |
| LAKE SUPERIOR HIGH SCHOOL            | 1                | 96                 | 66                       | -                  | -                     | -                      | -                  | X                     | X                  | -                         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y            | Y            | Y             | Y             | #              | Y              | Y      | N/A |     |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                |                       |                    | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |           |            |             |           |            |             |            |           |            |           |           |            |        |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|----------------|-----------------------|--------------------|-----------|-------------------------------------|---|-----------|------------|-------------|-----------|------------|-------------|------------|-----------|------------|-----------|-----------|------------|--------|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter        |                       |                    |           |                                     | (B)(3)  | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (D)(2)(i) | (D)(2)(ii) | (D)(2)(iii) | (D)(2)(iv) | (D)(2)(v) | (D)(2)(vi) | (D)(3)(i) | (D)(5)(i) | (D)(5)(ii) | (E)(2) |
|                                     |                  |                    |                          | Superintendent     | Chair of School Board | Local Rep. of Teachers | Superintendent | Chair of School Board | Charter Authorized |           |                                     |   |           |            |             |           |            |             |            |           |            |           |           |            |        |
| CHOKIO-ALBERTA PUBLIC SCHOOL DIST.  | 2                | 158                | 64                       | X                  | X                     | X                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | N         | #          | Y         | Y         | N/A        |        |
| MAIN STREET SCHOOL PERFORMING ARTS  | 1                | 245                | 64                       | -                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | -          | #         | Y         | Y          | N/A    |
| FISHER PUBLIC SCHOOL DISTRICT       | 2                | 261                | 63                       | X                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | -          | #         | Y         | Y          | -      |
| KALEIDOSCOPE CHARTER SCHOOL         | 1                | 414                | 62                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| PAIDEIA ACADEMY CHARTER SCHOOL      | 1                | 364                | 62                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| VOYAGEURS EXPEDITIONARY             | 1                | 68                 | 62                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| NEW CENTURY CHARTER SCHOOL          | 1                | 144                | 61                       | -                  | -                     | -                      | X              | -                     | -                  | X         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | Y      |
| RIVER BEND EDUCATION DISTRICT       | 4                | 156                | 61                       | X                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | -      |
| AFSA HIGH SCHOOL                    | 1                | 202                | 60                       | -                  | -                     | -                      | X              | X                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | -          | Y         | Y         | Y          | N/A    |
| FACE TO FACE ACADEMY                | 1                | 69                 | 59                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| CLARKFIELD CHARTER SCHOOL           | 1                | 73                 | 58                       | -                  | -                     | -                      | X              | X                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| PINE POINT PUBLIC SCHOOL DISTRICT   | 1                | 60                 | 58                       | X                  | X                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| ST. CROIX PREPARATORY ACADEMY       | 3                | 881                | 58                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| QUEST ACADEMY                       | 1                | 122                | 55                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| EVANSVILLE PUBLIC SCHOOL DISTRICT   | 2                | 157                | 54                       | X                  | X                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| HERMAN-NORCROSS SCHOOL DISTRICT     | 2                | 103                | 50                       | X                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| LAKE BENTON PUBLIC SCHOOL DISTRICT  | 2                | 94                 | 49                       | X                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | Y      |
| LAURA JEFFREY ACADEMY CHARTER       | 1                | 151                | 49                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| COLOGNE ACADEMY                     | 1                | 163                | 46                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| DAVINCI ACADEMY                     | 1                | 263                | 46                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| GLACIAL HILLS ELEMENTARY            | 1                | 96                 | 43                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| IVANHOE PUBLIC SCHOOL DISTRICT      | 1                | 150                | 41                       | X                  | X                     | X                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| ST PAUL CONSERVATORY PERFORMING ART | 1                | 460                | 40                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| CYBER VILLAGE ACADEMY               | 1                | 110                | 39                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| RICHARD ALLEN MATH&SCIENCE          | 1                | 62                 | 38                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | Y         | Y         | Y          | N/A    |
| SPECTRUM HIGH SCHOOL                | 1                | 216                | 37                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| DISCOVERY PUBLIC SCHOOL FARIBAUT    | 1                | 56                 | 36                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| ROUND LAKE PUBLIC SCHOOL DISTRICT   | 1                | 111                | 36                       | X                  | X                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| TWIN CITIES ACADEMY                 | 1                | 199                | 34                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| METRO DEAF SCHOOL                   | 1                | 92                 | 33                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| MINNESOTA NEW COUNTRY SCHOOL        | 1                | 108                | 32                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| TWIN CITIES ACADEMY HIGH SCHOOL     | 1                | 120                | 32                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| CYRUS PUBLIC SCHOOL DISTRICT        | 1                | 59                 | 31                       | X                  | -                     | -                      | -              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| GREAT RIVER SCHOOL                  | 1                | 260                | 30                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| BRIGHT WATER ELEMENTARY             | 1                | 58                 | 29                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| GREEN ISLE COMMUNITY SCHOOL         | 1                | 90                 | 29                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| TWIN CITIES GERMAN IMMERSION CHRTR  | 1                | 197                | 29                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | N          | #         | Y         | Y          | N/A    |
| CANNON RIVER STEM SCHOOL            | 1                | 135                | 28                       | -                  | -                     | -                      | X              | X                     | X                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |
| EDIVISIONS OFF CAMPUS SCHOOL        | 1                | 73                 | 28                       | -                  | -                     | -                      | X              | -                     | -                  | -         | Y                                   | Y   | Y         | Y          | Y           | Y         | Y          | Y           | Y          | Y         | Y          | #         | Y         | Y          | N/A    |

Detailed Table for (A)(1)

| Name                                | LEA Demographics |                    |                          | Signatures on MOUs |                       |                        |                    |                       |                    | MOU Terms | Uses Standard Terms and Conditions? | Preliminary Scope of Work - Participation in each applicable Plan Criterion |           |            |             |            |           |            |             |              |            |           |        |     |     |
|-------------------------------------|------------------|--------------------|--------------------------|--------------------|-----------------------|------------------------|--------------------|-----------------------|--------------------|-----------|-------------------------------------|---|-----------|------------|-------------|------------|-----------|------------|-------------|--------------|------------|-----------|--------|-----|-----|
|                                     | # of Schools     | # of K-12 Students | # of Students in Poverty | Non-Charter        |                       |                        | Charter            |                       |                    |           |                                     | (B)(3)  | (C)(1)(i) | (C)(1)(ii) | (C)(1)(iii) | (C)(1)(iv) | (C)(1)(v) | (C)(1)(vi) | (C)(1)(vii) | (C)(1)(viii) | (C)(1)(ix) | (C)(1)(x) | (E)(2) |     |     |
|                                     |                  |                    |                          | Superintendent LEA | Chair of School Board | Local Rep. of Teachers | Superintendent LEA | Chair of School Board | Charter Authorizer |           |                                     |   |           |            |             |            |           |            |             |              |            |           |        |     |     |
| STUDIO ACADEMY CHARTER SCHOOL       | 1                | 111                | 26                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| TRIO WOLF CREEK DISTANCE LEARNING   | 1                | 124                | 26                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| WATERSHED HIGH SCHOOL               | 1                | 84                 | 26                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| FRASER ACADEMY                      | 1                | 65                 | 23                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| SWAN RIVER MONTESSORI CHARTER SCH   | 1                | 144                | 23                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | N          | #         | Y      | Y   | N/A |
| YINGHUA ACADEMY                     | 1                | 296                | 23                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| MINNESOTA ONLINE HIGH SCHOOL        | 1                | 109                | 22                       | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| LIONSGATE ACADEMY                   | 1                | 94                 | 21                       | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| RIDGEWAY COMMUNITY SCHOOL           | 1                | 82                 | 20                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| RIVER'S EDGE ACADEMY                | 1                | 34                 | 20                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | Y   |     |
| BIRCH GROVE COMMUNITY SCHOOL        | 1                | 38                 | 19                       | -                  | -                     | -                      | X                  | -                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| INTERNATIONAL SPANISH LANGUAGE ACAD | 1                | 172                | 19                       | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| RECOVERY SCHOOL OF SOUTHERN MN      | 1                | 23                 | 15                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | N          | #         | Y      | Y   | N/A |
| MILROY PUBLIC SCHOOL DISTRICT       | 2                | 34                 | 12                       | X                  | -                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| LACRESCENT MONTESSORI ACADEMY       | 1                | 39                 | 10                       | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | N          | #         | Y      | Y   | N/A |
| WORLD LEARNER CHARTER SCHOOL        | 1                | 176                | 10                       | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| DAKOTA AREA COMMUNITY CHARTER SCH   | 1                | 43                 | 8                        | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| ASPEN ACADEMY                       | 1                | 201                | 7                        | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | N          | #         | Y      | Y   | N/A |
| GREAT RIVER EDUCATION CENTER        | 1                | 35                 | 7                        | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| MATH & SCIENCE ACADEMY              | 1                | 319                | 4                        | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | Y   |     |
| MICHAEL FROME ACADEMY               | 1                | 54                 | 2                        | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| MILROY AREA CHARTER SCHOOL          | 1                | 50                 | 1                        | -                  | -                     | -                      | X                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| SOBRIETY HIGH                       | 4                | 141                | -                        | -                  | -                     | -                      | X                  | X                     | X                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |
| WORTHINGTON AREA LANGUAGE ACADEMY   | 1                | 136                | -                        | -                  | -                     | -                      | X                  | X                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | Y   |     |
| WRIGHT TECHNICAL CENTER             | 2                | 140                | -                        | X                  | X                     | -                      | -                  | -                     | -                  | Y         | Y                                   | Y   | Y         | Y          | Y           | Y          | Y         | Y          | Y           | Y            | #          | Y         | Y      | N/A |     |

**(A)(2id)/Section VIII: *Budget Narrative***

**Budget Part I: Overall Budget**

| <b>Budget Part I: Overall Budget</b><br><b>Project Name:</b><br><br><b>Associated with Criteria:</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b> |                                   |                                   |                                   |                                   |                      |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|
| <b>Budget Categories</b>  | <b>Project<br/>Year 1<br/>(a)</b> | <b>Project<br/>Year 2<br/>(a)</b> | <b>Project<br/>Year 3<br/>(a)</b> | <b>Project<br/>Year 4<br/>(a)</b> | <b>Total<br/>(e)</b> |
| 1. Personnel  | \$ 3,795,692                      | \$ 3,587,212                      | \$ 3,110,103                      | \$ 2,337,593                      | \$ 12,830,600        |
| 2. Fringe Benefits  | \$ 649,631                        | \$ 631,411                        | \$ 502,592                        | \$ 464,114                        | \$ 2,247,748         |
| 3. Travel   | \$ 921,000                        | \$ 921,000                        | \$ 921,000                        | \$ 900,000                        | \$ 3,663,000         |
| 4. Equipment  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 5. Supplies   | \$ 147,981                        | \$ 67,985                         | \$ 63,657                         | \$ 55,000                         | \$ 334,623           |
| 6. Contractual  | \$ 7,750,714                      | \$ 2,815,571                      | \$ 2,783,714                      | \$ 2,705,000                      | \$ 16,055,000        |
| 7. Training Stipends  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 8. Other  | \$ 1,127,000                      | \$ 1,154,000                      | \$ 254,000                        | \$ 254,000                        | \$ 2,789,000         |
| 9. Total Direct Costs (lines 1-8)   | \$ 14,392,019                     | \$ 9,177,179                      | \$ 7,635,066                      | \$ 6,715,707                      | \$ 37,919,971        |
| 10. Indirect Costs*   | \$ 1,374,750                      | \$ 1,316,853                      | \$ 1,004,230                      | \$ 830,216                        | \$ 4,526,049         |
| 11. Funding for Involved LEAs   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 12. Supplemental Funding for Participating LEAs   | \$ 48,427,652                     | \$ 37,595,666                     | \$ 20,445,330                     | \$ 17,925,083                     | \$ 124,393,730       |
| 13. Total Costs (lines 9-12)  | \$ 64,194,421                     | \$ 48,089,698                     | \$ 29,084,625                     | \$ 25,471,006                     | \$ 166,839,750       |
| 14. Funding Subgranted to Participating LEAs (50% of total grant)   | \$ 64,194,421                     | \$ 48,089,698                     | \$ 29,084,625                     | \$ 25,471,006                     | \$ 166,839,750       |
| 15. Total Budget (lines 13-14)  | \$ 128,388,842                    | \$ 96,179,396                     | \$ 58,169,250                     | \$ 50,942,011                     | \$ 333,679,500       |

All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.  
Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.  
\*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget

## **BUDGET NARRATIVE OVERVIEW**

Minnesota's Race to the Top budget is designed to address the broad reforms outlined in our application in a comprehensive way. A couple of key points should be highlighted:

**Supplements to enable significant reform across the state:** Minnesota believes that the impact of Race to the Top will be dramatically enhanced by ensuring broad statewide participation, both in terms of the number of students involved as well as the best practice sharing that occurs when high and low-poverty, charter and non-charter, and urban and rural collaborate. Given that the Title I formula funds are extremely concentrated, Minnesota has supplemented the budgets of some LEAs where their formula-driven RTTT funding would not allow them to implement reforms. In addition, Minnesota has prioritized Race to the Top funding in an effort to ensure LEAs have adequate resources to implement reforms outlined in the application. Well over 80% of RTTT funds will flow to LEAs through the Title I, Part A formula, state supplements and competitive grant funding and reimbursements to LEAs.

**Detailed expectations of participating LEAs:** Minnesota has specific expectations for participating LEAs that have been explained during our numerous outreach meetings and webinars in December and early January as well as in our comprehensive MOA. As such, our budget narrative is organized by project and delineates both the expectations of the state and LEAs. The corresponding budget cost category have been included in this description. Where funds will come either by formula-driven or state supplemental funds RTTT funds, that has been indicated as well.

**Oversight activities outlined in the grant** will ensure projects are effectively managed, transparent and finances well-tracked. Please see application section A(2).

**Additional funds will be frequently leveraged** including dedicated and currently unused state Q Comp funding, School Improvement Grants for the Turnaround Schools, Bush Foundation private foundation funds applied to teacher preparation program improvement, and LDS grant funds to complete Minnesota's longitudinal system just to name a few. The state Q Comp funding will provide an additional \$260/student up to 55% of the student population for LEAs not currently participating in the Q Comp program.

### Project List included in the Budget Narrative

|  |                               |            |
|--|-------------------------------|------------|
| Professional Development: Train the Trainer<br>PD content development and trainer management for<br>all standards PD | Standards and Assessments     | B3         |
| Professional Development: Statewide 24/7 access  | Standards and Assessments     | B3         |
| Curricular Frameworks  | Standards and Assessments     | B3         |
| Interim Assessments  | Standards and Assessments     | B3, B2     |
| Increased rigor grants   | Standards and Assessments     | B3         |
| Parent Portal  | Data systems                  | C2         |
| Data Coaches   | Data systems                  | C3         |
| Peer Assistance and Review   | Great Teachers and Leaders    | D2, D5     |
| Induction  | Great Teachers and Leaders    | D5         |
| Data-driven professional development   | Great Teachers and Leaders    | C3, D5     |
| MN Principals Academy  | Great Teachers and Leaders    | D5         |
| Q Comp (strengthen and expand)   | Great Teachers and Leaders    | D2         |
| Monitoring and reporting of achievement, evaluation<br>results, etc.   | Great Teachers and Leaders    | D2         |
| BOSA rulemaking initiatives  | Great Teachers and Leaders    | D1, D2, D4 |
| BOT rulemaking initiatives   | Great Teachers and Leaders    | D1, D4     |
| Recommended teacher and principal evaluation rubric  | Great Teachers and Leaders    | D2         |
| Equitable distribution grants  | Great Teachers and Leaders    | D3         |
| Extended Day   | Turnaround Struggling Schools | E2         |
| Job-Embedded Professional Development for<br>turnaround schools  | Turnaround Struggling Schools | E2         |
| Teacher Professional Development: Lowest-<br>performing schools  | Turnaround Struggling Schools | E2         |
| Teacher Leadership Opportunities   | Turnaround Struggling Schools | E2         |
| Teacher Evaluation Program for Turnaround Schools  | Turnaround Struggling Schools | E2         |
| MN Principals Academy: Turnaround School Program   | Turnaround Struggling Schools | E2         |
| Site Administrative Manager (SAM)  | Turnaround Struggling Schools | E2         |
| Planning Grants  | Turnaround Struggling Schools | E2         |
| Office of Turnaround Schools (OTAS)  | Turnaround Struggling Schools | E2         |
| Advanced Rigor course grants for turnaround schools  | Turnaround Struggling Schools | E2         |
| Oversight  | State Success Factors         | A2         |
| Evaluation   | State Success Factors         | A2         |
| Annual RTTT Conference   | State Success Factors         | A2         |
| Charter School Director Training   | General                       | F2         |
| Single Charter Authorizer for expansion of high-<br>quality charters   | General                       | F2         |
| International Assessments for benchmarking   | Standards and Assessments     | B2         |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Professional Development: Train the Trainer</b><br><br><b>Associated with Criteria: B3</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ 59,000                | \$ -                     | \$ -                     | \$ -                     | \$ 59,000    |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 59,000                | \$ -                     | \$ -                     | \$ -                     | \$ 59,000    |
| 10. Indirect Costs*  | \$ 12,213                | \$ -                     | \$ -                     | \$ -                     | \$ 12,213    |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ 9,392,436             | \$ -                     | \$ -                     | \$ -                     | \$ 9,392,436 |
| 13. Total Costs (lines 9-12)   | \$ 9,463,649             | \$ -                     | \$ -                     | \$ -                     | \$ 9,463,649 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: PD content development and trainer management for all standards PD</b><br><b>Associated with Criteria: B3</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                           |                           |                           |                           |                  |
|--|---------------------------|---------------------------|---------------------------|---------------------------|------------------|
| <b>Budget Categories</b>   | <b>Project Year 1 (a)</b> | <b>Project Year 2 (a)</b> | <b>Project Year 3 (a)</b> | <b>Project Year 4 (a)</b> | <b>Total (e)</b> |
| 1. Personnel   | \$ 477,109                | \$ 477,109                | \$ -                      | \$ -                      | \$ 954,217       |
| 2. Fringe Benefits   | \$ 128,819                | \$ 128,819                | \$ -                      | \$ -                      | \$ 257,639       |
| 3. Travel  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 4. Equipment   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 5. Supplies  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 6. Contractual   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 7. Training Stipends   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 8. Other   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 9. Total Direct Costs (lines 1-8)  | \$ 605,928                | \$ 605,928                | \$ -                      | \$ -                      | \$ 1,211,856     |
| 10. Indirect Costs*  | \$ 125,427                | \$ 125,427                | \$ -                      | \$ -                      | \$ 250,854       |
| 11. Funding for Involved LEAs  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 12. Supplemental Funding for Participating LEAs  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 13. Total Costs (lines 9-12)   | \$ 731,355                | \$ 731,355                | \$ -                      | \$ -                      | \$ 1,462,710     |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                           |                           |                           |                           |                  |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Professional Development: Statewide 24/7 access</b><br><br><b>Associated with Criteria: B3</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ 1,195,000             | \$ 150,000               | \$ 150,000               | \$ 150,000               | \$ 1,645,000 |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 1,195,000             | \$ 150,000               | \$ 150,000               | \$ 150,000               | \$ 1,645,000 |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 1,195,000             | \$ 150,000               | \$ 150,000               | \$ 150,000               | \$ 1,645,000 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Curricular Frameworks</b><br><br><b>Associated with Criteria: B3</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ 600,000               | \$ -                     | \$ -                     | \$ -                     | \$ 600,000   |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 600,000               | \$ -                     | \$ -                     | \$ -                     | \$ 600,000   |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 600,000               | \$ -                     | \$ -                     | \$ -                     | \$ 600,000   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Interim Assessments</b><br><br><b>Associated with Criteria: B3, B2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ 3,000,000             | \$ -                     | \$ -                     | \$ -                     | \$ 3,000,000  |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ 3,000,000             | \$ -                     | \$ -                     | \$ -                     | \$ 3,000,000  |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 32,623,301            | \$ 32,623,301            | \$ -                     | \$ -                     | \$ 65,246,601 |
| 13. Total Costs (lines 9-12)   | \$ 35,623,301            | \$ 32,623,301            | \$ -                     | \$ -                     | \$ 68,246,601 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

**Budget Part II: Project-Level Budget Table**  
**Project Name: Increased rigor grants**

**Associated with Criteria: B3**  
**(Evidence for selection criteria (A)(2)(i)(d))**

| <b>Budget Categories</b>                        | <b>Project Year 1 (a)</b> | <b>Project Year 2 (a)</b> | <b>Project Year 3 (a)</b> | <b>Project Year 4 (a)</b> | <b>Total (e)</b> |
|---|---------------------------|---------------------------|---------------------------|---------------------------|------------------|
| 1. Personnel                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 2. Fringe Benefits                              | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 3. Travel                                       | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 4. Equipment                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 5. Supplies                                     | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 6. Contractual                                  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 7. Training Stipends                            | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 8. Other  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 9. Total Direct Costs (lines 1-8)               | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 10. Indirect Costs*                             | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 11. Funding for Involved LEAs                   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 12. Supplemental Funding for Participating LEAs | \$ 8,000,000              | \$ -                      | \$ -                      | \$ -                      | \$ 8,000,000     |
| 13. Total Costs (lines 9-12)                    | \$ 8,000,000              | \$ -                      | \$ -                      | \$ -                      | \$ 8,000,000     |

All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.

Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable

Column (e): Show the total amount requested for all project years.

\*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Parent Portal</b><br><br><b>Associated with Criteria: C2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ 200,000               | \$ -                     | \$ -                     | \$ -                     | \$ 200,000   |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 200,000               | \$ -                     | \$ -                     | \$ -                     | \$ 200,000   |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 200,000               | \$ -                     | \$ -                     | \$ -                     | \$ 200,000   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Data Coaches</b><br><br><b>Associated with Criteria: C3</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ 50,000                | \$ -                     | \$ -                     | \$ -                     | \$ 50,000     |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ 50,000                | \$ -                     | \$ -                     | \$ -                     | \$ 50,000     |
| 10. Indirect Costs*  | \$ 10,350                | \$ -                     | \$ -                     | \$ -                     | \$ 10,350     |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 2,878,763             | \$ 2,878,763             | \$ 2,878,763             | \$ 2,878,763             | \$ 11,515,052 |
| 13. Total Costs (lines 9-12)   | \$ 2,939,113             | \$ 2,878,763             | \$ 2,878,763             | \$ 2,878,763             | \$ 11,575,402 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Peer Assistance and Review</b><br><br><b>Associated with Criteria: D2, D5</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 318,072    |
| 2. Fringe Benefits   | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 85,880     |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 403,952    |
| 10. Indirect Costs*  | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 83,618     |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 6,731,106             | \$ 8,855,491             | \$ 11,095,027            | \$ 13,340,812            | \$ 40,022,436 |
| 13. Total Costs (lines 9-12)   | \$ 6,852,999             | \$ 8,977,384             | \$ 11,216,919            | \$ 13,462,705            | \$ 40,510,006 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Induction</b><br><br><b>Associated with Criteria: D5</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ 350,526               | \$ 316,526               | \$ 316,526               | \$ 316,526               | \$ 1,300,104  |
| 2. Fringe Benefits   | \$ 85,462                | \$ 85,462                | \$ 85,462                | \$ 85,462                | \$ 341,848    |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ 5,000                 | \$ 5,000                 | \$ 5,000                 | \$ 5,000                 | \$ 20,000     |
| 6. Contractual   | \$ 50,000                | \$ -                     | \$ -                     | \$ -                     | \$ 50,000     |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ 490,988               | \$ 406,988               | \$ 406,988               | \$ 406,988               | \$ 1,711,952  |
| 10. Indirect Costs*  | \$ 91,285                | \$ 84,247                | \$ 84,247                | \$ 84,247                | \$ 344,024    |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 6,842,921             | \$ 6,842,921             | \$ 6,842,921             | \$ 6,842,921             | \$ 27,371,682 |
| 13. Total Costs (lines 9-12)   | \$ 7,425,193             | \$ 7,334,155             | \$ 7,334,155             | \$ 7,334,155             | \$ 29,427,658 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Data-driven professional development</b><br><br><b>Associated with Criteria: C3, D5</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 12,080,525            | \$ 6,040,263             | \$ 6,040,263             | \$ 6,040,263             | \$ 30,201,313 |
| 13. Total Costs (lines 9-12)   | \$ 12,080,525            | \$ 6,040,263             | \$ 6,040,263             | \$ 6,040,263             | \$ 30,201,313 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: MN Principals Academy</b><br><br><b>Associated with Criteria: D5</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ 35,000                | \$ 15,000                | \$ 10,000                | \$ 5,000                 | \$ 65,000    |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 35,000                | \$ 15,000                | \$ 10,000                | \$ 5,000                 | \$ 65,000    |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ 972,000               | \$ 1,296,000             | \$ 1,458,000             | \$ 1,458,000             | \$ 5,184,000 |
| 13. Total Costs (lines 9-12)   | \$ 1,007,000             | \$ 1,311,000             | \$ 1,468,000             | \$ 1,463,000             | \$ 5,249,000 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Q Comp (strengthen and expand)</b><br><br><b>Associated with Criteria: D2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ 340,680               | \$ 340,680               | \$ 340,680               | \$ 340,680               | \$ 1,362,718  |
| 2. Fringe Benefits   | \$ 91,983                | \$ 91,983                | \$ 91,983                | \$ 91,983                | \$ 367,934    |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ 432,663               | \$ 432,663               | \$ 432,663               | \$ 432,663               | \$ 1,730,652  |
| 10. Indirect Costs*  | \$ 89,561                | \$ 89,561                | \$ 89,561                | \$ 89,561                | \$ 358,245    |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 755,200               | \$ 1,888,000             | \$ 3,776,000             | \$ 3,776,000             | \$ 10,195,200 |
| 13. Total Costs (lines 9-12)   | \$ 1,277,424             | \$ 2,410,224             | \$ 4,298,224             | \$ 4,298,224             | \$ 12,284,097 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Monitoring and reporting of achievement, evaluation results, etc.</b><br><b>Associated with Criteria: D2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 318,072   |
| 2. Fringe Benefits   | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 85,880    |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 403,952   |
| 10. Indirect Costs*  | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 83,618    |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 121,893               | \$ 121,893               | \$ 121,893               | \$ 121,893               | \$ 487,570   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: BOSA rulemaking initiatives</b><br><br><b>Associated with Criteria: D1, D2, D4</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ 315,739               | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 554,293   |
| 2. Fringe Benefits   | \$ 85,249                | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 149,659   |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 400,988               | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 703,952   |
| 10. Indirect Costs*  | \$ 83,005                | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 145,718   |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 483,993               | \$ 121,893               | \$ 121,893               | \$ 121,893               | \$ 849,670   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: BOT rulemaking initiatives</b><br><br><b>Associated with Criteria: D1, D4</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ 315,739               | \$ 79,518                | \$ 79,518                | \$ 79,518                | \$ 554,293   |
| 2. Fringe Benefits   | \$ 85,249                | \$ 21,470                | \$ 21,470                | \$ 21,470                | \$ 149,659   |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 400,988               | \$ 100,988               | \$ 100,988               | \$ 100,988               | \$ 703,952   |
| 10. Indirect Costs*  | \$ 83,005                | \$ 20,905                | \$ 20,905                | \$ 20,905                | \$ 145,718   |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 483,993               | \$ 121,893               | \$ 121,893               | \$ 121,893               | \$ 849,670   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Recommended teacher and principal evaluation rubric</b><br><b>Associated with Criteria: D2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ 57,000                | \$ -                     | \$ -                     | \$ -                     | \$ 57,000    |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ 57,000                | \$ -                     | \$ -                     | \$ -                     | \$ 57,000    |
| 10. Indirect Costs*  | \$ 11,799                | \$ -                     | \$ -                     | \$ -                     | \$ 11,799    |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 68,799                | \$ -                     | \$ -                     | \$ -                     | \$ 68,799    |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b>   |                                   |                                   |                                   |                                   |                      |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|
| <b>Project Name: Equitable distribution grants</b>  |                                   |                                   |                                   |                                   |                      |
| <b>Associated with Criteria: D3</b>   |                                   |                                   |                                   |                                   |                      |
| <b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                                   |                                   |                                   |                                   |                      |
| <b>Budget Categories</b>  | <b>Project<br/>Year 1<br/>(a)</b> | <b>Project<br/>Year 2<br/>(a)</b> | <b>Project<br/>Year 3<br/>(a)</b> | <b>Project<br/>Year 4<br/>(a)</b> | <b>Total<br/>(e)</b> |
| 1. Personnel  | \$ -                              | \$ 12,340                         | \$ 12,340                         | \$ 12,340                         | \$ 37,019            |
| 2. Fringe Benefits  | \$ -                              | \$ 3,332                          | \$ 3,332                          | \$ 3,332                          | \$ 9,995             |
| 3. Travel   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 4. Equipment  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 5. Supplies   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 6. Contractual  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 7. Training Stipends  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 8. Other  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 9. Total Direct Costs (lines 1-8)   | \$ -                              | \$ 15,671                         | \$ 15,671                         | \$ 15,671                         | \$ 47,014            |
| 10. Indirect Costs*   | \$ -                              | \$ 3,244                          | \$ 3,244                          | \$ 3,244                          | \$ 9,732             |
| 11. Funding for Involved LEAs   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 12. Supplemental Funding for Participating LEAs   | \$ 1,000,000                      | \$ 1,000,000                      | \$ 2,000,000                      | \$ 3,000,000                      | \$ 7,000,000         |
| 13. Total Costs (lines 9-12)  | \$ 1,000,000                      | \$ 1,018,915                      | \$ 2,018,915                      | \$ 3,018,915                      | \$ 7,056,745         |
| <p>All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br/>           Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br/>           Column (e): Show the total amount requested for all project years.<br/>           *If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget</p> |                                   |                                   |                                   |                                   |                      |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Extended Day</b><br><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |               |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e)  |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 9. Total Direct Costs (lines 1-8)  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -          |
| 12. Supplemental Funding for Participating LEAs  | \$ 5,957,701             | \$ 4,766,161             | \$ 3,177,441             | \$ -                     | \$ 13,901,302 |
| 13. Total Costs (lines 9-12)   | \$ 5,957,701             | \$ 4,766,161             | \$ 3,177,441             | \$ -                     | \$ 13,901,302 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |               |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Job-Embedded Professional Development for</b><br><b>turnaround schools</b><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ 1,806,224             | \$ 1,444,979             | \$ 963,319               | \$ -                     | \$ 4,214,522 |
| 13. Total Costs (lines 9-12)   | \$ 1,806,224             | \$ 1,444,979             | \$ 963,319               | \$ -                     | \$ 4,214,522 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Teacher Professional Development: Lowest-</b><br><b>performing schools</b><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                                   |                                   |                                   |                                   |                      |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|
| <b>Budget Categories</b>   | <b>Project<br/>Year 1<br/>(a)</b> | <b>Project<br/>Year 2<br/>(a)</b> | <b>Project<br/>Year 3<br/>(a)</b> | <b>Project<br/>Year 4<br/>(a)</b> | <b>Total<br/>(e)</b> |
| 1. Personnel   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 2. Fringe Benefits   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 3. Travel  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 4. Equipment   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 5. Supplies  | \$ 16,231                         | \$ 12,985                         | \$ 8,657                          | \$ -                              | \$ 37,873            |
| 6. Contractual   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 7. Training Stipends   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 8. Other   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 9. Total Direct Costs (lines 1-8)  | \$ 16,231                         | \$ 12,985                         | \$ 8,657                          | \$ -                              | \$ 37,873            |
| 10. Indirect Costs*  | \$ 3,360                          | \$ 2,688                          | \$ 1,792                          | \$ -                              | \$ 7,840             |
| 11. Funding for Involved LEAs  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 12. Supplemental Funding for Participating LEAs  | \$ 713,718                        | \$ 570,974                        | \$ 380,649                        | \$ -                              | \$ 1,665,341         |
| 13. Total Costs (lines 9-12)   | \$ 733,309                        | \$ 586,647                        | \$ 391,098                        | \$ -                              | \$ 1,711,054         |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                                   |                                   |                                   |                                   |                      |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Teacher Leadership Opportunities</b><br><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ 750,529               | \$ 600,423               | \$ 400,282               | \$ -                     | \$ 1,751,235 |
| 13. Total Costs (lines 9-12)   | \$ 750,529               | \$ 600,423               | \$ 400,282               | \$ -                     | \$ 1,751,235 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Teacher Evaluation Program for Turnaround Schools</b><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories   | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs   | \$ 996,147               | \$ 796,918               | \$ 531,279               | \$ -                     | \$ 2,324,344 |
| 13. Total Costs (lines 9-12)  | \$ 996,147               | \$ 796,918               | \$ 531,279               | \$ -                     | \$ 2,324,344 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: MN Principals Academy: Turnaround School Program</b><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories   | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual  | \$ 100,714               | \$ 80,571                | \$ 53,714                | \$ -                     | \$ 235,000   |
| 7. Training Stipends  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)   | \$ 100,714               | \$ 80,571                | \$ 53,714                | \$ -                     | \$ 235,000   |
| 10. Indirect Costs*   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs   | \$ 148,500               | \$ 118,800               | \$ 79,200                | \$ -                     | \$ 346,500   |
| 13. Total Costs (lines 9-12)  | \$ 249,214               | \$ 199,371               | \$ 132,914               | \$ -                     | \$ 581,500   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Site Administrative Manager (SAM)</b><br><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ 4,090,014             | \$ 3,272,011             | \$ 2,181,341             | \$ -                     | \$ 9,543,366 |
| 13. Total Costs (lines 9-12)   | \$ 4,090,014             | \$ 3,272,011             | \$ 2,181,341             | \$ -                     | \$ 9,543,366 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Planning Grants</b><br><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories   | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs   | \$ 1,012,500             | \$ 810,000               | \$ 540,000               | \$ -                     | \$ 2,362,500 |
| 13. Total Costs (lines 9-12)  | \$ 1,012,500             | \$ 810,000               | \$ 540,000               | \$ -                     | \$ 2,362,500 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Office of Turnaround Schools (OTAS)</b><br><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories  | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel   | \$ 1,053,221             | \$ 1,366,323             | \$ 1,366,323             | \$ 736,323               | \$ 4,522,190 |
| 2. Fringe Benefits   | \$ 112,920               | \$ 197,457               | \$ 197,457               | \$ 197,457               | \$ 705,291   |
| 3. Travel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies  | \$ 17,750                | \$ -                     | \$ -                     | \$ -                     | \$ 17,750    |
| 6. Contractual   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other   | \$ 27,000                | \$ 54,000                | \$ 54,000                | \$ 54,000                | \$ 189,000   |
| 9. Total Direct Costs (lines 1-8)  | \$ 1,210,890             | \$ 1,617,781             | \$ 1,617,781             | \$ 987,781               | \$ 5,434,232 |
| 10. Indirect Costs*  | \$ 250,654               | \$ 334,881               | \$ 334,881               | \$ 204,471               | \$ 1,124,886 |
| 11. Funding for Involved LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 13. Total Costs (lines 9-12)   | \$ 1,461,545             | \$ 1,952,661             | \$ 1,952,661             | \$ 1,192,251             | \$ 6,559,118 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Advanced Rigor course grants for turnaround schools</b><br><b>Associated with Criteria: E2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                          |                          |                          |                          |              |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories   | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 2. Fringe Benefits  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 3. Travel   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 4. Equipment  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 5. Supplies   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 6. Contractual  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 7. Training Stipends  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 8. Other  | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 9. Total Direct Costs (lines 1-8)   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 10. Indirect Costs*   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 11. Funding for Involved LEAs   | \$ -                     | \$ -                     | \$ -                     | \$ -                     | \$ -         |
| 12. Supplemental Funding for Participating LEAs   | \$ 512,421               | \$ 409,937               | \$ 273,291               | \$ -                     | \$ 1,195,650 |
| 13. Total Costs (lines 9-12)  | \$ 512,421               | \$ 409,937               | \$ 273,291               | \$ -                     | \$ 1,195,650 |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Oversight</b><br><br><b>Associated with Criteria: A2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                                   |                                   |                                   |                                   |                      |
|--|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|
| <b>Budget Categories</b>   | <b>Project<br/>Year 1<br/>(a)</b> | <b>Project<br/>Year 2<br/>(a)</b> | <b>Project<br/>Year 3<br/>(a)</b> | <b>Project<br/>Year 4<br/>(a)</b> | <b>Total<br/>(e)</b> |
| 1. Personnel   | \$ 613,652                        | \$ 613,652                        | \$ 613,652                        | \$ 613,652                        | \$ 2,454,608         |
| 2. Fringe Benefits   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 3. Travel  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 4. Equipment   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 5. Supplies  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 6. Contractual   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 7. Training Stipends   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 8. Other   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 9. Total Direct Costs (lines 1-8)  | \$ 613,652                        | \$ 613,652                        | \$ 613,652                        | \$ 613,652                        | \$ 2,454,608         |
| 10. Indirect Costs*  | \$ 127,026                        | \$ 127,026                        | \$ 127,026                        | \$ 127,026                        | \$ 508,104           |
| 11. Funding for Involved LEAs  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 12. Supplemental Funding for Participating LEAs  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 13. Total Costs (lines 9-12)   | \$ 740,678                        | \$ 740,678                        | \$ 740,678                        | \$ 740,678                        | \$ 2,962,712         |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br>Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                                   |                                   |                                   |                                   |                      |

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b>   |                                   |                                   |                                   |                                   |                      |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----------------------|
| <b>Project Name: Evaluation</b>   |                                   |                                   |                                   |                                   |                      |
| <b>Associated with Criteria: A2</b>   |                                   |                                   |                                   |                                   |                      |
| <b>(Evidence for selection criteria (A)(2)(i)(d))</b>   |                                   |                                   |                                   |                                   |                      |
| <b>Budget Categories</b>  | <b>Project<br/>Year 1<br/>(a)</b> | <b>Project<br/>Year 2<br/>(a)</b> | <b>Project<br/>Year 3<br/>(a)</b> | <b>Project<br/>Year 4<br/>(a)</b> | <b>Total<br/>(e)</b> |
| 1. Personnel  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 2. Fringe Benefits  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 3. Travel   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 4. Equipment  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 5. Supplies   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 6. Contractual  | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 10,000,000        |
| 7. Training Stipends  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 8. Other  | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 9. Total Direct Costs (lines 1-8)   | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 10,000,000        |
| 10. Indirect Costs*   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 11. Funding for Involved LEAs   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 12. Supplemental Funding for Participating LEAs   | \$ -                              | \$ -                              | \$ -                              | \$ -                              | \$ -                 |
| 13. Total Costs (lines 9-12)  | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 2,500,000                      | \$ 10,000,000        |
| <p>All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br/>           Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable<br/>           Column (e): Show the total amount requested for all project years.<br/>           *If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget</p> |                                   |                                   |                                   |                                   |                      |

**Budget Part II: Project-Level Budget Table**

**Budget Part II: Project-Level Budget Table**  
**Project Name: Annual RTTT Conference**

**Associated with Criteria: A2**  
**(Evidence for selection criteria (A)(2)(i)(d))**

| <b>Budget Categories</b>                        | <b>Project Year 1 (a)</b> | <b>Project Year 2 (a)</b> | <b>Project Year 3 (a)</b> | <b>Project Year 4 (a)</b> | <b>Total (e)</b> |
|---|---------------------------|---------------------------|---------------------------|---------------------------|------------------|
| 1. Personnel                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 2. Fringe Benefits                              | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 3. Travel                                       | \$ 900,000                | \$ 900,000                | \$ 900,000                | \$ 900,000                | \$ 3,600,000     |
| 4. Equipment                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 5. Supplies                                     | \$ 50,000                 | \$ 50,000                 | \$ 50,000                 | \$ 50,000                 | \$ 200,000       |
| 6. Contractual                                  | \$ 50,000                 | \$ 50,000                 | \$ 50,000                 | \$ 50,000                 | \$ 200,000       |
| 7. Training Stipends                            | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 8. Other  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 9. Total Direct Costs (lines 1-8)               | \$ 1,000,000              | \$ 1,000,000              | \$ 1,000,000              | \$ 1,000,000              | \$ 4,000,000     |
| 10. Indirect Costs*                             | \$ 196,650                | \$ 196,650                | \$ 196,650                | \$ 196,650                | \$ 786,600       |
| 11. Funding for Involved LEAs                   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 12. Supplemental Funding for Participating LEAs | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 13. Total Costs (lines 9-12)                    | \$ 1,196,650              | \$ 1,196,650              | \$ 1,196,650              | \$ 1,196,650              | \$ 4,786,600     |

All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.

Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable

Column (e): Show the total amount requested for all project years.

\*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget

**Budget Part II: Project-Level Budget Table**

| <b>Budget Part II: Project-Level Budget Table</b><br><b>Project Name: Charter School Director Training</b><br><br><b>Associated with Criteria: F2</b><br><b>(Evidence for selection criteria (A)(2)(i)(d))</b>  |                          |                          |                          |                          |              |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------|
| Budget Categories   | Project<br>Year 1<br>(a) | Project<br>Year 2<br>(a) | Project<br>Year 3<br>(a) | Project<br>Year 4<br>(a) | Total<br>(e) |
| 1. Personnel  | \$ 62,992                | \$ 62,992                | \$ 62,992                | -                        | \$ 188,976   |
| 2. Fringe Benefits  | \$ 17,008                | \$ 17,008                | \$ 17,008                | -                        | \$ 51,024    |
| 3. Travel   | \$ 21,000                | \$ 21,000                | \$ 21,000                | -                        | \$ 63,000    |
| 4. Equipment  | -                        | -                        | -                        | -                        | -            |
| 5. Supplies   | -                        | -                        | -                        | -                        | -            |
| 6. Contractual  | \$ 20,000                | \$ 20,000                | \$ 20,000                | -                        | \$ 60,000    |
| 7. Training Stipends  | -                        | -                        | -                        | -                        | -            |
| 8. Other  | -                        | -                        | -                        | -                        | -            |
| 9. Total Direct Costs (lines 1-8)   | \$ 121,000               | \$ 121,000               | \$ 121,000               | -                        | \$ 363,000   |
| 10. Indirect Costs*   | \$ 20,907                | \$ 20,907                | \$ 20,907                | -                        | \$ 62,721    |
| 11. Funding for Involved LEAs   | -                        | -                        | -                        | -                        | -            |
| 12. Supplemental Funding for Participating LEAs   | -                        | -                        | -                        | -                        | -            |
| 13. Total Costs (lines 9-12)  | \$ 141,907               | \$ 141,907               | \$ 141,907               | -                        | \$ 425,721   |
| All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.<br>Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.<br>*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget |                          |                          |                          |                          |              |

**Budget Part II: Project-Level Budget Table**

**Budget Part II: Project-Level Budget Table**  
**Project Name: Single Charter Authorizer for expansion of high-quality charters**  
**Associated with Criteria: F2**  
**(Evidence for selection criteria (A)(2)(i)(d))**

| <b>Budget Categories</b>                        | <b>Project Year 1 (a)</b> | <b>Project Year 2 (a)</b> | <b>Project Year 3 (a)</b> | <b>Project Year 4 (a)</b> | <b>Total (e)</b> |
|---|---------------------------|---------------------------|---------------------------|---------------------------|------------------|
| 1. Personnel                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 2. Fringe Benefits                              | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 3. Travel                                       | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 4. Equipment                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 5. Supplies                                     | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 6. Contractual                                  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 7. Training Stipends                            | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 8. Other  | \$ 200,000                | \$ 200,000                | \$ 200,000                | \$ 200,000                | \$ 800,000       |
| 9. Total Direct Costs (lines 1-8)               | \$ 200,000                | \$ 200,000                | \$ 200,000                | \$ 200,000                | \$ 800,000       |
| 10. Indirect Costs*                             | \$ 41,400                 | \$ 41,400                 | \$ 41,400                 | \$ 41,400                 | \$ 165,600       |
| 11. Funding for Involved LEAs                   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 12. Supplemental Funding for Participating LEAs | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 13. Total Costs (lines 9-12)                    | \$ 241,400                | \$ 241,400                | \$ 241,400                | \$ 241,400                | \$ 965,600       |

All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.  
 Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable Column (e): Show the total amount requested for all project years.  
 \*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget

**Budget Part II: Project-Level Budget Table**

**Budget Part II: Project-Level Budget Table**

**Project Name: International Assessments for benchmarking**

**Associated with Criteria: B2  
(Evidence for selection criteria (A)(2)(i)(d))**

| <b>Budget Categories</b>                        | <b>Project Year 1 (a)</b> | <b>Project Year 2 (a)</b> | <b>Project Year 3 (a)</b> | <b>Project Year 4 (a)</b> | <b>Total (e)</b> |
|---|---------------------------|---------------------------|---------------------------|---------------------------|------------------|
| 1. Personnel                                    | \$ -                      | \$ 79,518                 | \$ 79,518                 | \$ -                      | \$ 159,036       |
| 2. Fringe Benefits                              | \$ -                      | \$ 21,470                 | \$ 21,470                 | \$ -                      | \$ 42,940        |
| 3. Travel                                       | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 4. Equipment                                    | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 5. Supplies                                     | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 6. Contractual                                  | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 7. Training Stipends                            | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 8. Other  | \$ 900,000                | \$ 900,000                | \$ -                      | \$ -                      | \$ 1,800,000     |
| 9. Total Direct Costs (lines 1-8)               | \$ 900,000                | \$ 1,000,988              | \$ 100,988                | \$ -                      | \$ 2,001,976     |
| 10. Indirect Costs*                             | \$ 186,300                | \$ 207,205                | \$ 20,905                 | \$ -                      | \$ 414,409       |
| 11. Funding for Involved LEAs                   | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 12. Supplemental Funding for Participating LEAs | \$ -                      | \$ -                      | \$ -                      | \$ -                      | \$ -             |
| 13. Total Costs (lines 9-12)                    | \$ 1,086,300              | \$ 1,208,193              | \$ 121,893                | \$ -                      | \$ 2,416,385     |

All applicants must provide a break-down by the applicable budget categories shown in lines 1-15.

Columns (a) through (d): For each project year for which funding is requested, show the total amount requested for each applicable

Column (e): Show the total amount requested for all project years.

\*If you plan to request reimbursement for indirect costs, complete the Indirect Cost Information form at the end of this Budget



| Activity  | Purpose   | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category  |
|---|---|---|---------------|-------------|---------------|---------------|---|
| <b>STANDARDS AND ASSESSMENTS</b>  |   |   |               |             |               |               |   |
| <i>Professional Development: Train the Trainer</i>                                |   |   |               |             | 415           |               |   |
| Standards content training for all teachers in participating LEAs                 | Trainers hired to train teachers, curriculum directors and other administration across the state on Common Core Standards content                                   | 1 year of support at \$121K salary for 20-25 trainers   |               | X           |               | \$ 3,352,173  | 12./14. Supplemental and Subgranted funds to LEAs |
| Materials and travel costs associated with trainers                               | Travel and material costs for trainers  | Travel and material costs estimated at \$59K for 20-25 trainers   | X             |             |               | \$ 59,000     | 5. Supplies                                       |
| One day of training for teachers in all participating LEAs                        | Training to support the adoption of state standards in classroom instruction and local curriculum, assessments and PLCs   | Cost of substitute teacher for one day at \$125 per day for ~48,000 teachers  |               | X           |               | \$ 6,040,263  | 12./14. Supplemental and Subgranted funds to LEAs |
| <i>PD content development and trainer management for all standards PD</i>         |   |   |               |             | 415           |               |   |
| PD development content and management, digital "academy" content management       | To increase state capacity to create professional development focused on standards content and to manage the implementation of the statewide 24/7 digital "academy" | Two years of support for 5 FTEs at the state level with salary estimated at \$100K each   | X             |             |               | \$ 1,211,856  | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| <i>Professional Development: Statewide 24/7 access</i>                            |   |   |               |             | 524           |               |   |
| Web-based content and user-interface development for statewide digital PD support | To provide 24/7 access to instructional tools and supports through a web-based digital "academy" for all teachers   | \$1.65m estimated cost for content development, including: user-generated content grants, content subscription fee and research costs   | X             |             |               | \$ 1,645,000  | 6. Contractual                                    |
| <i>Curricular Frameworks</i>  |   |   |               |             | 524           |               |   |
| Develop curricular frameworks aligned with K-12 standards                         | To help "unpack" standards and support the adoption of standards in instruction and classroom curriculum  | K-12 curricular frameworks for mathematics, English-language arts/Reading and science, and ensure alignment with other critical programs including ELL, Special Education and Early Childhood | X             |             |               | \$ 600,000    | 6. Contractual                                    |
| <i>Interim Assessments</i>  |   |   |               |             | 415           |               |   |
| Aligned Formative Assessments developed by an outside vendor based on state RFP   | Ensure participating LEAs undertaking rigorous and aligned formative assessments  | 6 Formative Assessments (of 12 expected over 4 years) for all participating LEAs @ \$14 per student   |               | X           |               | \$ 65,246,601 | 12./14. Supplemental and Subgranted funds to LEAs |
| Funding for start-up costs  | Administrative cost to align interim assessments with the state's standards for Math, English-language arts/Reading and Science                                     | Administrative costs  | X             |             |               | \$ 3,000,000  | 6. Contractual                                    |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity  | Purpose  | Cost Detail  | State portion | LEA portion | Involved LEAs | Total        | Category  |
|---|--|--|---------------|-------------|---------------|--------------|---|
| <b>Increased rigor grants</b>                     |  |  |               |             |               |              |   |
| Grant funding                                     | To increase the enrollment of high-poverty and minority students enrolled in increased rigor courses | \$8m in grants allocated to increase minority and high-poverty student enrolled in schools |               | X           |               | \$ 8,000,000 | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>International Assessments for benchmarking</b> |  |  |               |             |               |              |   |
| Conduct international test (e.g., TIMSS/PISA)     | Benchmark Minnesota students vs. other nations   | Covers both TIMMS and PISA testing   | X             |             |               | \$ 1,800,000 | 8. Other  |
| Support test administration                       | Full-time Ed Spec 1 support person at estimated salary of \$62,000                                   | Support MDE during TIMSS administration  | X             |             |               | \$ 201,976   | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity   | Purpose   | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category   |
|--|---|---|---------------|-------------|---------------|---------------|--|
| <b>DATA SYSTEMS</b>  |   |   |               |             |               |               |  |
| <b>Parent Portal</b>   |   |   |               |             |               |               |  |
| Development of Parent Portal   | To provide greater and customized access to data for Minnesota's parents                            | \$200,000 in one-time development costs   | X             |             |               | \$ 200,000    | 6. Contractual                                   |
| <b>Data Coaches</b>  |   |   |               |             |               |               |  |
| Fund school-based data coaches to provide training and support for greater and more customized data-driven decision making | Build capability among teachers and principals at each school and model data-driven decision making | \$2000 annual stipend per data coach; assumes 1 data coach per 35 teachers, ~48,000 total teachers                                    |               | X           |               | \$ 11,045,052 | 12/14. Supplemental and Subgranted funds to LEAs |
| Provide 2-day training for all Data Coaches  | Teach data coaches how to embed data-driven culture, lead data trainings, use techniques, etc.      | \$1250/day for a trainer to provide 2-day training for ~50 cohorts of data coaches statewide (estimated 30 data coaches per training) |               | X           |               | \$ 470,000    | 12/14. Supplemental and Subgranted funds to LEAs |
| Develop training curriculum and materials for Data Coaches   | Train school-based data coaches   | Flat \$50,000 rate estimate based on previous training curriculum development   | X             |             |               | \$ 50,000     | 1. Personnel                                     |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity  | Purpose  | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category  |
|---|--|---|---------------|-------------|---------------|---------------|---|
| <b>GREAT TEACHERS AND LEADERS</b>   |  |   |               |             |               |               |   |
| <i>Peer Assistance and Review</i>   |  |   |               |             |               |               |   |
| Support implementation and expansion of PAR in participating LEAs             | Ensure consistency, quality and measurement in rollout of PAR                        | 1 FTE at \$100,988 salary including fringe  | X             |             |               | \$ 403,952    | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| Fund Consulting Teachers and Consulting Principals for PAR                    | Support introduction and/or expansion in use of PAR to participating LEAs            | Assumes 1 Consulting Teacher/Principal for 15 teachers/principals on PAR, at \$121,400/year average including fringe, ~4,500 participating  |               | X           |               | \$ 36,784,200 | 12./14. Supplemental and Subgranted funds to LEAs |
| Provide initial training to new Consulting Teachers and Consulting Principals | Ensure new CTs/CPs are trained in the role, best practices, skills, procedures, etc. | 5 days of training for new consulting teacher/consulting principal cohort (1:30 trainer:teacher ratio)  |               | X           |               | \$ 75,000     | 12./14. Supplemental and Subgranted funds to LEAs |
| Fund time for teachers and principals on PAR to spend with their CT/CP        | Ensure dedicated time to focus on and develop teacher/principal observation, skills  | Covers 2 hours, 10x/year (i.e. 20 total hours/year) for all individuals on PAR at average \$35/hour rate; assumes 1.5% of teachers and principals in each LEA participate in Year 1, 2.0% in Year 2, 2.5% Year in 3, and 3.0% in Year 4 |               | X           |               | \$ 3,163,236  | 12./14. Supplemental and Subgranted funds to LEAs |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity  | Purpose   | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category   |
|---|---|---|---------------|-------------|---------------|---------------|--|
| <b>Induction</b>  |   |   |               |             |               |               |  |
| Support implementation of comprehensive induction program                         | Ensure consistency, quality and measurement in rollout of state induction system for new teachers   | 1 FTE at \$100,988 salary including fringe  | X             |             |               | \$ 403,952    | ~80% 1. Personnel, ~20% 2. Fringe Benefits       |
| Support implementation of comprehensive induction program                         | Ensure consistency, quality and measurement in rollout of state induction system for new teachers   | 1 FTE at \$58,200 salary including fringe   | X             |             |               | \$ 232,800    | ~80% 1. Personnel, ~20% 2. Fringe Benefits       |
| Develop induction website   | Ensure LEAs have access to best practices, practical resources, etc. for rollout of comprehensive, quality induction program                              | \$50,000 one-time cost estimate based on previous program website development costs   | X             |             |               | \$ 50,000     | 6. Contractual                                   |
| Contract preparation of materials to support dissemination of induction framework | Ensure standardization of induction programs, curriculum  | \$10,000 One-time cost estimate for up-front material development, based on previous program history  | X             |             |               | \$ 10,000     | 1. Personnel                                     |
| Print and distribute induction publications                                       | Ensure standardization of induction programs, curriculum  | \$5000 annual estimate of printing costs to distribute hard-copy materials, booklets, etc.  | X             |             |               | \$ 20,000     | 5. Supplies                                      |
| Support induction work group meeting time and expenses                            | Collaboratively develop recommended induction curriculum to support already-established TSP framework assuming ~2,900 teachers over 4 years               | \$1500 per induction workgroup meeting per month for one year, plus \$125/day average teacher substitute pay assuming 4 teachers  | X             |             |               | \$ 24,000     | 1. Personnel                                     |
| Fund annual stipend for new teacher mentors                                       | Ensure new teacher mentors are recognized and rewarded for their time and effort in training and meeting with their mentee (2,900 estimated new teachers) | \$1000 annual stipend per mentor, assuming 1:1 mentor, new teacher ratio (mentors are not FT mentors only, but rather existing classroom teachers)                              |               | X           |               | \$ 12,731,015 | 12/14. Supplemental and Subgranted funds to LEAs |
| Provide 2-day training to new teacher mentors                                     | Ensure new teacher mentors know best practices and follow induction model (i.e. beyond current buddy system)  | 2 FTEs at \$121,400/year including fringe   | X             |             |               | \$ 971,200    | ~80% 1. Personnel, ~20% 2. Fringe Benefits       |
| Fund substitutes for mentors to receive training                                  | Support mentors in developing and providing quality induction (2,900 estimated new teachers)  | \$125/day substitute pay to cover all mentors to attend their 2-day training (one 2-day training per mentor per year)   |               | X           |               | \$ 3,182,754  | 12/14. Supplemental and Subgranted funds to LEAs |
| Fund regular new teacher time with their mentors                                  | Ensure dedicated time to focus on and develop new teacher skills (2,900 estimated new teachers)   | Covers 1 hour/week for 36 weeks/year at average \$25/hour rate for all first year teachers, plus all 2nd and 3rd year teachers in the bottom quartile of high-poverty districts |               | X           |               | \$ 11,457,914 | 12/14. Supplemental and Subgranted funds to LEAs |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity   | Purpose   | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category  |
|--|---|---|---------------|-------------|---------------|---------------|---|
| <b>Data-driven professional development</b>  |   |   |               |             |               |               |   |
| Fund time for teachers to attend professional development centered around data-driven decision making (on top of existing PLC and PD time provided through Q Comp) | Build capability in data-driven decision making, accessing and using data, use of instructional improvement resources, etc.                 | 5 days of professional development over the course of 4 years for all teachers in participating LEAs (~48,000 teachers), at \$125/day for avg substitute time/cost  |               | X           |               | \$ 30,201,313 | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>MN Principals Academy</b>   |   |   |               |             |               |               |   |
| Stipend to fund additional trainers for MN Principals' Academy   | Build capacity in MN Principals' Academy trainer to ensure ability to train all principals in all participating LEAs                        | \$5000 per trainer for 11 trainers total over four years  | X             |             |               | \$ 55,000     | 6. Contractual                                    |
| Stipend to fund development of password-protected website to support Principals' Academy cohort  | Enables Principals' Academy to develop greater remote support, mentoring and online communities for principals attending academy            | \$10,000 one-time cost estimate provided by Principals' Academy   | X             |             |               | \$ 10,000     | 6. Contractual                                    |
| Fund principals in all participating LEAs to attend MN Principals' Academy   | Raise caliber of support and professional development provided to principals  | \$162,000 per cohort (assumes 30 participants per cohort), for all principals in participating LEAs   |               | X           |               | \$ 5,184,000  | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Q Comp (strengthen and expand)</b>  |   |   |               |             |               |               |   |
| Provide technical assistance to LEAs joining or updating Q Comp, as well as ongoing monitoring, reporting and support  | Ensure timeliness and fidelity of Q Comp expansion  | 5 FTEs total: 1 at 116,763; 1 at \$100,988; 2 at \$78,356; 1 at \$58,200 (annual salaries, all including fringe)  | X             |             |               | \$ 1,730,652  | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| Fund Q Comp performance pay for principals who meet evaluation performance goals   | Ensure principals are able to be on Q Comp without diluting current state-provided funds that go to teacher performance pay program         | Up to \$2000 per principal per year for ~1,800 principals, depending on how LEA defines goals and performance through Q Comp; estimate assumes 20% on upgraded Q Comp Year 1, 50% Year 2, and 100% Year 3 and 4 |               | X           |               | \$ 10,195,200 | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Monitoring and reporting of achievement, evaluation results, etc.</b>   |   |   |               |             |               |               |   |
| Analyze and produce regular reports on student achievement data as well as teacher and principal evaluations   | Ensure inter-rater reliability and provide coaching to LEAs as necessary  | 1 FTE at \$116,400/year including fringe  | X             |             |               | \$ 403,952    | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| <b>BOSA rulemaking initiatives</b>   |   |   |               |             |               |               |   |
| Amend rules on principal prep programs and licensure   | Institute tiered licensure, clarify and strengthen program authorization requirements for both alternative and traditional pathway programs | \$300,000 one-time standard state estimate for board, staff and stakeholder time to develop and roll out major rulemaking   | X             |             |               | \$ 300,000    | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| Additional full-time staff person to support BOSA in developing initiatives  | Support Board of School Administrators  | One FTE to support BOT in rulemaking  | X             |             |               | \$ 403,952    | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity   | Purpose  | Cost Detail  | State portion | LEA portion | Involved LEAs | Total        | Category  |
|--|--|--|---------------|-------------|---------------|--------------|---|
| <b><i>BOT rulemaking initiatives</i></b>   |  |  |               |             |               |              |   |
| Support for amendment of rules on teacher prep programs and licensure, communication of rule changes, etc. | Institute tiered licensure, clarify and strengthen program authorization requirements for both alternative and traditional pathway programs                  | \$300,000 one-time standard state estimate for board, staff and stakeholder time to develop and roll out major rulemaking  | X             |             |               | \$ 300,000   | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| Additional full-time staff person to support BOT in developing initiatives                                 | Support Board of Teaching  | One FTE to support BOT in rulemaking   | X             |             |               | \$ 403,952   | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| <b><i>Recommended teacher and principal evaluation rubric</i></b>  |  |  |               |             |               |              |   |
| Support work group meeting time and expenses   | Collaboratively develop recommended teacher and principal evaluation rubric  | \$1500 per teacher and principal workgroup meeting per month for one year, plus \$125/day average teacher substitute pay (assuming 50% teacher participation in 12-person teacher workgroup plus 10% teacher participation in 12-person principal workgroup) | X             |             |               | \$ 57,000    | 1. Personnel                                      |
| <b><i>Equitable distribution grants</i></b>  |  |  |               |             |               |              |   |
| Provide competitive grant opportunities to LEAs  | Fund initiatives to improve equitable distribution of highly effective teachers and leaders in districts that 1) need it and 2) are willing to be innovative | \$1M annual pilots in Year 1 and 2, scaling to \$2M in Year 3 and \$3M in Year 4 as more districts have reliable evaluation results to establish distribution baseline   |               | X           |               | \$ 7,000,000 | 12./14. Supplemental and Subgranted funds to LEAs |
| Fund staff time to oversee administration of grants and review applications                                | Support participation in, distribution of grant monies, and measurement of outcomes  | 0.2 FTE at \$78,356 annually, including fringe   | X             |             |               | \$ 47,014    | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity  | Purpose   | Cost Detail  | State portion | LEA portion | Involved LEAs | Total         | Category  |
|---|---|--|---------------|-------------|---------------|---------------|---|
| <b>TURNING AROUND THE PERSISTENTLY LOWEST-ACHIEVING SCHOOLS</b>                     |   |  |               |             |               |               |   |
| <b>Extended Day</b>   |   |  |               |             |               |               |   |
| Additional hour of instructional time for each turnaround school                    | Provide one additional hour of instructional time in all turnaround schools                                     | \$35 per hour cost for teachers for 180 days each school year  |               | X           |               | \$ 13,901,302 | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Job-Embedded Professional Development for turnaround schools</b>                 |   |  |               |             |               |               |   |
| 90 minutes each week for professional learning community time in struggling schools | Provide each teacher with 90 minutes of instructional time dedicated to their professional learning communities | \$35 per hour cost for job-embedded professional development (PLC)   |               | X           |               | \$ 4,214,522  | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Teacher Professional Development: Lowest-performing schools</b>                  |   |  |               |             |               |               |   |
| Site-based trainer  | Provide 10 days of site-based training for each turnaround school   | \$1,250 daily rate for trainer estimated   |               | X           |               | \$ 393,750    | 12./14. Supplemental and Subgranted funds to LEAs |
| Substitute teacher for teacher training   | Provide 10 day teacher academy for all teachers in turnaround schools   | \$125 estimated sub-fee per day for 10 days  |               | X           |               | \$ 919,398    | 12./14. Supplemental and Subgranted funds to LEAs |
| Ongoing teacher training for turnaround schools                                     | Provide training for new teachers that join turnaround schools after process is underway                        | 15% new teachers estimated for turnaround schools each year with \$125 in substitute costs per teacher for 10 days   |               | X           |               | \$ 264,145    | 12./14. Supplemental and Subgranted funds to LEAs |
| Ongoing trainer fee for turnaround schools  | Provide training for new teachers in turnaround schools   | 15% new teachers estimated for turnaround schools each year with \$1,250 estimated daily stipend for trainer costs   |               | X           |               | \$ 88,048     | 12./14. Supplemental and Subgranted funds to LEAs |
| Training materials for teachers   | Provide pre- and post- content exams and surveys of enacted curriculum  | \$40 material costs for each teacher in a turnaround school  | X             |             |               | \$ 37,873     | 5. Supplies                                       |
| <b>Teacher Leadership Opportunities</b>   |   |  |               |             |               |               |   |
| Teacher leadership opportunities for teachers in turnaround schools                 | Provide increased instructional leadership responsibilities for 5% of teachers in turnaround schools            | 5% of all teachers in turnaround schools receive \$50k increase in salary and benefits for increased role and responsibility                                       |               | X           |               | \$ 1,751,235  | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Teacher Evaluation Program for Turnaround Schools</b>                            |   |  |               |             |               |               |   |
| Evaluation and performance pay for turnaround schools                               | Provide a formal, multiple measure system of training for teachers in turnaround schools                        | TAP or OTAS-Approved program with up to \$81 additional support per student  |               | X           |               | \$ 2,324,344  | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>MN Principals Academy: Turnaround School Program</b>                             |   |  |               |             |               |               |   |
| NISL Program for turnaround principals program development and facilitation costs   | Provide specialized NISL curriculum for principals of turnaround schools  | \$200k curriculum development, \$35 additional administrative costs  | X             |             |               | \$ 235,000    | 6. Contractual                                    |
| License principals upon completion of the program                                   | Licensing fee for principals certified through MN Principals' Academy   | \$3k license fee estimate for each principal   |               | X           |               | \$ 94,500     | 12./14. Supplemental and Subgranted funds to LEAs |
| 3 years of coaching for each principal in a turnaround school                       | Provide three years of intensive coaching for principals in turnaround schools                                  | \$40K coach stipend to provide intensive coaching, support and training to principals in turnaround schools at a ratio of 1 coach to 5 principals over three years |               | X           |               | \$ 252,000    | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Site Administrative Manager (SAM)</b>  |   |  |               |             |               |               |   |
| Hire Site Administrative manager for each turnaround school                         | Provide SAM support for each turnaround school to increase instructional coaching time for principals           | \$100K estimated salary (80%) and benefits (20%) to support 1 Site Administrative Manager (SAM) for each turnaround school   |               | X           |               | \$ 9,543,366  | 12./14. Supplemental and Subgranted funds to LEAs |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity   | Purpose   | Cost Detail  | State portion | LEA portion | Involved LEAs | Total        | Category  |
|--|---|--|---------------|-------------|---------------|--------------|---|
| <b>Planning Grants</b>   |   |  |               |             |               |              |   |
| Planning grants awarded to each approved turnaround school                   | Provide funding to support development of turnaround plan for each turnaround site  | \$75k awarded to fund planning for each approved site (35 Schools)   |               | X           |               | \$ 2,362,500 | 12./14. Supplemental and Subgranted funds to LEAs |
| <b>Office of Turnaround Schools (OTAS)</b>                                   |   |  |               |             |               |              |   |
| OTAS Director and staff costs  | To provide increased support and oversight at the state-level in the school turnaround process  | \$133K estimated Director salary and benefits , \$100K estimated for each staff salary and benefits (to support 9 staff members) | X             |             |               | \$ 3,317,482 | ~80% 1. Personnel, ~20% 2. Fringe Benefits        |
| LEA Turnaround officer stipend   | To provide increased salary and benefits for officers of the state-level turnaround office  | \$20k stipend each year for each LEA-based turnaround officer for duration of turnaround process                                 | X             |             |               | \$ 1,890,000 | 1. Personnel                                      |
| OTAS advisory board  | To create an advisory board to support the OTAS   | \$5k estimated costs of board member stipends  | X             |             |               | \$ 20,000    | 1. Personnel                                      |
| Office space for OTAS  | Estimated rental costs for moving OTAS into space external to MDE   | Office space for 4 years of OTAS operation (\$4500/month)  | X             |             |               | \$ 189,000   | 8. Other  |
| Purchase computers for OTAS staff  | To provide equipment, including computers to OTAS   | \$2k estimate per computer (for 10 computers)  | X             |             |               | \$ 17,750    | 5. Supplies                                       |
| <b>Advanced Rigor course grants for turnaround schools</b>                   |   |  |               |             |               |              |   |
| Advanced rigor courses and other supports for students in turnaround schools | Increase enrollment in advanced -rigor courses and programs to increase matriculation to post-secondary programs for students in turnaround schools | \$125 per student for cost of OTAS-approved student support programs   |               | X           |               | \$ 1,195,850 | 12./14. Supplemental and Subgranted funds to LEAs |

MINNESOTA RACE TO THE TOP BUDGET OVERVIEW



| Activity  | Purpose  | Cost Detail   | State portion | LEA portion | Involved LEAs | Total         | Category                                   |
|---|--|---|---------------|-------------|---------------|---------------|--|
| <b>OVERSIGHT, COLLABORATION, AND REFORM ACCELERATION</b>                  |  |   |               |             |               |               |  |
| <b>Oversight</b>  |  |   |               |             |               |               |  |
| Create 6-person RTTT administration team                                  | Ensure consistent and timely communication, fund distribution, implementation, and reporting of RTTT programs      | 1 Director at \$133,500 annually; 4 support staff at \$100,988 annually, and 1 support staff at \$58,200 annually (all numbers include fringe benefits) | X             |             |               | \$ 2,382,608  | 1. Personnel                               |
| Support travel, substitute pay, etc. for RTTT oversight committee members | Ensure consistent, involved oversight committee to provide input on implementation and evaluation of RTTT programs | Monthly committee meetings @ \$1500 each for the life of the grant  | X             |             |               | \$ 72,000     | 1. Personnel                               |
| <b>Evaluation</b>   |  |   |               |             |               |               |  |
| Contract external evaluation of RTTT programs                             | Ensure fidelity of implementation and determine which programs have successfully impacted the achievement gap      | \$10M set-aside for the life of the grant, to be used annually or semi-annually by the state to hire evaluators to evaluate grant                       | X             |             |               | \$ 10,000,000 | 6. Contractual                             |
| <b>Annual RTTT Conference</b>   |  |   |               |             |               |               |  |
| Travel allowance to conference  | Share best practices and challenges for RTTT implementation in Minnesota   | \$800 max travel reimbursement per conference per LEA   | X             |             |               | \$ 3,200,000  | 3. Travel                                  |
| Conference Meals  |  | \$100 estimated food cost per attendee per conference (4 per LEA)   | X             |             |               | \$ 400,000    | 3. Travel                                  |
| Conference Materials  |  | \$50 estimated materials cost per attendee per conference (4 per LEA)   | X             |             |               | \$ 200,000    | 5. Supplies                                |
| Conference speaker/fees   |  | \$25,000 total cost for faculty/speakers per conference (fees, lodging, etc.)   | X             |             |               | \$ 100,000    | 6. Contractual                             |
| Conference facility   |  | \$25,000 rental cost for 2-day conference each year   | X             |             |               | \$ 100,000    | 6. Contractual                             |
| <b>Charter School Director Training</b>                                   |  |   |               |             |               |               |  |
| Education mentors   | Mentors for new Charter School Directors, 20 @ \$1,000 each  | \$250,000 over 4 years to fund ongoing training and support of mentor relationships   | X             |             |               | \$ 60,000     | 6. Contractual                             |
| Participant travel for Chicago trip                                       | Chicago meeting to visit and review charter school program   | \$900 per participant for travel to Chicago   | X             |             |               | \$ 54,000     | 3. Travel                                  |
| Staff supervision   | Additional staff supervision for expanded program  | 1 FTE at \$60,000 salary plus benefits  | X             |             |               | \$ 240,000    | ~80% 1. Personnel, ~20% 2. Fringe Benefits |
| Travel costs to drive to participants                                     | Driving Costs  | \$3,000 in driving expense to meet with participants per year   | X             |             |               | \$ 9,000      | 3. Travel                                  |
| <b>Single Charter Authorizer for expansion of high-quality charters</b>   |  |   |               |             |               |               |  |
| Fund start-up of single charter authorizer                                | Authorizer with singular focus on replicating proven national and local charter models                             | \$800,000 over 4 years for start-up funding   | X             |             |               | \$ 800,000    | 8. Other                                   |

**Budget: Indirect Cost Information**

To request reimbursement for indirect costs, please answer the following questions:

Does the State have an Indirect Cost Rate Agreement approved by the Federal government?

YES    
NO

If yes to question 1, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement (mm/dd/yyyy):  
From: 07 / 01 / 2009 To: 06 / 30 / 2010

Approving Federal agency:  ED  Other  
(Please specify agency): \_\_\_\_\_

Directions for this form:

1. Indicate whether or not the State has an Indirect Cost Rate Agreement that was approved by the Federal government.

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2. If "No" is checked, ED generally will authorize grantees to use a temporary rate of 10 percent of budgeted salaries and wages subject to the following limitations:
  - (a) The grantee must submit an indirect cost proposal to its cognizant agency within 90 days after ED issues a grant award notification; and
  - (b) If after the 90-day period, the grantee has not submitted an indirect cost proposal to its cognizant agency, the grantee may not charge its grant for indirect costs until it has negotiated an indirect cost rate agreement with its cognizant agency.
3. If "Yes" is checked, indicate the beginning and ending dates covered by the Indirect Cost Rate Agreement. In addition, indicate whether ED, another Federal agency (Other) issued the approved agreement. If "Other" was checked, specify the name of the agency that issued the approved agreement.