Utah Race to the Top Appendix

APPENDIX 1

53A-17a-163. Performance-based Compensation Pilot Program.

(1) The Performance-based Compensation Pilot Program is created to pilot the development and implementation of performance-based compensation plans for elementary school classroom-related staff.

(2) From monies appropriated by the Legislature for the Performance-based Compensation Pilot Program, the State Board of Education shall award grants to school districts and charter schools to develop and implement performance-based compensation plans for elementary school classroom-related staff.

(3) The State Board of Education shall:

(a) solicit proposals from school districts and charter schools for the use of grant monies to develop and implement performance-based compensation plans for elementary school classroom-related staff; and

(b) award grants on a competitive basis.

(4) To receive a grant, a school district or charter school shall submit a proposal to the State Board of Education to develop and implement a performance-based compensation plan over a two-year period as follows:

(a) In the first year, the school district or charter school shall develop, administer, and evaluate performance measures.

(b) In the second year, the school district or charter school shall administer performance measures and compensate classroom-related staff based on performance.

(c) A performance-based compensation plan shall provide that:

(i) student learning gains shall account for 40% of the maximum amount of performance-based compensation that may be awarded to an employee;

(ii) an employee's instructional quality or performance as measured by classroom observations or other instruments shall account for 40% of the maximum amount of performance-based compensation that may be awarded to an employee; and

(iii) the remaining 20% of the maximum amount that may be awarded to an employee shall include a measure of parent, student, or community satisfaction.

(d) A proposal shall include a budget and specify the amount of grant monies requested.

(e) A school district's proposal may apply to one or more elementary schools within the district.

APPENDIX 2

53A-10-106. Components of educator evaluation program.

An educator evaluation program adopted by a local school board in consultation with a committee shall include the following components:

(1) a reliable and valid evaluation program consistent with generally accepted professional standards for personnel evaluation systems;

(2) systematic evaluation procedures for both provisional and career educators;

(3) the use of multiple lines of evidence, such as:

(a) self-evaluation;

(b) student and parent input;

(c) peer observation;

(d) supervisor observations;

(e) evidence of professional growth;

(f) student achievement data; and

(g) other indicators of instructional improvement;

(4) a reasonable number of observation periods for an evaluation to insure adequate reliability; and

(5) administration of an educator's evaluation by:

(a) the principal;

(b) the principal's designee;

(c) the educator's immediate supervisor; or

(d) another person specified in the evaluation program.

Utah's Comprehensive Reform Plan

June 1, 2010

Prepared as a part of Utah's Race to the Top application and as an extension to the Utah State Board of Education's adopted goals and activities.

Table of Contents

Utah's Promises to Keep

Overview

Utah's comprehensive Reform Plan is based on the goals adopted by the Utah State Board of Education as a part of its **Promises to Keep** effort. **Promises to Keep** is a statement of vision and mission for Utah's system of public education. The statement relies on the language of the Utah Constitution for its central premise. It is intended to provide focus to the work of the State Board of Education, the Utah State Office of Education, and all school districts, local boards of education, and charter schools within the general control and supervision of the Board.

Utah's public education system is created in the state Constitution to "secure and perpetuate" freedom. Freedom, as envisioned in the Utah Constitution, is a promise to future generations that requires:

- Citizen participation in civic and political affairs.
- Economic prosperity for the community.
- Strong moral and social values.
- Loyalty and commitment to constitutional government.

The premise of **Promises to Keep** is that there are essential, core "promises" that leaders in the public education system should be clear about with citizens of Utah; that these "promises" are made as part of the civic compact at work as the citizens of Utah give into our hands resources for the public education system; and, that citizens should have high expectations regarding our success in the essential "promised" work of public education.

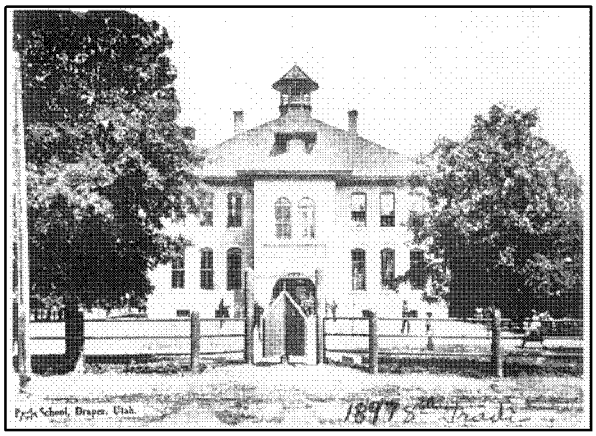
Utah's public education system keeps its constitutional promise through these goals:

1. Ensuring **literacy and numeracy** for all Utah children.
2. Providing **high quality instruction** for all Utah children.
3. Establishing curriculum with **high standards and relevance** for all Utah children.
4. Requiring effective assessment to inform high quality instruction and **accountability**.

"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."

-Robert Frost

Utah's Comprehensive Reform Plan



Utah has a long-standing commitment to education that began before it was granted statehood in 1896. Three months after pioneer settlers arrived in 1847, the first school was organized. By 1851, the Office of Territorial Schools had been established and given the responsibility of identifying a standard curriculum. As the state's population has grown and changed, Utah has systematically addressed the varied needs of its students, often implementing innovations decades in advance of other states. For example, Utah was the first state to equalize education funding by establishing, in 1946, a state-wide funding formula. This formula ensured financial equity between our urban and more isolated frontier schools and has helped prevent the funding imbalances experienced by many large cities as more affluent families began migrating to the suburbs.

Throughout Utah's history, our commitment to education has remained strong. Demographically, we have the highest percentage of students in public schools in the nation, and the highest class size. While the burden on our taxpayers is high due to the high amount of non-taxable federal land, our voters have historically defeated tax limitation proposals and have consistently rated education as the state's most important priority. Utah's public schools boast many successes. In the last census, 90.7% of Utahns age 25 or older had completed high school and 26.9% had earned a bachelor's degree or higher. We are a leader in teaching world languages. We increased graduation requirements in 2006, requiring more language arts, science, and mathematics. We have one of the highest rates of students who take and pass the Advanced Placement (AP) exams. In 1995, Utah began a concurrent enrollment program. In the past year, almost half of the state's juniors and seniors participated, earning college credit while completing high school graduation requirements.

Today, our most pressing challenge is meeting the needs of a burgeoning school-age population that is increasingly diverse with the resources that are available. Utah continues to address students' needs through innovation and efficiency. Utah targets its limited resources on its greatest identified needs. As a result, 82% of Utah's Local Education Agencies (LEAs) offer state-supported, full-time kindergarten

programs; 37 LEAs have implemented 55 Family Literacy Centers, which serve 6,494 families. These centers provide parent literacy training to help parents instruct their children and support interactive parent-child literacy activities. Utah's four-year old Student Tutoring Achievement in Reading (STAR) program provides training for reading coaches, reading professionals, and volunteers who intervene with struggling readers. LEAs are expanding Science Technology Engineering and Math **(STEM)** offerings through a program called Utah Science Technology and Research (USTAR).

Our State Constitution assigns the responsibility for general control and supervision of education to an elected State Board of Education (State Board). For the last 40 years, the State Board has engaged in strategic planning. Our current strategic plan is based on data indicating a need to focus attention, resources, and accountability on individual student and teacher performance to ensure all students graduate college or career ready. The State Board has conducted a series of meetings and roundtables to bring K-16 educators, parents, and business and government leaders to consensus on this strategic reform plan. In June of 2009, the State Board adopted four promises, which define Utah's current strategic efforts:

First Promise: To ensure that every Utah student gains the literacy and numeracy skills they need for success.

In today's world, literacy goes beyond being able to read a sentence. It includes writing, speaking, and listening skills. Every 21st century career requires twelfth grade or higher reading skills. We believe that there is no other success in our schools that can compensate for failure to teach every child to read. Our students also require strong quantitative skills. They need appropriate course work in mathematics and career pathway information that will help them make their desired future happen. Students who make non-**STEM** career choices will need to understand and use math at least at the Algebra 2 level. Our K-12 system must include content articulation, which will lead to a seamless transition to work and college.

Second Promise: To ensure that all Utah children receive high quality instruction in every classroom every day.

We believe that the most powerful school factor leading to successful student learning is high quality instruction. Whenever we talk about greater student success, we focus on improving the quality of instruction. Utah is committed to developing and implementing new evaluation and measurement systems for teachers and principals that use student growth, measures of instructional quality, and stakeholder satisfaction to fairly assess teacher and principal effectiveness. High-quality instruction is the most

important factor to improve student success, but it is also the least well measured part of our public education system. Developing and implementing tools to measure and improve high quality instruction is a centerpiece of our reform plan.

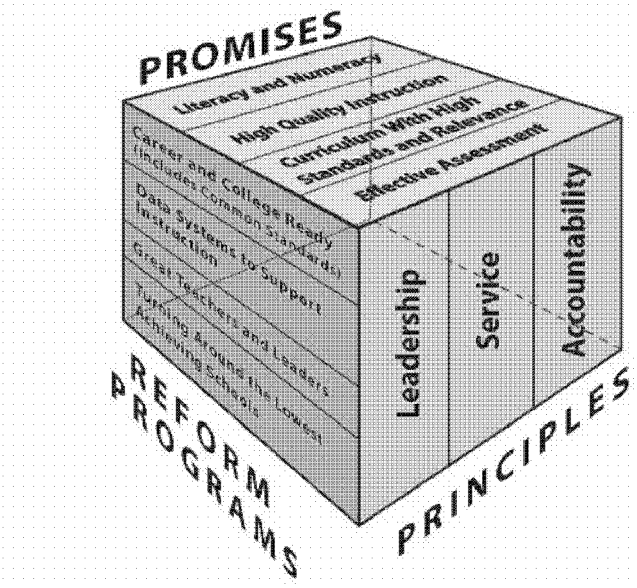
Third Promise: To make certain that all students are engaged in curriculum that embodies high standards and relevance to the world students will encounter after high school.

We want students to be ready for college or careers, prepared to succeed at whatever they choose. Whether a student pursues a degree in electrical engineering or becomes an electrician, we must be sure that our curriculum is relevant with appropriate standards of excellence.

Fourth Promise: To ensure that high quality, effective assessments inform both instruction and accountability.

In recent years we've concentrated so much on testing for accountability that we seem to have lost sight of the goal of helping teachers provide the most effective instruction for every child. We all want to know if our schools are making proficiency targets, but we can't forget about testing that effectively informs teachers, parents and students about growth, areas that need improvement, and gives frequent formative information that can lead to urgently needed course corrections and remediation.

After the announcement of the Race to the Top Initiative, the State Board held a series of meetings to determine how the four Race to the Top (RTTT) reforms aligned with their four promises. From these meetings, the State Board determined that the promises were, in fact, very closely aligned to the reform areas in RTTT. Each reform program and each promise is designed to help all students become college and career ready. Our model for translating Utah's promises and the RTTT reforms into actual outcomes is through leadership, service, and accountability across the state, each LEA, and each school. The model at left illustrates this



concept.

The 560,000 children who attend our schools, their parents and all Utah citizens are our clients. They have hired us to help ensure that students are prepared to be successful in life. Students must graduate from our high schools ready for life and ready for the advanced schooling and careers that will make that life a happy and productive one. The poet Robert Frost, in his poem "Stopping by Woods on a Snowy Evening" writes, "The woods are lovely, dark, and deep/But I have ***promises to keep***." We have promised the citizens of Utah that their children will be ready for the future. Our reform plan is part of that obligation—it is a guide to keeping our promises. Our extraordinary history of commitment to education and our innovative responses to new challenges clearly position us to successfully race to the top. Utah's educational community, led by the State Board has demonstrated the knowledge, experience, and commitment to established frameworks to implement our RTTT goals. We only lack the financial support of RTTT funds to implement reforms within the RTTT timeline. With the needed financial resources, there is no question that Utah will meet its reform goals. Utah has been identified as the state with the "Best Return on Investment in Education" (U.S. Chamber of Commerce), "Best Managed State in the Nation" (Pew Center), and "#1 in Technology Concentration and Dynamism" (Milken Institute).

Utah: A Leader in Implementing Successful Initiatives in the Four Reform Areas

Historically, Utah has engaged in many effective innovations, beginning with the development of state core standards in the 1850s. Utah's LEAs have been part of the core curriculum development process and have a long history of success with well-defined sets of standards and aligned assessments. Utah has core curriculum standards and master plans for achievement in the following core areas: language arts, mathematics, science, social studies, fine arts, health/physical education, educational technology, library media, and each Career and Technical Education (CTE) career area. Utah has had an aligned criterion-referenced testing program since the early 1980's.

The Utah State Office of Education (USOE) builds capacity through leadership, service and accountability. USOE holds monthly meetings that focus on curriculum and instruction with all of the LEAs in the state and is successfully implementing a number of projects designed to improve student achievement and reduce achievement gaps. USOE provides assistance to LEAs in the form of professional development, curriculum tools, and leadership consultation. USOE tracks and provides data in the areas of literacy, numeracy, graduation rates, teacher quality, and college success. The following examples of USOE initiatives demonstrate the current status of projects implemented in the four reform areas of RTTT:

Reform Area One: Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace

- The K-3 Reading Initiative, which began in 2004, has successfully combined the use of professional development (PD) and school-based reading coaches who use a three-tiered reading approach and state developed STAR Program to prevent and remediate the reading difficulties of kindergarten through third grade students. This ongoing initiative is funded through a combination of legislative appropriations and local LEA tax revenue.
- Utah's *Three-Tiered Model of Instruction of Reading Instruction* has been in use for a decade. It is now used throughout the United States. The model helps teachers and principals better respond to the instructional needs of all students.
- To increase access to core learning, USOE has extended our core standards with documents that help teachers meet the needs of students with significant cognitive disorders.
- The Principals Literacy Institute that trains 30-50 elementary principals annually in high quality instructional strategies in reading.
- Family Literacy Centers are strategically located throughout the state to provide early intervention for English Language Learner (ELL) students and their parents. Software and other instructional strategies are used to jumpstart student language acquisition.
- Our Extended-day Kindergarten Program, which focuses on placing at-risk students in full-day kindergarten programs, has shown success in significantly improving reading and mathematics outcomes for participating students.
- Our CTE program has resulted in increased graduation rates and focused preparation for college and careers. Over 200,000 Skills Certification Exams are successfully completed annually. CTE standards are aligned with the needs of business, industry, and higher education. Programs, in engineering; biotechnology; information technology; and Pro-Start, a professional culinary arts program, have been successfully expanded.
- A parent and teen guide outlining high school to college in career pathways has been distributed to over 100,000 students. Students throughout the state have access to these programs through onsite and/or distance learning.
- Our concurrent enrollment program allows motivated students to graduate with associate degrees and receive higher education scholarships from all higher education institutions.
- **STEM Activities**

- Our 4-6 Mathematics Initiative has shown that a combination of intense professional development, coaching, and financial incentives for teachers leads to increases in grade 4-6 mathematics achievement.
- Utah's secondary USTAR program extends opportunities for students to be involved in **STEM** activities by extending the school year.
- Utah's Mathematics Engineering and Science Achievement (MESA) program, started in 1990, was developed to increase the number of underserved, ethnic minority and female students who pursue coursework, advanced study, and careers in **STEM**.
- Utah's Early College High School program focuses on encouraging students from underrepresented groups to pursue a science and engineering associate degrees and receive automatic admission to state colleges and universities.

Reform Area Two: Building Data Systems that Measure Student Growth and Success and Inform Teachers and Principals about How They Can Improve Instruction

- Our outstanding, ultra high-tech statewide longitudinal data system fulfills, in part or completely, all of the seven capabilities and twelve elements that the 2009 ARRA statewide longitudinal data system (SLDS) request for application prescribes. The objectives and outcomes of this Utah Data Alliance (UDA) project can be summarized as the fulfillment of the entire set of SLDS requirements. Some of these requirements, as based on the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES), must be completed while others need improvements-- most notably in the availability of data for decision-making.
- While Utah has collected longitudinal data on reading and math since the early 1980's, with Utah's new Utah Data Alliance (UDS) projects, to be funded through the recently announced 2009 ARRA SLDS Grant award, Utah will be able to fully track and analyze student performance and growth from elementary through higher education or technical training.
- Utah has exchanged concurrent enrollment data between K-12 and postsecondary since 2007.
- The Utah Mentor Teacher Academy has given special education teachers and coaches access to a data system to track ongoing student progress.
- USOE's Utah Test Item Pool System (UTIPS) program provides teachers access to thousands of peer reviewed items aligned with Utah's core curriculum, which may be used for formative math and reading assessments.

- USOE holds an annual Principal Data Institute that provides intensive professional development in data use, data collection, and data interpretation for K-12 data teams. The Data Institute trains principal-led school teams to establish a culture that uses data to inform instruction.

Reform Area Three: Recruiting, Developing, and Retaining Effective Teachers and Principals, Especially Where They Are Needed Most

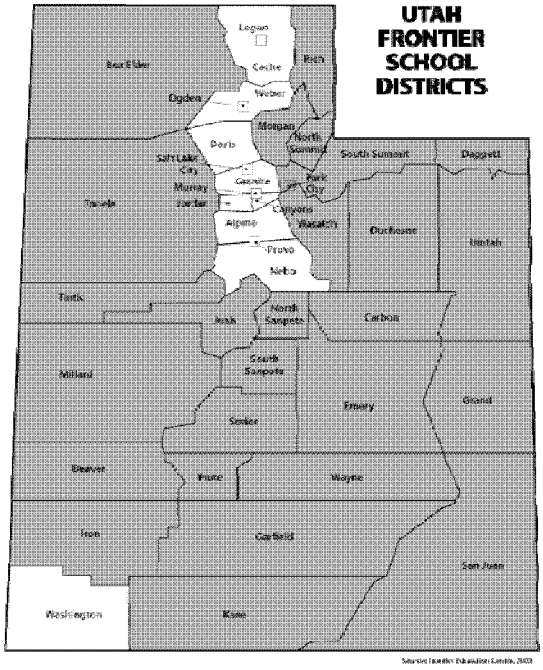
- Utah is a principal member of the Multi-State Consortium for Revisioning the Professional Educator Continuum. The consortium is working to redefine what today's teachers need to ensure they are prepared, supported, and assessed throughout the span of their career.
- Through signing bonuses and tuition scholarships, our Public Education Job Enhancement Program (PEJEP) has been very successful in recruiting and retaining teachers in hard to fill content areas and assignments.
- Utah's Alternate Route to Licensure (ARL) system gives non-traditional teacher candidates multiple ways to become teachers. Our retention rate for ARL candidates is higher than the national average, and ARL is supported in state law and by USOE sponsored courses and ongoing monitoring.
- Utah's Early Years Enhancement (EYE) Support Program focuses on helping pre-service elementary teachers be successful.

Utah's Differentiated Compensation Pilot currently involves five LEAs including two charter schools that are experimenting with performance pay plans led by faculties.

Reform Area Four: Turning around Lowest Achieving Schools

- Utah believes that an essential element of our Race to the Top is a Race to Prevent Failure. With our Title I, Part A funding, USOE, collaborating with WestEd (a research, development, and service agency) has developed a System of Support (SOS) for struggling schools. The system requires schools to identify school leadership teams, use the SOS instructional appraisal process to identify strengths and challenges, and use this information to revise the school's improvement plan. Because our proficiency targets increase overtime, all schools, regardless of their AYP (adequate yearly progress) status are encouraged to use SOS. The USOE School Improvement Team monitors progress of struggling schools through data analysis and appraisal rubrics. Because of SOS, of the twenty nine "alert" schools for 2008-2009, only two moved into improvement status for 2009-2010. The fifteen schools in improvement status in 2008-2009 also improved. Fourteen achieved AYP, five exited improvement status altogether, and nine will exit if they make AYP next year.

- For almost a decade, Utah has required school improvement plans from every school in the state. These plans are based on local school data to be developed and implemented by school community councils comprised of educators, parents and community members.
- All LEA's must engage in an annual relook at their own comprehensive reform plan through our technology-driven Utah Consolidated Plan (UCA) process.



- In 2002, when the Elementary and Secondary Education Act (ESEA) was reauthorized as the No Child Left Behind (NCLB) Act, began Utah identified schools that needed improvement, but most Utah schools were not starting at the extremely low performance levels of high poverty inner city schools in other parts of the country. With State Education Agency (SEA) leadership, SOS and local LEA effort, only one Utah school, West Middle School in Uintah School District; has gone through a restructuring process. West Middle School is a school located in Uintah County, designated as a "frontier" county by the U.S. Department of Agriculture and the U.S Department of Health. Frontier counties are isolated from major service markets and have very low population density. Educators who work in frontier counties often must travel over 90 minutes from the school to receive health care, to shop, or find a home. Many of the challenges associated with rural schools are exacerbated in frontier counties by the isolated nature of their locations. Utah has other frontier schools that require educators to live in LEA supplied housing and travel over four hours for basic services. The isolated nature of frontier schools makes the four federal turn around models extremely difficult to use.

  West Middle School had not achieved AYP for several years. Under the expert direction of the USOE Support Team, the LEA leadership considered closing the school and sending the students to a school in another small town over 30 miles away. The Uintah School Board held a public hearing that was well attended by the Ute Tribal Council and parents of the students attending the school. During the course of the meeting, the parents and the Tribal Council committed to increasing the level of intervention in the case of truant students if a school could remain in their

community. The School Board decided to use a turnaround model. The Board tore down the older, existing middle school and built a new K-8 school. The District hired one of the most dynamic principals in the district to open the new school with a hand-picked staff. An adjacent elementary school was closed. The newly constituted school, Eagle View Elementary School, opened using a K-8 elementary model, which kept students primarily with one teacher for the school year. There is a new curriculum focus on literacy, a strong data driven delivery system, and much greater school to community collaboration. The school made AYP its first year of operation.

- The State Board has the constitutional authority to intervene directly in failing schools and LEA's.

As noted above, Utah has a long history of success. With stakeholder support and the work of LEAs, Utah will use RTTT program to increase capacity and pursue dramatic and sustainable change. Our job is to help students be successful. With RTTT funds Utah will have a measurement system in place that ensures all students receive high quality instruction from outstanding teachers and leaders. Starting this fall teachers and leaders will begin receiving professional development so students will be taught reading and mathematics using new world class common core standards. Our data system and assessment systems will be upgraded and used to inform student instruction on a real time basis. Our teacher leaders will be engaged in a new system of continuous support that includes a fair evaluation system. We will use our expertise and our new funds to help our students pursue college and career goals and achieve a successful future.

Ambitious and measurable student outcome goals

During the past decade Utah has made steady progress in increasing student proficiency in Mathematics and Reading/Language Arts. Overall we currently advance one to two percentage points every four years. Our Hispanic/Latino population is closing the achievement gap by increasing their performance at four percentage points per four year period. Our educational performance is still too low, and gaps still separate White students and students of color. We have made a promise to our students that they will leave our public schools prepared for the future. They won't be prepared if they don't read, write and compute proficiently.

We have developed reasonable but ambitious goals. We have studied and compared our criterion referenced tests (CRTS) and our National Assessment of Educational Progress (NAEP) scores. Table 1 below shows this comparison.

NAEP Comparison with Utah CRTs: 2007 Reading Scores and 2009 Mathematics Scores

Grade/Content	NAEP			Utah CRTs
	Basic	Proficient & Advanced	Total of Basic, Proficient & Advanced	
Grade 4 Reading	35	34	69	78
Grade 8 Reading	45	30	75	81
Grade 4 Math	43	40	83	75
Grade 8 Math	39	36	75	75

The NAEP and CRT scores range from identical to variations of up to nine percentage points. While this difference in scores is better than in some other states, it means separate NAEP and CRT goals must be made. We anticipate that the new common core standards combined with our work with the Summative Multi-State Resources for Teachers and Education Research Balanced Consortium (SMARTER Balanced Consortium) will result in reduced discrepancies between the NAEP and the new assessment system. Until the new assessment system is in place, we will proceed with the goals described below. When the new assessments are implemented we will adjust the CRT goals.

Using ***Utah's Comprehensive Reform Plan*** and our RTTT funds, Utah will achieve the following goals:

Student Outcome Goals- Reading/Language Arts

Goal 1: Utah will increase its overall student performance in reading/language arts as measured by CRTS from 80.9% to 90% proficiency by the end of the 2014-2015 school year.

Currently Utah's overall student population improves at a rate of 1.5 to 2.0 percentage points every four years. This is not an acceptable rate of improvement. We propose an improvement rate of 2.5 percentage points annually which will bring us to the 90% goal by spring of 2015.

Goal 2: Utah will increase its overall student performance in reading/language arts as measured by NAEP from 69% basic or above to 80 % in fourth grade and from 75% basic or above to 85% in eighth grade by the end of the 2014-2015 school year.

Goal 3: Utah will cut the achievement gap in half for students of color in Reading/Language Arts as measured by the CRTS by the end of the 2014-2015 school year.

Currently, Utah's Hispanic/Latino/ and American Indian populations improve at a rate of three to four percentage points every four years. While this rate of advancement is better than the overall population, an unacceptable twenty five percent gap exists between these groups and the White population. We intend to improve at a rate which is four times faster than the current rate.

Student Outcome Goals- Mathematics

Goal 1: Utah will increase its overall student performance in mathematics as measured by CRTS from 68.2% to 80% proficiency by the end of the 2014-2015 school year.

Currently Utah's overall student population improves in mathematics at a rate of two percentage points every four years. This is not an acceptable rate of improvement. We propose an improvement rate of two to three percentage points annually which will bring us to the 80% goal by spring of 2015.

Goal 2: Utah will increase its overall student performance in mathematics as measured by NAEP from 83% basic or above to 90 % in fourth grade and from 75% basic or above to 85% in eighth grade by the end of the 2014-2015 school year.

Goal 3: Utah will decrease the achievement gap by 50% for students of color in Mathematics as measured by the CRTS by the end of the 2014-2015 school year.

Currently, Utah's Hispanic/Latino population is improving in mathematics at a rate of 2 percentage points every four years. Our American Indian population has not improved, but remains steady at 42.7% proficient. An enormous 30 percentage gap exists between these groups and the White population. The gap is not acceptable. We propose an improvement rate which is four to five times faster. This will result in a narrowing of the gap by 50%.

Student Outcome Goals: Graduation and Increasing College Enrollment

Goal 1: Utah will increase its overall graduation rate to 92% and will reduce the gap for students of color by 50%.

Goal 2: Utah will increase college enrollment in an institution of higher education to 55%. According to our Higher Education counterparts, 17,278, or 50%, of our 34,292 high school graduates (2009) enrolled in one of Utah's public colleges or universities in fall of 2009. This number does not reflect the number of Utah students attending private institutions in the state. We will work with our IHEs to increase the percentage to 55%.

Reform that Keeps Utah's Promises

Utah's Comprehensive Reform Plan is the culmination of a long effort. It is built on the knowledge and work of educators who saw the need for common standards as far back as 1851 and the current strategies and research-based practices of the past ten years. The goals and projects associated with this application have been aligned to the State Board's promises to our students, the four American Recovery and Reinvestment Act (ARRA) reform areas, our School Improvement Grant (SIG) and our Statewide Longitudinal Data Grant (SLDS). They were derived from a complete review of our state data, an evaluation of our current conditions and efforts, the input from education roundtables held throughout the state, feedback from our education stakeholders and cross-specialty groups at the USOE level. Special attention has been given to Reform Area Three: Great Teachers and Leaders. Utah believes that high-quality instruction is the **most** important factor to improving student success. It is also the least well measured part of our public education system. Developing and implementing tools to measure and improve the quality of instruction is a centerpiece of our plan. Our reform agenda includes:

Reform Area One Goal: Implement Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers. By August 2010, Utah will adopt and begin implementation of K-12 standards in mathematics and literacy created in conjunction with the Council of Chief State School Officers and NGA consortium. To complement and enhance the effective implementation of the new standards, Utah will develop and implement high quality professional development and prepare instructional materials that will increase the capacity of leaders and teachers to teach using best practices. By July 2012, Utah will align engaging and relevant mathematics and English courses between all high schools and Utah public and private institutions of higher education to increase student success in the

first year of post-secondary instruction and will develop a system to monitor student enrollment in courses preparing students for post-secondary education that will provide feedback to students, parents, and schools. By the start of the 2011-12 school year, Utah, working with the SMARTER Balanced Consortium, will begin the piloting of high quality assessments that are aligned with the standards to determine student academic achievement. Implementing new standards with proven practices will result in more students who read and compute at the higher levels needed to be successful in life. The timely new assessment data we receive will be used to inform instruction and allow for faster intervention for both struggling and gifted students.

Reform Area Two Goal: Refine Utah's Data Systems to ensure that student growth and proficiency in literacy and numeracy is measured, data can be used to in a timely manner to inform teachers and principals about instruction, and the system includes data that measures instructional quality in the classroom for formative and summative educator evaluations. By **December 2014,** Utah will fully implement a statewide, high-quality longitudinal data system to measure the academic achievement of students and link their achievement to educator readiness and preparation. Every parent, teacher, leader, and policymaker in the state will have information that will lead to quick corrections and interventions for students. In addition, all participating LEAs will adopt and implement local instructional improvement systems to support the effective use of student data to inform instruction. Through the use of local data management tools and a common state data dashboard all schools, LEAs and the State will be able to track progress of common goals for students. To increase capacity, by December 2014, all LEA data teams, including at minimum superintendents, curriculum directors, and assessment directors, will participate in professional development using the statewide data and create a plan for ongoing LEA training. Using critical data more efficiently will help us target individual groups of students in a faster, more coordinated, manner. The outcome will be more students that are prepared and ready for college and careers.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops, and retains effective teachers and leaders and evaluates their

performance in terms of measures of instructional quality, student growth, and stakeholder input. Students learn from great teachers and leaders. If our aim is to improve student learning, we must raise the quality of instruction. By December 2014, the State Office of Education, working with our higher education partners, will implement a new statewide continuum of support for developing practicing teachers and principals. Also by December 2014, all of Utah's K-12 teachers will participate in LEA evaluation systems that require the use of high-quality instructional strategies evidenced by appropriate and approved measures of quality instruction (including observations of teaching, student growth data, and stakeholder evaluation). This new evaluation system will allow all LEAs to have in place a means by which effective and highly effective teachers and principals are identified by the schools and LEAs in which they work. The new system will be used to support and strengthen good teachers and make great teachers even better. The system will enable all participating LEAs to have a reliable and valid means by which ineffective teachers and principals are identified by the schools and LEAs in which they work and are remediated or terminated. The outcome will be more students prepared and ready for college and careers.

Reform Area Four Goal: Ensure that all Utah children are proficient in reading and math, receive quality instruction every day, and participate in relevant and engaging coursework by turning around our lowest-achieving schools.

Utah believes that prevention is the key to ending poor performance by schools. Utah encourages improvement efforts that use collaboration and build positive school and community climate. We will continue to use our SOS and will expand the process to all state schools that need improvement. In addition, by fall of 2010, all Title I schools identified as persistently low achieving, that have not responded to SOS efforts to improve student achievement, will immediately begin one of the four school intervention models. Also by fall 2010, Utah will have a system in place to identify secondary non-Title I schools that are at risk of becoming persistently lowest achieving and begin school improvement intervention. The outcome from these activities will be more students prepared and ready for college and careers.

Utah's Comprehensive Reform Plan Goals and Projects

The attached table outlines Utah's comprehensive reform plan. The key activities/projects are described for each of the four reform areas. State goals, student outcomes and supporting rationales are aligned with the key activities/projects.

Reform Area One: Adopting standards and assessments that prepare students to succeed in college and the workplace to compete in the global economy.

Federal Requirements:
1. **Developing and adopting common standards.**
2. **Developing and implementing common, high quality assessments.**
3. **Supporting the transition to enhanced standards and high quality assessments.**

Reform Area One Goal: Implement Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers. By August 2010, Utah will adopt and begin implementation of K-12 standards in mathematics and literacy created in conjunction with the Council of Chief State School Officers and NGA consortium. To complement and enhance the effective implementation of the new standards, Utah will develop and implement high quality professional development and prepare instructional materials that will increase the capacity of leaders and teachers to teach using best practices. By July 2012, Utah will align engaging and relevant mathematics and English courses between all high schools and Utah public and private institutions of higher education to increase student success in the first year of post-secondary instruction and will develop a system to monitor student enrollment in courses preparing students for post-secondary education that will provide feedback to students, parents, and schools. By the start of the 2011-12 school year, Utah, working with the SMARTER Balanced Consortium, will begin the piloting of high quality assessments that are aligned with the standards to determine student academic achievement. Implementing new standards with proven practices will result in more students who read and compute at the higher levels needed to be successful in life. The timely new assessment data we receive will be used to inform instruction and allow for faster intervention for both struggling and gifted students.

Total RTTT Budget: $26,691,508

Project One: Adoption and Implementation of the New Common Core Standards in Reading/Language Arts and in Mathematics

Manager: Dr. Sydnee Dickson **Total Budget: $6,278,557**

Rationale: Utah has successfully used rigorous core standards for over a century. The adoption of nationally recognized, relevant common core standards will provide a more stable set of expectations for teachers, students, parents, higher education, and other interested stakeholders. This will result in greater consistency in teacher lesson preparation, concept instruction, and improvement in student outcomes.

Activities	2010-2011 SEA/LEA Activities	2011-12 SEA/LEA Activities	2012-13 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Prepare and deliver Professional development (PD) to support	SEA 1. Design Professional	SEA 1. Follow-up PD. 2. On-site	SEA Targeted PD to LEAs with	

implementation of the new Reading/Language Arts Common Core State Standards. Focus on: a. integration of academic core standards used across the curriculum; b. the successful implementation of Utah's Three-Tiered model of reading instruction; c. use of best practices in reading/ language arts and d. the use of promising practices related to instruction for underachieving populations.	Development. 2. Provide professional development for administrators, and teacher representatives. PD for administrators and teacher representatives from all LEAs through a trainer-of-trainers model. **LEA** LEAs provide training with local stakeholders.	technical support as needed for frontier/small LEAs. **LEA** LEAs provide training with local stakeholders	identified needs. **LEA** LEAs provide targeted PD to schools with identified needs.	
2. Design and deliver professional development to support implementation of the new Mathematics core standards. Focus on: a. integration of academic core standards used across the curriculum; b. the successful implementation of Utah's Three-Tiered model of mathematics instruction; c. use of best practices in mathematics and d. the use of promising practices related to instruction for underachieving populations.		**SEA** 1. Design Professional Development. 2. Provide professional development for administrators, and teacher representatives. PD for administrators and teacher representatives from all LEAs through a trainer-of-trainers model. **LEA** LEAs provide training with local stakeholders.	**SEA** 1Continued PD. 2. On-site PD support as needed for rural/small LEAs. **LEA** LEAs provide training with local stakeholders	**SEA** Targeted PD to LEAs with identified needs. **LEA** LEAs provide targeted PD to schools with identified needs.
Project Two: Using the Common Core Standards to Ensure Literacy for all Utah Children **Manager: Dr. Reed Spencer Total Budget: $3,298,164** **Rationale:** The adoption of new common core standards gives Utah the opportunity to address all aspects of effective delivery of reading instruction. Using lessons learned from our successful K-3				

Literacy Initiative, professional development coaching, and use of Utah's "***Three-Tiered Model of Reading Instruction***" will help us implement the new Core. Expanding our literacy initiative, while implementing the new Core, will help us increase our capacity to deliver high quality reading instruction that will increase student achievement in reading/language arts, our high school graduation rate, and college enrollment.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-12 SEA/LEA Activities**	**2012-13 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Begin development of web-based lesson plans for reading/language arts areas that ensure alignment across schools/classrooms regardless of variations in materials and that capture the experience and talents of master teachers and the use of best practices.	**SEA** Creation of a repository site for supporting instructional materials (e.g., lesson plans, instructional materials, "best practices" video clips). **LEA** On-going sharing of repository concept with LEA stakeholders.	**SEA** On-going creation of Common Core ancillary materials for the repository. **LEA** On-going contribution to repository.	**SEA** Continued development and posting to Common Core repository. **LEA** 1. Ongoing contribution to repository. 2. Begin using the repository.	**SEA** Completion of repository by July 1, 2014. **LEA** 1. Final contribution to repository. 2. On-going use of the repository.
2. Embed a reading strand into the science, social studies, healthy lifestyles and fine arts core and Career Technical Education standards.	**SEA** 1. Form working groups to develop Literacy Strands for each identified content area. 2. Working groups develop a framework for the Literacy Strand for specific content-area literacy. 3. Working groups populate the framework for each grade and course in specific content area. **LEA** Support SEA efforts with key staff member's participation.	**SEA** 1. Literacy strands provided to all identified content teachers. 2. High quality professional development provided on Literacy Strands to LEA representatives. 3. Input on Literacy Strands sought on a web-based format. 4. Reconvene Literacy Strand working groups in spring to revisit and refine the strands with input received from teachers. **LEA** Support SEA efforts with key staff member participation.	**SEA** 1. Full implementation. 2. Provide support to frontier or small LEAs in delivery of Professional Development. **LEA** Begin implementation.	**SEA** 1. Sustaining implementation. 2. Provide support to rural or small LEAs in delivery of PD. 2. Provide support to targeted principals and coaches to strengthen implementation. **LEA** Full implementation.

3. Prepare and implement recommendations for the expansion of the literacy initiative through eighth grade with a focus on adolescent literacy. :	**SEA** 1. Form an Adolescent Literacy working committee. 2. Create Adolescent Literacy standards aligned to the Common Core, to include a focus on standards for teaching struggling readers. **LEA** Support and participate in the development process.	**SEA** 1. Distribute and pilot Adolescent Literacy standards aligned to the Common Core. 2. Develop and promote courses for striving readers (those two grade levels behind in reading ability) in all secondary settings. 3. Provide professional development to LEA representatives on the Adolescent Literacy standards and on best instructional practices. **LEA** 1. Support and participate in the development process.	**SEA** 1. Implement Adolescent Literacy standards aligned to the Common Core. 2. Provide professional development to LEA representatives on the Adolescent Literacy standards and on best instructional practices. **LEA** 1. Participate in Professional Development. 2. Offer courses for striving readers.	**SEA** 1. Sustain Adolescent Literacy standards aligned to CC. 2. Sustain implementation of courses for striving readers. 3. Provide support to frontier or small LEAs in delivery of PD. **LEA** 1. Begin local PD and implementation of Adolescent Literacy standards. 2. Sustain courses for striving readers.
4. Continue to support the work of the Family Literacy Centers and the use of ELL software to assist students with acquisition of English academic language skills and increase reading/language arts proficiency.	**SEA** 1. Provide sharing and networking opportunities for Family Literacy Center personnel to help all use the most effective practices. 2. Construct and implement data-gathering protocols to measure the effectiveness of the program. **LEA** Sharing of current efforts and selection of future sites.	**SEA** 1. Provide sharing and networking opportunities for Family Literacy Center personnel to help all use the most effective practices. 2. Construct and implement data-gathering protocols to measure the effectiveness of the program. **LEA** Initial implementation of program at additional sites.	**SEA** Assistance to LEAs as needed **LEA** On-going implementation at designated sites.	**SEA** Assistance to LEAs as needed. **LEA** On-going implementation at designated sites.

Project Three: Using the Common Core Standards to Ensure Mathematics Literacy for all Utah Children

Manager: David Smith **Total Budget: $1,506,538**

Rationale: The adoption of new common core standards gives Utah an opportunity to address all aspects of effective delivery of mathematics instruction. Using lessons learned from our successful 4-6 Mathematics Initiative, professional development, and coaching will help us implement the new core. Expanding our mathematics initiative, while implementing the new core, will help us increase our capacity to deliver high quality mathematics instruction, which will increase our high school graduation rate and increase college enrollment.

Activities	2010-2011 SEA/LEA Activities	20111-12 SEA/LEA Activities	2012-13 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Begin development of web-based lesson plans for mathematics that ensure alignment across schools/classrooms regardless of variations in materials and that capture the experience and talents of master teachers and the use of best practices.		**SEA** Creation of a repository site for supporting instructional materials (e.g., lesson plans, instructional materials, "best practices" video clips). **LEA** On-going sharing of repository concept with LEA stakeholders.	**SEA** On-going creation of Common Core repository for supporting instructional materials. **LEA** On-going contribution to repository.	**SEA** Continued development and posting to Common Core repository. **LEA** 1. Ongoing contribution to repository. 2. Begin using the repository.
2. Create rigorous and relevant math courses that are an alternative to the traditional calculus track, while avoiding the "historic" problem of "dumbing down".	**SEA** With input from LEAs, industry and higher education partners, design rigorous and relevant courses that can be taken for credit during the senior year of high school.	**SEA** Prepare and deliver professional development in the content and pedagogy of the new courses. **LEA** Participate in professional development.	**SEA** Provide support for implementation of the new courses, including distance learning opportunities for smaller and rural LEAs. **LEA** Begin offering new courses.	**SEA** Ongoing technical assistance. **LEA** Ongoing implementation.
3. Prepare and implement recommendations for a state K-6 mathematics initiative and an Algebra mathematics initiative.	**SEA** Form a mathematics strategic planning task-force to develop a K-6 mathematics initiative and an Algebra initiative.	**SEA** Form a development group to design appropriate professional development and resources for	**SEA** 1. Begin professional development for LEA teacher and principal representatives.	**SEA** Continue professional development for LEA teacher and principal representatives, implementation

	LEA Participate with SEA.	initiative implementation. **LEA** Participate with SEA.	**LEA** Implement and participate in evaluation of initiatives.	and evaluation of initiatives. **LEA** Continue implementation and participate in evaluation of initiatives.

Project Four: Ensuring Postsecondary Success

Co: Managers: Mary Shumway, Moya Kessig Total Budget: $2,693,798

Rationale: Utah has implemented many successful initiatives designed to help secondary students prepare for college and careers. Enhancing these initiatives and using information gathered from the National High School Center reports will help Utah deliver the Core in a manner that leads to greater student engagement, higher levels of achievement, and horizontal and vertical coordination between school levels and higher education.

Activities	2010-2011 SEA/LEA Activities	2011-12 SEA/LEA Activities	2012-13 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Create annual information for students and parents regarding career and college pathways and aligned coursework beginning at the end of sixth grade and continuing through twelfth grade.	**SEA** Form a broad-based committee to develop a career pathway initiative that includes a parent and student web site, annual guides and post secondary pathway tracking and commitment materials.	**SEA** 1. Establish professional development for guidance counselors increasing their knowledge of pathways and enhancing their ability to communicate pathway information to families. 2. Post the parent & student website, distribute guides and assist LEAs in using the pathway commitment materials. **LEA** Participate in PD, link to SEA web site, distribute guides and assist parents and students in using	**SEA** Maintain career pathway initiative and update guides as needed. **LEA** Continue implementation.	**SEA** On-going implementation. **LEA** On-going implementation.

		the pathway commitment materials.		
2. Revise and add academic pathways to the career pathway materials.	**SEA** Form committees to begin analysis of academic pathways and determine format **LEA** Participate and support project	**SEA** Continue development of pathway project for CTE and Academic pathways **LEA** Participate and support project	**SEA** Complete pathway project **LEA** Provide implementation.	**SEA** Provide web access to pathways for all students and parents **LEA** Provide ongoing support to parents and students.
3. Work with LEAs and Higher Education to advise and initiate secondary renewal and reform.	**SEA** 1. Work with struggling secondary schools and others identified by LEAs. 2. Identify and disseminate information about effective high schools, transition issues and college readiness.	**SEA** On-going technical support.	**SEA** On-going technical support.	**SEA** On-going technical support.
4. Continue coordination with Higher Education to ensure that dual enrollment and concurrent enrollment courses that may lead to an Associate Degree (AD) are offered. Develop at least five areas of emphasis for ADs that include sufficient flexibility to accommodate academic and career technical education issues.	**SEA** 1. Work with Higher Education partners to maintain and enhance the Concurrent enrollment Program. 2. Establish working agreements on Associate Degree offerings for high school students in five areas of emphasis.			
5. Using lessons learned from Utah's highly effective AP program, work with two high need LEA's to ensure that disadvantaged subgroups have quality access to AP and concurrent enrollment	**SEA** 1. Analyze data regarding course taking patterns and access to AP and concurrent enrollment programs for disadvantaged subgroups in two high	**SEA** Provide support to the two LEAs in implementing the plan **LEA** Implement the	**SEA** Monitor on-going progress of implementation and evaluate success. **LEA** Implement the	**SEA** On-going monitoring. **LEA** On-going implementation.

programs. RTTT Budget:	need LEAs. 2. With the assistance of College Board, create a plan to address access to AP and concurrent enrollment programs for disadvantaged subgroups in the LEAs high schools. **Identified LEAs** Participate in development of SEA plan.	plan	plan and make adjustments as necessary.	
6. Coordinate with Higher Education to review and ensure that English and Mathematics are vertically and horizontally aligned, and that other current courses required for graduation are aligned to student needs for career and college readiness.	**SEA** 1. Continue working with business representatives and Higher Education to determine any needed courses and to align current courses for career and college readiness.	**SEA** Provide support for implementation of the new courses, including distance learning opportunities for smaller and frontier LEAs. **LEA** Begin offering new courses.	**SEA** On-going technical support. **LEA** Ongoing implementation.	**SEA** On-going technical support. **LEA** Ongoing implementation.
7 Review the data and reports from current **STEM** initiatives and propose continued, enhanced, or new initiatives, including CTE, that increase student participation in the study of STEM fields.	**SEA** 1. Analyze data regarding current STEM readiness and participation.	**SEA** 1.Review the data and reports from current STEM initiatives and propose 2. Determine a model for enhanced, as well as new initiatives to increase student participation in the study of STEM fields.	**SEA** Pilot enhanced and new initiatives to increase student participation in the study of STEM fields.	**SEA** Implement enhanced and new initiatives to increase student participation in the study of STEM fields.
9. Work with business, industry and higher education partners to define needs for a quality workforce and develop instruction to support acquisition of skills to meet those needs.	**SEA** Conduct a statewide study of workforce preparation to ascertain the skills required for students to be successful in the workforce.	**SEA** Analyze data and work with business and industry to develop a 6 year plan to address acquisition of critical skills for workforce	**SEA** Provide professional development and collaborate with business and industry in the plan implementation at	**SEA** Collaborate with business and industry in the plan implementation at the state, region, and local level with

:	**LEA** Support SEA efforts	preparation. **LEA** Utilize statewide data in developing local plans for acquisition of critical skills identified by business and industry.	the state, region, and local level with workforce and higher education partners. **LEA** Implement local plans for acquisition of critical skills identified by business and industry.	workforce and higher education partners. **LEA** Implement local plans for acquisition of critical skills identified by business and industry.
Project Five: Improving Early Learning Outcomes **Manager: Dr. Reed Spencer Total Budget: $1,914,450** **Rationale**: The foundation for success in reading and mathematics begins before kindergarten. This is especially true for economically disadvantaged students, English language learners, and students with disabilities. We have learned from our optional extended day kindergarten initiative, that early intervention at the preschool level is essential to narrowing achievement gaps.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Review the data and reports from the Utah K-3 Reading initiative. Use data to identify and replicate high performing projects and practices.	**SEA** Identify common data-gathering protocols for both student achievement and program practices. **LEA** Support the K-3 program support and participate in the development of protocols.	**SEA** 1. Implement common data-gathering protocols for both student achievement and program practices. 2. Provide guidance and support for principals and coaches for monitoring and driving best practices into every classroom. **LEA** Provide ongoing support and participation.	**SEA** 1. Implement common data-gathering protocols for both student achievement and program practices. 2. Provide guidance and support for principals and coaches for monitoring and driving best practices into every classroom. **LEA** Provide support and ongoing participation as well as initiate local efforts.	**SEA** On-going technical support **LEA** Ongoing participation
2. Maintain full-day kindergarten for eligible students. Use data to identify and replicate	**SEA** 1. Provide extended or full-day kindergarten to	**SEA** 1. Provide extended or full-day kindergarten to	**SEA** 1. Provide extended or full-day kindergarten	**SEA** On-going support. **LEA**

high performing projects and practices.	students who are eligible for it. 2. Identify common data-gathering protocols for both student achievement and effective practices. **LEA** Support e the full-day K program, support and participate in the development of protocols	students who are eligible for it. 2. Implement common data-gathering protocols for both student achievement and effective practices. 3. Provide ongoing professional development in how to make a full day of kindergarten most effective for students, including sharing and networking opportunities for teachers. **LEA** Provide ongoing support and participation in implementing protocols and PD.	to students who are eligible for it. 2. Implement common data-gathering protocols for both student achievement and effective practices. 3. Provide ongoing professional development in how to make a full day of kindergarten most effective for students, including sharing and networking opportunities for teachers. **LEA** 1. Provide ongoing support and participation with SEA in implementing protocols, PD, and networking.	On-going participation.
3. Support early intervention programs for high need Pre-K children. Review the data and reports from the UPSTART Early Learning initiative, CTE sponsored pre-schools and other state preschool programs. Make recommendations for changes or for adoption of successful practices by LEAs.	**SEA** 1. Form a Pre-K Advisory Committee reflective of all stakeholders to evaluate and make recommendations statewide. 2. Provide ongoing monitoring and possible expansion of UPSTART Early Learning Initiative (in-home computer-based preparation for school success). 3. Provide common professional development and assessment protocols	**SEA** 1. Implement recommendations of Pre-K Advisory Committee. 2. Select or develop common assessment procedures. 2. Provide ongoing monitoring and possible expansion of UPSTART Early Learning Initiative. 3. Provide professional development focused on interventions and instruction for	**SEA** 1. Provide ongoing monitoring and possible expansion of UPSTART Early Learning Initiative. 2. Develop a web site containing guidance for school readiness preparation and support for all Pre-K providers. **LEA** Participate, monitor and support SEA, as well as well as	**SEA** 1. Provide ongoing monitoring and possible expansion of UPSTART Early Learning Initiative. 2. Ongoing monitoring and implementation. **LEA** Provide LEA leadership and guidance

	for CTE-based and private providers. **LEA** Participate and support SEA.	high-risk populations of Pre-K children. **LEA** Participate, monitor and support SEA.	provide LEA leadership and guidance.	
4. Develop and distribute Pre-K academic standards.	**SEA** 1. Using the Pre-K academic preparation committee described in 4 above, develop standards/guidelines to assist all providers of services to Pre-K children to strengthen their instruction in school readiness skills. **LEA** Participate and support.	**SEA** 1. Distribute and pilot standards/ guidelines. 2. Provide professional development. **LEA** Participate and support.	**SEA** 1. Fully implement standards and guidelines. 2. Provide professional development. **LEA** Participate and support and provide LEA guidance.	**SEA** 1. Maintain and promote use of standards/ guidelines. 2. Provide professional development. **LEA** Participate and support and provide LEA leadership and guidance
Project Six: Refinement of Utah Performance Assessment System for Students (U-PASS) Testing **Manager: John Jesse Total Budget: $11,000,000** **Rationale:** Utah has successfully used rigorous core assessments for over forty years. The adoption of nationally recognized, relevant common core standards will require development and adoption of assessments that align with the new standards.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2914 SEA/LEA Activities**
1. Design and implement summative testing systems and high quality assessments that are aligned to the new Common Core State standards and that will evaluate both student growth and status. Other Funds: Common Assessment Consortium Grant	**SEA** Common Assessments Consortium work for Language Arts and Math (Item writing, item alignment, item piloting, statistical analysis)	**SEA** 1. Common Assessments Consortium work for Language Arts and Math (Item writing, item alignment, item piloting, statistical analysis) 2. Pilot for Language Arts items. **LEA** Participate in new Language Arts assessment pilots.	**SEA** 1. Common Assessments Implemented for Language Arts. 2. Math assessment pilots. **LEA** Participate in new Math assessment pilots	**SEA** Common Assessments Implemented for Language Arts and Math (full implementation) **LEA** Participate in new Language Arts and Math assessments

2. Design and implement infrastructure that facilitates testing systems that use computer technology. Other Funds: National Telecom Information Agency Grant	**SEA** 1. Common Assessments Consortium work for Language Arts and Math (framework and plan for specific software requirements) 2. Working with the Utah Education Network (UEN) provide the technology infrastructure needed to link needy LEAs to the network at broadband speed.	**SEA** Common Assessments Consortium work for Language Arts and Math (software development and piloting) 2. Provide jumpstart technology grants to help needy LEAs acquire the computers they need for on-line testing.	**SEA** Common Assessments Implemented for Language Arts and Math (continued piloting, revising, and beginning of implementation **LEA** Participate in new Language Arts and Math assessment pilots	**SEA** Common Assessments Implemented for Language Arts and Math (full implementation) **LEA** Participate in new Language Arts and Math assessments
3. Continue the current testing pilot and expand the pilot to allow four urban districts, six frontier districts and ten charter schools to participate. Other Funds: State	**SEA & Pilot LEAS** Increase the implementation and continue to evaluate the success of the testing pilots	**SEA & Pilot LEAS** Increase the implementation and continue to evaluate the success of the testing pilots	**SEA & Pilot LEAS** Increase the implementation and continue to evaluate the success of the testing pilots	**SEA & Pilot LEAS** Increase the implementation and continue to evaluate the success of the testing pilots
4. Revise the high school "exit" exam requirements. Consider using a combination of CRTs, Explore, Plan and the ACT for all students. Other Funds: State	**SEA** Design new "exit" exam requirements.	**SEA & LEAs** Implement improved "exit" exam requirements.	**SEA & LEAs** Continue the improved "exit" exam requirements.	**SEA & LEAs** Continue the improved "exit" exam requirements.
5. Participate in the formative and interim assessment consortium while expanding informal, ongoing formative assessment of math and reading in all schools. Other Funds: State	**SEA** Update the current Utah formative assessment tool (UTIPS) to allow for interim assessments, an increased item bank allowed to common core standards, data linked to state SIS system.	**SEA** Begin Professional Development for all LEAs on UTIPS. **LEA** Participate in Professional Development on UTIPS.	**SEA** Continue expanding the item bank and continued professional development. **LEA** Continue use of UTIPS and other formative assessments.	**SEA** Continue expanding the item bank and continued professional development. **LEA** Continue use of UTIPS and other formative assessments.
6. Create a common, standard Kindergarten entry and post assessment.	**SEA** Develop and pilot a common kindergarten assessment to be	**SEA** Conduct statistical procedures on test (i.e. item analyses,	**SEA.** 1. Full implementation. 2. Ongoing data	**SEA** 1. Full implementation. 2. Ongoing data

	used at both the entry of kindergarten and as a post test. **LEA** Review assessment.	etc.) to refine and improve effectiveness. **LEA** Pilot assessment.	analyses. Full implementation and monitoring of new programs. **LEA** Implement assessment.	analyses. **LEA** Maintain assessment.
7. Refine assessment systems for students with disabilities and English Language Learners.	**SEA** 1. Explore options and implement an improved assessment system for ELL students. 2. Develop an improved assessment system for students with disabilities. 3. Provide PD for LEAs in the new assessments. **LEA** 1. Participate in PD. 2. Begin using new tests.	**SEA** 1. Implement an assessment system for ELL students. 2. Implement an improved assessment system for students with disabilities. 3. Provide PD for LEAs in the new assessments. **LEA** 1. Participate in PD. 2. Begin using new tests.	**SEA** 1. Implement an assessment system for ELL students. 2. Implement an improved assessment system for students with disabilities. 3. Provide PD for LEAs in the new assessments. 4. Analyze data to improve assessments and student performance. **LEA** 1. Participate in PD. 2. Begin using new tests.	**SEA** 1. Implement an assessment system for ELL students. 2. Implement an improved assessment system for students with disabilities. 3. Provide PD for LEAs in the new assessments. 4. Analyze data to improve assessments and student performance. **LEA** 1. Participate in PD. 2. Begin using new tests.

Reform Area Two Goals, Projects, Timeline, Budget, Managers

Reform Area Two: Building data systems that measure student growth and success, and inform teachers and principals about how they can improve instruction.

Federal Requirements:
1. **Fully implementing a statewide longitudinal data system.**
2. **Accessing and using State data.**
3. **Using data to improve instruction.**

Reform Area Two Goal: Refine Utah's Data Systems to ensure that student growth and proficiency in literacy and numeracy is measured, data can be used to in a timely manner to inform teachers and principals about instruction, and the system includes data that measures instructional quality in the classroom for formative and summative educator evaluations. By **December 2014,** Utah will fully implement a statewide, high-quality longitudinal data system to measure the academic achievement of students and link their achievement to educator readiness and preparation. Every parent, teacher, leader, and policymaker in the state will have information that will lead to quick corrections and interventions for students. In addition, all participating LEAs will adopt and implement local instructional improvement systems to support the effective use of student data to inform instruction. Through the use of local data management tools and a common state data dashboard all schools, LEAs and the State will be able to track progress of common goals for students. To increase capacity, by December 2014, all LEA data teams, including at minimum superintendents, curriculum directors, and assessment directors, will participate in professional development using the statewide data and create a plan for ongoing LEA training. Using critical data more efficiently will help us target individual groups of students in a faster, more coordinated, manner. The outcome will be more students that are prepared and ready for college and careers.

Total RTTT Budget: **$12,925,000**

Project One: Expansion and Adaptation of State Longitudinal Data Systems (SLDS)

Manager: John Brandt **Budget: $4,550,000**

Rationale: Our outstanding, ultra high-tech statewide longitudinal data system fulfills, in part or completely, all of the seven capabilities and twelve elements that the 2009 ARRA statewide longitudinal data system (SLDS) request for application prescribes. Utah has a P-20 longitudinal system that meets most of the America COMPETES required elements. With its ARRA/2009 SLDS grant application (#384A1000056), Utah has been awarded funds to enhance its existing longitudinal system and fully meet all the America COMPETES requirements.

Activities	2010-2011 SEA/LEA Activities	2011-2012 SEA/LEA Activities	2012-2013 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. The Utah ARRA/2009 SLDS grant award brings several state agencies together, first to share their de-identified	SEA The USOE will work with partner state agencies to build necessary data infrastructure to	SEA The USOE and partner agencies will populate data share and begin analysis and	SEA The USOE and partner agencies will continue to expand data sharing and individual and	

data, and then to coordinate analyses and research using those data. This work will allow the partner agencies to answer questions about their policies, programs and practices. The questions include, but are not limited to, those asked by the American Recovery and Reinvestment Act (ARRA), Institute of Educational Sciences (IES), SLDS grants program; the ARRA, Race to the Top (RTTT); and the State Fiscal Stabilization Fund (SFSF) assurances. RTTT Budget; 0 Other Funds: SLDS Grant $7,467,814	conduct data analysis and research.	research.	collaborative data analysis and research.	
2. Improve vertical SSID/SIS integration through automated assignment of statewide student identifiers to supplement and replace current batch system. RTTT Budget: 0 Other Funds: SLDS Grant $600,000	**SEA/LEA** The USOE and LEAs will modify systems to accommodate the new automated processes.	**SEA/LEA** The USOE and LEAs will test and begin using the system.	**SEA/LEA** The USOE and LEAs will continue to use and perfect the system.	**SEA/LEA** On-going use.
3. Add disciplinary data to the Utah eTranscript and Records Exchange system. RTTT Budget: 0 Other Funds: SLDS Grant $170,000	**SEA** The USOE will hire a contractor and lead UTREx and SIS modifications.	**SEA/LEA** The LEAs will begin reporting and the USOE will begin using the data in EDFacts etc.	**SEA/LEA** The LEAs will continue reporting and the USOE will continue using the data.	**SEA/LEA** On-going use.

4. Expand pre-kindergarten data collections and incorporation into the USOE data warehouse. RTTT Budget: 0 Other Funds: SLDS Grant $148,750	**SEA** The USOE will hire a contractor and lead system modifications.	**SEA/LEA** The LEAs will begin reporting and the USOE will begin using the data.	**SEA/LEA** The LEAs will continue reporting, the USOE will analyze the data.	**SEA/LEA** On-going use.
5. Support the collection and analysis of non-cognitive data. RTTT Budget: 0 Other Funds: SLDS Grant $650,000	**SEA** The USOE with the University of Utah will hire a contractor and lead UTREx modifications.	**SEA/LEA** LEAs will report the data for the first time and the USOE will share data with the U. of U. researchers.	**SEA/LEA** The LEAs continue reporting, and data analysis is expanded to postsecondary and workforce services.	**SEA/LEA** On-going use
6. The USOE needs to introduce new data elements to allow connections between measures of quality instruction, teacher practice, strategies, and teacher performance and student achievement. Not in SLDS grant, will use RTTT funds.	**SEA** The USOE will hire contractors and lead UTREx and SIS modifications.	**SEA/LEA** Testing of the data collections from the LEAs will begin and the data analyzed.	**SEA/LEA** The LEAs will continue reporting and the USOE will continue using the data.	**SEA/LEA** On-going use.
7. The USOE will integrate the Utah SIS2000+ system's grade book with the Utah Test Item Pool (UTIPS) formative assessment delivery system via state and national curriculum standards. Not in SLDS grant, will use RTTT funds.	**SEA** The USOE will hire contractors and lead the integration of the two state owned systems.	**SEA/LEA** System testing with the help of the LEAs will continue throughout the year.	**SEA/LEA** Any LEAs will fully use the system and offer suggestions for enhancements to the USOE.	**SEA/LEA** On-going use
Project Two: Effective Data Access for Instructional Improvement **Manager: Jennifer Lambert** **Budget: $5,360,000** **Rationale:** Utah has a robust longitudinal data system. For data to be used effectively to improve instruction and increase student learning, the appropriate technology must be used provide accessibility to the data.				

Activities	2010-2011 SEA/LEA Activities	2011-12 SEA/LEA Activities	2012-2013 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Increase the acquisition, adoption, and use of local instructional improvement systems (technology-based tools and other strategies) that provide teachers, principals, and administrators with meaningful support and actionable data to systemically manage continuous instructional improvement that provide teachers, principals, and administrators with the information and resources they need to inform and improve their instructional practices, decision-making, professional development activities and overall effectiveness.	**SEA** Explore and determine the most appropriate Data Management System to be implemented in each LEA.	**SEA** Assist the LEA's in implementing a Data Management **LEA** Implement a Data Management System.	**SEA** Support for Data Management System in each LEA **LEA** On-going implementation	**SEA** Support for Data Management System in each LEA. **LEA** On-going implementation.
2. Ensure that the state data management tool allows data from multiple sources to be integrated together for effective decision making.	**SEA** Collaboration with the Data Management Tool vendor, LEA Student Information Systems, and the State Data Warehouse to develop the utility that allows data from multiple sources to be integrated.	**SEA** Implement the full capability of the tool that allows for integration of multiple data elements.	**SEA** Implement the full capability of the tool that allows for integration of multiple data elements.	**SEA** Implement the full capability of the tool that allows for integration of multiple data elements.
3. Ensure that the data management tool allows for local data collection that is unique to the LEA to be	**SEA** Collaboration with the Data Management Tool vendor, LEA	**SEA** Implement the full capability of the tool that allows for data from LEAs to	**SEA** Implement the full capability of the tool that allows for data from LEAs to be	**SEA** Implement the full capability of the tool that allows for data from LEAs to be

included in the data set available to Stakeholders.	Student Information Systems, and the State Data Warehouse to develop the utility that allows data from LEAs to be integrated.	be integrated.	integrated.	integrated.
4. Ensure that data from the State's statewide longitudinal data system are accessible to, and used to inform and engage, as appropriate, key stakeholders (*e.g.*, parents, students, teachers, principals, LEA leaders, community members, unions, researchers, and policymakers); and that the data support decision-makers in the continuous improvement of efforts in such areas as policy, instruction, operations, management, resource allocation, and overall effectiveness.	**SEA/LEA** 1. Expand SEA & LEA partnerships with local universities, and increase data analysis available on LEA and SEA websites. 2. Conduct an outreach program to inform researchers and policymakers of the data available to them. 3. Begin use of data dashboard.	**SEA/LEA** 1. Expand SEA & LEA partnerships with local universities, and increase data analysis available on LEA and SEA websites. 2. Use data dashboard to track progress toward reform goals.	**SEA/LEA** 1. Expand SEA & LEA partnerships with local universities, and increase data analysis available on LEA and SEA websites. 2. Use data dashboard to track progress toward reform goals.	**SEA/LEA** 1. Expand SEA & LEA partnerships with local universities, and increase data analysis available on LEA and SEA websites. 2. Use data dashboard to track progress toward reform goals.
Project Three: Effective Data Use **Manger: John Jesse** **Budget: $3,015,000** **Rationale:** For data to be effectively used to improve instruction and increase student learning, LEA administrators, principals, and teachers must have the skills, knowledge, and dispositions they need to use data effectively.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Provide professional development to LEA's in the use of data to inform instruction.	**SEA** 1. Implement multi-session Principal Data Institute at the LEA level for 50% of LEAs 2. Develop	**SEA** 1. Implement multi-session Principal Data Institute at the LEA level for 50% of LEAs. Provide 2nd year Institute	**SEA** 1Provide 3rd year Institute support for the original 50%, and provide 2nd year support for the 50%. 2. Provide on-going support for the	**SEA** 1. Provide 3rd year Institute support for the second 50%. 2. Provide on-going support for the electronic data training modules.

	electronic data training modules. **LEA** Participate in LEA training.	support for the original 50%. 2. Expand the electronic data training modules and provide continuing support. **LEA** Participate in LEA training.	electronic data training modules. **LEA** Participate in LEA training	**LEA** Participate in LEA training
2. Develop and provide support for LEA's and struggling schools in the use of professional learning communities and school improvement strategies.	**SEA** Develop the specific strategies for individualized Data Consultation through the Data Mentor Program (30 Data Mentors).	**SEA** Implement the specific strategies for the individualized Data Consultation through the Data Mentor Program (30 Data Mentors).	**SEA** Implement the specific strategies for the individualized Data Consultation through the Data Mentor Program (30 Data Mentors).	**SEA** Implement the specific strategies for the individualized Data Consultation through the Data Mentor Program (30 Data Mentors).
3. Develop and provide professional development for understanding and using at risk, dropout and graduation data.	**SEA** Conduct summit on at risk, dropout and graduation data. **LEA** Evaluate at risk, dropout and graduation data and develop plans to improve data and services to students	**SEA** Provide professional development and technical assistance to LEAs regarding data and best practices. **LEA** Develop a plan for improving programs for at risk, drop out and graduation using data.	**SEA** Provide professional development and technical assistance to LEAs regarding data and best practices. **LEA** Implement plans for improving programs for at risk, drop out and graduation using data.	**SEA** Provide professional development and technical assistance to LEAs regarding data and best practices. **LEA** Implement a plan for improving programs for at risk, drop out and graduation using data.

Reform Area Three Goals, Projects, Timeline, Budget, Managers

Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most.

Federal Requirements:

1. **Providing high-quality pathways for aspiring teachers and principals.**
2. **Improving teacher and principal effectiveness based on performance, including growth.**
3. **Ensuring equitable distribution of effective teachers and principals.**
4. **Improving the effectiveness of teacher and principal evaluation programs.**
5. **Providing effective support to teachers and principals.**

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops, and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth, and stakeholder input. Students learn from great teachers and leaders. If our aim is to improve student learning, we must raise the quality of instruction. By December 2014, the State Office of Education, working with our higher education partners, will implement a new statewide continuum of support for developing practicing teachers and principals. Also by December 2014, all of Utah's K-12 teachers will participate in LEA evaluation systems that require the use of high-quality instructional strategies evidenced by appropriate and approved measures of quality instruction (including observations of teaching, student growth data, and stakeholder evaluation). This new evaluation system will allow all LEAs to have in place a means by which effective and highly effective teachers and principals are identified by the schools and LEAs in which they work. The new system will be used to support and strengthen good teachers and make great teachers even better. The system will enable all participating LEAs to have a reliable and valid means by which ineffective teachers and principals are identified by the schools and LEAs in which they work and are remediated or terminated. The outcome will be more students prepared and ready for college and careers.

RTTT Budget: $19,931,832

Project One: Using Student Data to Assist in Measuring Instructional Quality

Manager: Travis Rawlings **RTTT Budget: $500,000**

Rationale: Utah already has an electronic warehouse of student data and electronic educator files. However, while these robust data systems are currently providing us the framework to directly tie student data to teacher effectiveness data, we haven't utilized the integration of systems to inform educator improvement. Two primary activities have been designed to make better use of student data by informing statewide instructional practices and teacher effectiveness.

Activities	2010-2011 SEA/LEA Activities	2011-2012 SEA/LEA Activities	2012-2013 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Utilize data in student warehouse to inform teacher and principal evaluation.	SEA Produce an additional report using growth factors outlined in federal definition (i.e., 1.5 years	SEA 1. On-going report 2. Utilize Data Quality Control plan to ensure accuracy of data	SEA 1. On-going report 2. Utilize Data Quality Control plan to ensure accuracy of data	SEA 1. On-going report 2. Utilize Data Quality Control plan to ensure

	growth = highly effective, 1 year growth = effective) **LEA** Use additional local benchmark achievement data to further inform evaluation, employment and placement decisions.	3. Desk and site monitoring of LEA data combined with growth report for educator effectiveness designation. **LEA** On-going use	3. Desk and site monitoring of LEA data combined with growth report for educator effectiveness designation. **LEA** On-going use	accuracy of data 3. Desk and site monitoring of LEA data combined with growth report for educator effectiveness designation. **LEA** On-going use
2. Expand use of CACTUS to house teacher/principal effectiveness data.	**SEA** Produce a new CACTUS evaluation tab on each active educator showing current and historical effectiveness level. **LEA** Use new tab to help determine placement, guide professional development and inform employment decisions.	**SEA** 1. Provide statewide report on effectiveness data, establishing base line. **2.** Analysis of LEA reports to ensure implementation and fidelity of new teacher/principal effectiveness tab. **LEA** On-going use	**SEA** 1. Update SEA effectiveness data and embed in appropriate legislative and federal reports. **2.** Analysis of LEA reports to ensure implementation and fidelity of new teacher/principal effectiveness tab. **LEA** On-going use	**SEA** 1. Add to longitudinal effectiveness data. **2.** Analysis of LEA reports to ensure implementation and fidelity of new teacher/principal effectiveness tab. **LEA** On-going use
Project Two: Developing and Implementing Measures of Instructional Quality **Manager: Dr. Sydnee Dickson** **RTTT Budget: $3,969,500** **Rationale:** Students cannot learn without great teachers who deliver high quality instruction. In order to measure instruction, we must define high quality instruction, and use the definition to develop instructional expectations for educators.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Examine current research and make recommendations for instructional standards and measures.	**SEA** 1. Assemble Instructional Quality Workgroup, consisting of IHE, SEA, LEA, business community,			

	teacher union, parent and student representation to examine current research and make recommendations for instructional standards and measures. 2. Present to the Board for adoption. 3. Share findings with LEAs.			
2. Develop toolkit of resources (i.e., video examples, coaching models, observation protocols) to support LEAs in implementing instructional quality standards and measures.		**SEA** Develop a toolkit of resources (i.e., video examples, coaching models, observation protocols).		
3. Pilot toolkit in frontier and urban/suburban settings.			**SEA** 1. Select LEAs to pilot toolkit. 2. Pilot the toolkit. 3. Evaluate the pilot and make changes as needed.	**SEA** 1. Use the toolkit in all LEAs. 2. Assist LEAs in using the toolkit. **LEA** Use the toolkit.
4. Adapt and pilot toolkit to local context and existing evaluation systems.				**SEA** Adapt and pilot toolkit to local context and existing evaluation systems.
Project Three: Revise and Implement Utah Professional Teaching Standards **Manager: Linda Alder** **RTTT Budget: $500,000** **Rationale:** The Utah Professional Teaching Standards (UPTS) are the foundation for many LEA evaluation systems, university teacher preparation curriculum and ongoing professional development				

support, including mentoring of new teachers. Our review of current statewide evaluation practices makes clear that a more current and consistent instructional-based framework and accompanying tools are needed to ensure that standards based evaluation is connected to teacher effectiveness and student growth. The revised UPTS will serve as the foundation for statewide evaluation, teacher preparation and professional development.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Revise Utah Professional Teaching Standards to incorporate measures of instructional quality, stages of career development, expectations for student growth, and rubrics for evaluation.	**SEA** 1. Assemble Standards Workgroup from IHEs, SEA, LEAs, teacher union, principal organization, community, parents, and students. 2. Revise standards and accompanying tools 3. Provide training for and facilitated conversations with IHEs and LEAs on new standards in preparation for alignment of educator preparation programs, induction models and educator evaluation.	**SEA** Pilot standards with a sample of varied LEAs.	**SEA**	**SEA**
2. Disseminate standards through online brochures, seminars and LEA professional development to ensure fidelity of implementation and LEA alignment		**SEA** 1. Prepare information, seminars and PD. 2. Begin dissemination of materials, seminars and PD.	**SEA** 1. Conduct analysis of LEA educator evaluation systems to ensure alignment with new standards. 2. Provide technical assistance and monitor implementation of	

between evaluation instruments and standards.			updated standards at IHE and LEA levels.	
3. Provide exemplars of instructional excellence outlined in updated Utah Professional Teaching Standards by integrating two online tools.	**SEA** Update on-line tools with new standards. **LEA** Use on-line tools.	**SEA** Determine effectiveness through frequency of usage data, online survey tool and improvement in teacher effectiveness data. **LEA** Use on-line tools	**SEA** Determine effectiveness through frequency of usage data, online survey tool and improvement in teacher effectiveness data. **LEA** Use on-line tools	**SEA** Determine effectiveness through frequency of usage data, online survey tool and improvement in teacher effectiveness data. **LEA** Use on-line tools
Project Four: Implement Statewide Educator Evaluation System **Manager: Dr. Sydnee Dickson** **RTTT Budget: $4,000,000** **Rationale:** Utah's current evaluation system requires that teachers and principals be evaluated every three years based on performance. This system is used to inform full licensure, retention, tenure, and potential removal from the profession. This project will add measures of student growth and measures of instructional quality to evaluation measures. It will also change evaluations to annual evaluations, inform professional development, and be used to fairly inform compensation and promotion.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Convene a stakeholder group to develop a statewide educator evaluation framework.	**SEA** 1. Reassemble and update the Educator Quality Workgroup. 2. Begin the work of creating a statewide evaluation framework. 3. Examine updated UPTS and instructional standards to frame the work of evaluation. 4. Ensure that the statewide evaluation framework			

	includes instructional effectiveness, student growth and stakeholder satisfaction. 5. Ensure that the framework is aligned with Utah State Code on educator evaluation. **LEA** Participate with SEA in stakeholder focus groups and a drafting committee to develop an evaluation framework for improved instruction.			
2. Create evaluation framework and toolkit. A. Create evaluation framework and toolkit to facilitate measurement of instructional quality and provide technical assistance for LEA adaptation and implementation. B. Develop and implement a statewide framework for annual teacher evaluation that includes parental input, student growth, and measures of instructional		**SEA** 1. Engage in laser-like focus on best instructional practices; work with experts in the field to develop a toolkit based on research. 2. Hire an expert in educator evaluation and measures of instructional quality to act as program coordinator. 3. Create a model quality instruction evaluation tool for LEAs to support their work in instructional improvement and teacher evaluation. The tool will be technology ready and be used for multiple short observation and information gathering activities.		

quality.		**LEA** Various stakeholders work with SEA to develop the instructional practices toolkit and model evaluation instrument.		
3. Pilot evaluation framework and toolkit including professional development and technical assistance. Evaluate pilot.			**SEA** 1. Provide technical assistance to pilot LEAs as they use the new measures of quality instruction tools. 2. Provide support through materials and professional development for LEAs working on implementation. 3. Assist LEA's in purchasing net books or handhelds for collection of data on instructional measures. **LEA** 1. Various LEAs will engage in pilot phase of the model quality instruction evaluation tool.	
4. Transition work of Educator Quality Workgroup to Teacher Effectiveness Committee to provide monitoring and technical assistance to LEAs.			**SEA** Transition work of Educator Quality Workgroup to Teacher Effectiveness Committee to provide monitoring and technical assistance to LEAs.	
5. Provide professional development to all LEAs and technical assistance for implementation where needed.		**SEA** 1. Provide support through materials and professional development for LEAs working on implementation of new framework into LEA	**SEA** 1. Provide support through materials and professional development for LEAs working on implementation of new framework into LEA	

		system. **LEA** 1. All LEAs will use SEA Framework to ensure evaluation practices are aligned with Board Rule. 2. Revise LEA educator evaluation system where needed to ensure compliance with updated Board Rule and focused attention to measuring instructional effectiveness through multiple measures.	system. 2. Assist LEA's in purchasing net books or handhelds for collection of data on instructional measures. **LEA** 1. Implement revisions to LEA educator evaluation system based on updated Board Rule. 2. Engage with SEA to access resources and professional development where needed.	
6. Examine existing LEA evaluation systems for alignment and make recommendations for improvement where needed and provide ongoing technical assistance and monitoring.			**SEA** 1. Monitor LEAs to ensure compliance with new framework and tenets of updated Board Rule.	**SEA** 1. Continue to monitor LEAs to ensure compliance with new framework and tenets of updated Board Rule. 2. Provide support through materials and professional development for LEAs working on implementation. 3. Monitor effectiveness through analysis of improved practices and student achievement data. **LEA** 1. Monitor schools and principals to ensure fidelity of implementation of updated evaluation

				systems. 2. Engage with SEA to access resources and professional development where needed.

Project Five: Develop and Implement Instructional Leadership Standards
Manager: Dr. Sydnee Dickson RTTT Budget: $499,612

Rationale: Utah recognizes that the key to sustaining high quality instruction in every classroom is the school principal. Many LEAs currently have principal evaluation systems in place based on supervisor observations and stakeholder input. Current State Board Rule does not define requirements for evaluation of principals nor does it provide a set of standards by which principal evaluation systems can be developed. The new framework will include both summative and formative measures and will have a foundation in research-based standards. The principal standards will include the knowledge, skills, and attitudes that are needed to lead effectively to improve instruction. A focus on instructional leadership with the goals of ***Promises to Keep*** at the forefront will align principal practices with intended student outcomes. Doing so will help ensure that Utah students have access to high quality instruction in every classroom.

Activities	2010-2011 SEA/LEA Activities	2011-2012 SEA/LEA Activities	2012-2013 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Create a state framework for principal evaluation; focused on instructional leadership.		**SEA** 1. Commission existing Utah Consortium of Education Leadership (UCEL) group to examine research and best practices on principal evaluation systems that focus on instructional leadership. 2. Gather consensus recommendations from UCEL and vet to LEA, SEA, IHE, UEA UASSA and PTSA leadership for consideration.	**SEA** Select representatives from groups listed to write standards from research base and recommendations.	
2. Hire an expert in Principal evaluation to assist with the development of a statewide principal evaluation system based on		**SEA** Use RFP process to contract with an expert to facilitate development of statewide principal evaluation system based on standards.	**SEA** Work with expert and stakeholder team to develop the system. Expert work with LEAs to align current principal evaluation system with new standards.	**SEA** Continue Expert work with LEAs to align current principal evaluation system with new standards. **LEA**

standards.			**LEA** Begin alignment of LEA system to new standards	1. All LEAs will use SEA Framework to ensure evaluation practices are aligned with Board Rule.
3. Adopt principal standards into Board rule.			**SEA** Ensure that Standards and tenets of evaluation are listed in Board rule.	
4. Assist and monitor LEAs progress with implementation of new principal evaluation system.			**SEA** Provide professional development for LEAs to implement new evaluation system or align old system to new standards. **LEA** Attend PD and begin implementation of new system or alignment of LEA system to new standards.	**SEA** 1. Provide ongoing monitoring and technical assistance. 2. Ensure new evaluation system components and standards embedded in all LEA principal evaluation programs.
5. Contract with outside evaluator to ensure fidelity of planning, development, and implementation; ensure instruments are valid and reliable.			**SEA** 1. RFP completed to contract with outside evaluator. 2. Monitor evaluation	**SEA** 1. Monitor evaluation

Project Six: Providing Statewide Policy and Resources for Equitable Distribution

Manager: Travis Rawlings **RTTT Budget: $2,502,544**

Rationale: Utah must provide policy, direction and resources to support LEAs in ensuring effective and qualified teachers in every school. Students, especially in impoverished areas and in hard to staff frontier settings, must have equitable access to great teachers.

Activities	2010-2011 SEA/LEA Activities	2011-2012 SEA/LEA Activities	2012-2013 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Program CACTUS to house **effectiveness** data as part of the	**SEA** Work with Data			

educator record, making it easier for LEAs to make hiring and placement decisions.	Services to Program CACTUS to house **effectiveness** data as part of the educator record.			
2. Conduct a more thorough analysis of staffing patterns by LEAs and provide strategies for improvement. Data set for analysis will include transfer data, freshman teacher class data, exit data, and effectiveness data. Make recommendation to LEAs for improvement based on analysis.	**SEA** 1. Analyze LEA staffing patterns. 2. Make recommendations and provide strategies for improvement.	**SEA** Assist LEAs in implementation of improvement strategies. **LEA** Implement improvement strategies.		
3. Expand Teachers-Teachers.Com recruitment tool to provide more thorough reporting on recruitment efforts and ensure all LEAs and IHEs are using the tool as primary application.	**SEA** Expand Teachers-Teachers.Com recruitment tool. **LEA** Use tool.	**SEA** Monitor LEAs and IHEs for use of the tool. **LEA** Use tool.	**SEA** Monitor LEAs and IHEs for use of the tool. **LEA** Use tool.	**SEA** Monitor LEAs and IHEs for use of the tool. **LEA** Use tool.
4. Work with county commissions and legislators to provide housing incentives and loan forgiveness programs to teach in frontier areas.	**SEA** Work with government stakeholders to implement strategies.	**SEA** Work with government stakeholders to implement strategies.	**SEA** Work with government stakeholders to implement strategies.	**SEA** Work with government stakeholders to implement strategies.
Project Seven: Implementing Recommendations in the Multi-State Consortium for Revisioning the Professional Educator Continuum **Manager: Dr. Sydnee Dickson RTTT Budget: $7,960,206** **Rationale:** Utah is in the process of establishing a statewide continuum of support for developing and practicing teachers and principals. This initiative will help ensure that Utah students have access to high quality instruction in every classroom and effective and highly effective teachers and principals.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
Project Seven Part A: Teacher Leadership Pathways: Pre-Practitioner Preparation				
1. Develop and implement State Board of Education teacher	**SEA** 1. Development	**SEA**	**SEA**	**SEA**

preparation program approval standards to augment current approval by NCATE and TEAC and ensure quality in all teacher preparation programs in Utah. Standards will focus on millennial teachers, 21st Century Learners, robust field experiences, pedagogy embedded in content. Approval process will include accountability measures, timelines, and performance expectations.	activities in collaboration with Institutions of Higher Education (IHEs) and other stakeholders. 2. Hire a project specialist to assist USOE staff with Continuum projects.	Implementation activities by IHEs with technical assistance from SEA.	Travel to monitor compliance on site.	Monitoring through multiple data sources.
2. Adopt statewide performance assessments throughout preparation programs as an exit requirement from teacher preparation program.	**SEA** Development of performance assessment with ETS.	**SEA** Professional development for IHEs and LEAs to implement assessment.	**SEA** Initial implementation with IHEs.	**SEA** Analysis of instructional performance in classrooms connected to new cohort of graduates. **LEA** Assist in data collection and analysis.
3. Implement a pilot resident professional development school (PDS) model for resident teacher preparation including co-teaching assignments, internships, and job-embedded coursework in an urban setting. Student teaching will include paid internships.	**SEA** Initial pilot with University of Utah U of U), Salt Lake Community College (SLCC) and Salt Lake School District SLSD). **LEA** Salt Lake School District will work with U of U and SLCC to provide intensive clinical experience for resident teachers.	**SEA** Full implementation of PDS resident model with SLSD, U of U and SLCC. **LEA** Expand school sites for resident teachers as participation in PDS project.	**SEA** Evaluation and retooling based on data from initial phase of implementation. **LEA** Participate in data collection.	**SEA** Transition leadership of project to U of U College of Education.
4. Continue the use of the Utah State Office of Education Alternative Route (ARL) to Licensure Program and expand	**SEA** 1. Provide startup funding for additional sites to	**SEA** Work with Regional Service Centers to	**SEA** Work with three Regional Service Centers to	**SEA** Transition leadership for ARL support to

support for ARL candidates in urban, suburban and frontier settings by developing cohort support by mentors, online and hybrid coursework provided onsite, and additional support to frontier areas by regional service centers. Replicate Granite School District cohort of support for ARL teachers who are obtaining their license.	develop support systems for ARL candidates. 2. Create online coursework for ARL candidates. **LEA** Work with SEA to develop cohorts of ARL candidates in need of support services.	support ARL candidates in frontier settings. **LEA** Provide professional development opportunities in collaboration with Regional Service Centers, SEA and IHEs.	support ARL candidates in frontier settings. **LEA** Provide access to services for ARL candidates to engage in PD leading to full licensure and Highly Qualified Teacher (HQT) status.	Regional Service Centers in frontier settings and LEAs in suburban settings. **LEA** Maintain mentoring and coursework for ARL cohorts as part of ongoing mentoring and induction efforts.
Project Seven Part B: Teacher Leadership Pathways: Novice Practitioner				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Provide a pilot program for university and LEAs to provide collaborative induction support as a seamless transition to full licensure.	**SEA** 1. Development activities including travel to onsite IHE/LEA collaborative models. **LEA** Collaborate with IHEs to co-develop seamless induction support including professional portfolio, mentoring, coursework as needed and coaching in instructional standards.	**SEA** Lead statewide implementation efforts of pilot program with several LEAs and IHEs. **LEA** Engage in pilot program with IHE to provide seamless induction support for better retention and quality instruction in every classroom.	**SEA** Conduct 2nd year of pilot program. **LEA** Engage in 2nd year of program with IHE to provide seamless induction support for better retention and quality instruction in every classroom.	**SEA** Implementation of program for all IHEs. **LEA** Increase LEA participation as all IHEs engage in model.
2. Provide startup funds for LEAs to improve induction programs that include released time to work with trained mentors, reduced class loads and reduced	**SEA** 1. Development of RFP for LEAs to procure funding to develop improved	**SEA** Select applicants for funding for initial planning, professional	**SEA** Provide technical assistance for implementation of improved	**SEA** Analyze data, including retention rates and student

non-classroom assignments.	induction plans 2. Provide training to LEAs for development and submission of RFP (may be webinar based for equal access by all LEAs). **LEA** Develop plan to improve induction support for new teachers based on standards set forth by SEA.	development and improvement of induction support. **LEA** Selected LEAs participate in professional development and planning activities for implementation of plans.	induction plans including measures for sustainability. **LEA** First year of implementation for improved induction support for all new teachers.	learning to determine success of induction models. **LEA** Collaborate with SEA to determine success of improved induction models.
3. Expand frontier outreach for educators to meet HQT requirements through online coursework, online communities of support and other resources with minimal cost to the participants.	**SEA** Development of online coursework, networking with IHEs and other providers. . **LEA** Collaborate with SEA and IHEs in development of online coursework for frontier educators to obtain HQ status.	**SEA** Provide technical assistance to IHEs and other online providers as well as assisting LEAs in their efforts to help all frontier educators become HQT in their assignments. **LEA** Provide access and support for educators engaging in online coursework for HQT status.	**SEA** Provide technical assistance to IHEs and other online providers as well as assisting LEAs in their efforts to help all frontier educators become HQT in their assignments. **LEA** Provide access and support for educators engaging in online coursework for HQT status.	**SEA** Provide technical assistance to IHEs and other online providers as well as assisting LEAs in their efforts to help all frontier educators become HQT in their assignments. **LEA** Provide access and support for educators engaging in online coursework for HQT status As numbers of non-HQT teachers decrease, transition online support

				for instructional improvement.
4. Administer the Teaching and Working Conditions Survey statewide in order to improve learning environments for students and retention rates for Utah educators.	**SEA** 1. Work with New Teacher Center to develop Survey. 2. Build capacity for implementation through outreach activities. **LEA** Cooperate with SEA in getting buy in from educators to implement survey and use findings to improve working conditions for all educators.	**SEA** Administer online Teacher Working Conditions Survey. **LEA** Fully participate in implementation of survey.	**SEA** 1. Analyze results and develop training materials for sharing data 2. Provide technical assistance to LEAs as they strive to use data. **LEA** Participate in sharing of data and make policy changes to address findings from survey.	**SEA** 1. Address policy changes that may arise at state level from survey data 2. Provide technical assistance to LEAS based on their desired improvements. **LEA** Continue to support improvements in working conditions based on findings from survey.
Project Seven Part C: Teacher Leadership Pathways: Developing Practitioner				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Adopt high quality professional development standards to ensure that professional learning for all educators is results in positive changes in student learning.	**SEA** 1. Ensure State Board adoption of Professional Development Standards. 2. Provide technical assistance through professional development and accompanying toolkit to build LEA capacity. 3. Hire project coordinator to	**SEA** Build capacity in LEAs to ensure that LEA personnel are engaging educators in high quality professional development leading to improved instruction and student learning **LEA**	**SEA** Provide ongoing technical assistance to ensure statewide use of PD Standards **LEA** Adopt local board policy associated with standards based PD to ensure that all PD funds are used to	**SEA** Provide ongoing technical support and monitor implementation of Board adopted PD Standards **LEA** Monitor use of PD standards at district and local level to

	assist SEA and LEAs with activities to support developing practitioners and teacher leaders. **LEA** Select LEA representatives work with SEA to aide in Board adoption and development of toolkit and other resources.	Engage with SEA in using standards to ensure that PD efforts are high quality and result in change in instructional practice and increase student learning.	improve instructional practices and increase student learning.	ensure PD results in positive change in instruction and student learning.
2. Develop resources for LEAs to provide standards based professional development models (i.e. learning teams, coaching, peer evaluation).	**SEA** Develop resources and provide support to help LEAs in providing opportunities for teachers with career advancement and leadership. **LEA** Select LEA representatives to help in development of models and support activities.	**SEA** Dissemination of resources and technical assistance to LEAs willing to participate in distributed leadership models. **LEA** Participate in pilot programs of distributed leadership and career advancement models.	**SEA** Provide ongoing technical assistance to LEAs participating in pilot project. **LEA** 2nd year of pilot participation by select LEAs.	**SEA** Monitoring of effectiveness of LEA models with analysis and reporting. **LEA** Assist SEA in data collection, analysis and reporting of findings from pilot project.
3. Provide standards and innovation configurations (ICS) for effective professional learning communities to ensure that the work is focused on student learning and improving instruction.	**SEA** Development of ICS to determine effectiveness of current learning community models. **LEA** Participate in development and	**SEA** Provide Professional Development for use of ICs and evaluation tools. **LEA** Participate in use of ICs and	**SEA** Provide technical assistance including resource materials and professional development based on results of using ICs for targeted	**SEA** Provide ongoing technical assistance for advancement of effective use of Learning Communities to improve student learning.

	dissemination of ICs and evaluation tools.	evaluation tools if learning community models are in place.	improvement in the use of Learning Communities. **LEA** Determine where to target efforts of improvement with Learning Communities based on use of ICs.	**LEA** Use data from ICs to advance effective us of Learning Communities to improve student learning.
4. Implement the professional development **NSDC Standards Assessment Inventory (SAI)** to establish baseline information regarding the effectiveness of current statewide professional development efforts.		**SEA** Engage LEAs in capacity building activities (setting the stage using the adoption of new PD Standards). **LEA** Participate in activities to learn about benefits of implementing SAI.	**SEA** 1. Conduct NSDC Standards Inventory Survey (SAI). 2. Analysis of SAI results 3. Share results with LEAs. **LEA** Participate in SAI with high rates of return.	**SEA** 1. Provide technical assistance based on findings from SAI. 2. Continue to model and promoting best PD practices through existing venues. **LEA** Use findings from SAI to improve PD practices.
Project Seven Part D: Teacher Leadership Pathways: Experienced Practitioner				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Develop teacher leaders standards with accompanying licensure/endorsement requirements, coursework and performance assessment.	**SEA** Work with UEA, UCEL, UCED, and LEA reps to develop standards and accompanying tools for implementation.			

2. Develop cadre of teacher leaders in using formative assessment to improve student learning (Keeping Learning on Track) resulting in capacity building for LEAs to engage in school-wide KLT model.	**SEA** Select cadre of teacher leaders to begin pilot phase of Keeping Learning on Track. **LEA** Support select teacher leaders to engage in initial phase of "train the trainer" model.	**SEA** Support teacher leader cadre in 2nd year of pilot phase of KLT. **LEA** Support teacher leaders in providing PD for KLT to other teachers.	**SEA** Expand cadre of teachers to engage larger group of educators in using formative assessments for improved learning. **LEA** Support expansion of KLT professional development by teacher leaders for other educators.	**SEA** Support implementation with technical assistance to ensure that LEAs can provide ongoing support with KLT. **LEA** Use teacher leaders to continue to build capacity for improved instructional practices.
3. Develop models of differentiated staffing options (i.e., full time release: 1/3 with new teachers, 1/3 on school projects, and 1/3 with universities).		**SEA** Collaborate with IHEs, LEAs and other providers to develop models of differentiated staffing models for teacher leaders; especially to support new and/or struggling teachers. **LEA** Collaborate with SEA to develop and implement differentiated staffing models.	**SEA** Initiate differentiated staffing models for teacher leaders through pilot phase – transitioning to LEAs embedding this as part of regular staffing patterns. **LEA** Adopt model of differentiated staffing for teacher leaders where possible.	**SEA** Provide technical assistance to LEAs who want to initiate and implement varied staffing models to improve teacher quality and student learning. **LEA** Differentiate staffing model to engage expertise of teacher leaders.
4. Provide leadership opportunities for teacher leaders outside of the classroom to enhance their content knowledge	**SEA** Staff support needed to develop partnerships with community and	**SEA** Work with LEAs to determine criteria and pair selected teacher	**SEA** Work with business and community partners to take a	**SEA** 1. Transition oversight of partnerships to LEAs.

and leadership skills.	business leaders in order to provide internships for practicing teacher leaders that will enhance their content knowledge and skills and provide real world/ hands on experience with leadership outside of classroom.	leaders with appropriate business/community partners for leadership internships. **LEA** Identify teacher leaders to participate in project and support their participation.	more active role in initiating and maintaining partnerships with LEAs. **LEA** Select and support teacher leaders in participating in leadership internships.	2. Conduct analysis of project effect on teacher leadership and school improvement. **LEA** Select and support teacher leaders in participating in leadership internships and take active role in setting up and maintaining partnership program.
Project Seven Part E: Principal Leadership Pathway				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Improve administrator preparation programs through: development of state standards that include a strong focus on instructional leadership and the use of data to increase achievement; and review and revision of entrance requirements into principal preparation programs.	**SEA** 1. Engage with IHEs and LEAs in developing standards for instructional leadership preparation programs. 2. Hire a principal leadership coordinator team. **LEA** Select representatives participate in development activities.	**SEA** Implementation of standards in Board Rule and Practice.	**SEA** Monitor IHE school administrator preparation programs for compliance with program standards.	**SEA** Ongoing monitoring and technical assistance. **LEA** Assist SEA in data collection and analysis of improvement of instructional leadership practices of principal candidates from revised programs.
2. Work with LEAs to develop and implement collaborative	**SEA** Collaborate with	**SEA** Provide technical	**SEA** Provide technical	**SEA** Assess

induction and coaching programs for principals.	IHEs and LEAs to develop models of effective induction for new principals. **LEA** Work with SEA and IHEs to develop models of seamless collaborative (IHE and LEA) induction.	support for IHEs to work with LEAs in adopting improved induction models that engage both the IHE and the LEA in the process. **LEA** Adopt model of collaborative induction for new principals.	support for IHEs to work with LEAs implementing improved induction models that engage both the IHE and the LEA in the process. **LEA** Implement collaborative induction model for new principals in order to improve instructional leadership practices.	effectiveness of collaborative induction models for principals. **LEA** Assist in analysis of collaborative induction model for new principals.
3. Provide high quality professional development including online communities, face to face instruction and regional academies, for practicing principals to ensure instructional leadership practices are in place to improve instruction for all students.	**SEA** 1. Assist LEAs in developing models of professional development to improve instructional leadership practices. 2. Focus on efforts for frontier principals through online professional development, online learning communities and support through Regional Service Centers. **LEA** Engage with SEA in developing effective professional	**SEA** Assist LEAs in implementing PD models for instructional leadership with practicing administrators. **LEA** Provide effective professional development for practicing administrators	**SEA** Provide ongoing technical assistance as needed. **LEA** Provide effective professional development for practicing administrators to	**SEA** Provide ongoing technical assistance as needed. **LEA** Provide effective professional development for practicing

	development models to promote instructional leadership practices that result in teacher quality and higher levels of student learning.	to become more effective in instructional leadership practices.	become more effective in instructional leadership practices.	administrators to become more effective in instructional leadership practices.

Reform Area Four Goals, Projects, Timeline, Budget, Managers

Reform Area Four: Turning around our lowest-achieving schools.

Federal Requirements: **1. Intervening in the lowest-achieving schools.**
2. Turning around the lowest-achieving schools.

Reform Area Four Goal: Ensure that all Utah children are proficient in reading and math, receive quality instruction every day, and participate in relevant and engaging coursework by turning around our lowest-achieving schools.

Utah believes that prevention is the key to ending poor performance by schools. Utah encourages improvement efforts that use collaboration and build positive school and community climate. We will continue to use our SOS and will expand the process to all state schools that need improvement. In addition, by fall of 2010, all Title I schools identified as persistently low achieving, that have not responded to SOS efforts to improve student achievement, will immediately begin one of the four school intervention models. Also by fall 2010, Utah will have a system in place to identify secondary non-Title I schools that are at risk of becoming persistently lowest achieving and begin school improvement intervention. The outcome from these activities will be more students prepared and ready for college and careers.

RTTT Budget: $5,000,000

Project One: System of Support for Low-Achieving Schools

Manager: Karl Wilson **Budget: $500,000**

Rationale: Utah believes two critical elements needed to ensure that our schools meet the needs of students are preventing failure through the use of our System of Support (SOS) model, and the use of an aggressive and cooperative intervention model used to improve achievement in low-performing schools. SOS is very effective in preventing Title I schools from reaching the persistently low-performing schools designation. This program turns around Utah Title I schools by focusing resources on research-based strategies that increase achievement. We will continue and expand our SOS process to all state schools that need improvement and, by fall of 2010, begin using one of the four school intervention models in our Persistently Lowest-Achieving Title I schools that have not responded to SOS efforts to improve student achievement.

Activities	2010-2011 SEA/LEA Activities	2011-12 SEA/LEA Activities	2012-13 SEA/LEA Activities	2013-2014 SEA/LEA Activities
1. Utah will identify the lowest-achieving Title I schools and other non Title I schools in need of improvement.	**SEA** Annual review of school achievement (proficiency scores in reading/language arts and mathematics), graduation rate (for high schools), and growth scores to	**SEA** Annual review of school achievement (proficiency scores in reading/language arts and mathematics), graduation rate (for high schools), and growth scores to	**SEA** Annual review of school achievement (proficiency scores in reading/language arts and mathematics), graduation rate (for high schools), and growth scores to	**SEA** Annual review of school achievement (proficiency scores in reading/language arts and mathematics), graduation rate (for high schools), and growth scores to

	identify lowest performing schools.	identify lowest performing schools.	identify lowest performing schools.	identify lowest performing schools.
2. The Utah State Office of Education will work with LEAs to implement the Utah Title I System of Support for identified Title I and other schools in need of improvement.	**SEA** Provide support including training to LEAs on Utah's Title I SOS. **LEAs with schools in need of improvement** 1. Establish school leadership teams Select members of the School Support Team (SST). 2. Conduct school appraisal. 3. Revise school improvement plan 4. Implement plan and monitor progress.	**SEA** Provide support including training to LEAs on Utah's Title I SOS. **LEAs with schools in need of improvement** 1. Establish school leadership teams Select members of the School Support Team (SST). 2. Conduct school appraisal. 3. Revise school improvement plan 4. Implement plan and monitor progress.	**SEA** Provide support including training to LEAs on Utah's Title I SOS. **LEAs with schools in need of improvement** 1. Establish school leadership teams Select members of the School Support Team (SST). 2. Conduct school appraisal. 3. Revise school improvement plan 4. Implement plan and monitor progress.	**SEA** Provide support including training to LEAs on Utah's Title I SOS. **LEAs with schools in need of improvement** 1. Establish school leadership teams Select members of the School Support Team (SST). 2. Conduct school appraisal. 3. Revise school improvement plan 4. Implement plan and monitor progress.
3. The Utah State Office of Education will work with LEAs to implement a higher level of mandatory SEA support for identified Title I schools that have not made significant progress.	**SEA** If these strategies do not result in significant improvement, schools continue to implement strategies in activity #2 and receive mandatory SEA support. **LEAs with Title I schools in need of improvement who do not improve.** 1. Conduct a thorough Instructional Audit. 2. Implement Instructional Coaching.	**SEA** If these strategies do not result in significant improvement, schools continue to implement strategies in activity #2 and receive mandatory SEA support. **LEAs with Title I schools in need of improvement who do not improve.** 1. Conduct a thorough Instructional Audit. 2. Implement Instructional Coaching.	**SEA** If these strategies do not result in significant improvement, schools continue to implement strategies in activity #2 and receive mandatory SEA support. **LEAs with Title I schools in need of improvement who do not improve.** 1. Conduct a thorough Instructional Audit. 2. Implement Instructional Coaching.	**SEA** If these strategies do not result in significant improvement, schools continue to implement strategies in activity #2 and receive mandatory SEA support. **LEAs with Title I schools in need of improvement who do not improve.** 1. Conduct a thorough Instructional Audit. 2. Implement Instructional Coaching.
4. In accordance with the ARRA RTTT guidelines the state will support turning around those schools that do not significantly	**SEA/LEA** The LEA and SEA will collaboratively select which intervention model is most appropriate for the	**SEA/LEA** The LEA and SEA will collaboratively select which intervention model is most appropriate for the	**SEA/LEA** The LEA and SEA will collaboratively select which intervention model is most appropriate for the	**SEA/LEA** The LEA and SEA will collaboratively select which intervention model is most appropriate for the

respond to the Utah Title I System of Support by implementing one of the four school intervention models.	school community. **LEAs with Title I schools in need of improvement who do not improve.** 1. The LEA will develop a plan and apply for the Title I ARRA school improvement grant. 2. The LEA will implement one of the four school intervention models.	school community. **LEAs with Title I schools in need of improvement who do not improve.** 1. The LEA will develop a plan and apply for the Title I ARRA school improvement grant. 2. The LEA will implement one of the four school intervention models.	school community. **LEAs with Title I schools in need of improvement who do not improve.** 1. The LEA will develop a plan and apply for the Title I ARRA school improvement grant 2. The LEA will implement one of the four school intervention models.	school community. **LEAs with Title I schools in need of improvement who do not improve.** 1. The LEA will develop a plan and apply for the Title I ARRA school improvement grant. 2. The LEA will implement one of the four school intervention models.
Project Two: Preventing Low-Achieving Schools **Manager: Karl Wilson** **Budget: $4,500,000** **Rationale:** SOS has been very effective in preventing Title I schools from reaching the persistently low-performing schools designation. Utah will use the lessons learned and RTTT funding to prevent select non-Title I secondary schools from becoming persistently low-performing schools.				
Activities	**2010-2011 SEA/LEA Activities**	**2011-2012 SEA/LEA Activities**	**2012-2013 SEA/LEA Activities**	**2013-2014 SEA/LEA Activities**
1. Identify schools that are at risk of becoming persistently low achieving schools.	**SEA** 1. Annual review of achievement results (language arts, mathematics achievement, and graduation rate). 2. Select four schools for assistance.	**SEA** Monitor data	**SEA** 1. Annual review of achievement results (language arts, mathematics achievement, and graduation rate). 2. Select four schools for assistance.	**SEA** Monitor Data
2. Using Utah's State System of Support process, ensure that these schools complete and implement a comprehensive school improvement plan, form and utilize professional learning communities effectively, address and pursue rigorous efforts in the desired student outcomes and the three other reform	**SEA** 1. SEA provides training and support for first four schools. **SEA, LEA, and school** 1. Establish RTTT school improvement MOU. 2. Establish school leadership teams. 3. Select members of the School Support Team (SST). 4. Conduct school	**SEA** 1. SEA provides training and support. **LEA, and school** Continue implementation of plan and monitor progress.	**SEA** 1. SEA provides training and support for next group of four schools. **SEA, LEA, and school** 1. Establish RTTT school improvement MOU. 2. Establish school leadership teams. 3. Select members of the School Support Team (SST).	**SEA** 1. SEA provides training and support. **LEA, and school** Continue implementation of plan and monitor progress.

areas, demonstrate school commitment by signing an MOU that includes a binding agreement to fully comply with the terms and conditions and scope of work description of the state plan and contains signatures from the LEA superintendent, principal, teacher leader representative, and local school community council president.	appraisal. 5. Begin work with School Support Team. 6. Revise school improvement plan. 6. Begin implementation of plan and monitor progress.		4. Conduct school appraisal. 5. Begin work with School Support Team. 6. Revise school improvement plan. 6. Begin implementation of plan and monitor progress.	
3. Utah will support turning around struggling secondary schools by requiring LEAs to allow flexibility and autonomy in (1) selecting staff, (2) implementing new structures and formats for the school day, schedule, or year, (3) control the school's budget, (4) provide comprehensive services to high need students, (5) create school climate and culture that remove obstacles and actively support student engagement and achievement, and (6) implement strategies that actively engage families and communities in supporting the academic success of their students.	**SEA** Require LEAs with SEA identified struggling schools to allow the schools flexibility and autonomy as stated in the project. **LEA** Allow the identified struggling schools the flexibility and autonomy stated in the project.	**SEA** Require LEAs with SEA identified struggling schools to allow the schools flexibility and autonomy as stated in the project. **LEA** Allow the identified struggling schools the flexibility and autonomy stated in the project.	**SEA** Require LEAs with SEA identified struggling schools to allow the schools flexibility and autonomy as stated in the project. **LEA** Allow the identified struggling schools the flexibility and autonomy stated in the project.	**SEA** Require LEAs with SEA identified struggling schools to allow the schools flexibility and autonomy as stated in the project. **LEA** Allow the identified struggling schools the flexibility and autonomy stated in the project.

Participating LEA Memorandum of Understanding

This Memorandum of Understanding ("MOU") is entered into by and between the Utah Board of Education and _____ ("Participating LEA"). The purpose of this agreement is to establish a framework of collaboration, as well as articulate specific roles and responsibilities in support of the State in its implementation of an approved Race to the Top grant project.

I. SCOPE OF WORK

Exhibit I, the Preliminary Scope of Work, indicates which portions of the State's proposed reform plans ("State Plan") the Participating LEA is agreeing to implement. (Note that, in order to participate, the LEA must agree to implement all or significant portions of the State Plan.)

II. PROJECT ADMINISTRATION

A. PARTICIPATING LEA RESPONSIBILITIES

In assisting the State in implementing the tasks and activities described in the State's Race to the Top application, the Participating LEA sub grantee will:

1) Implement the LEA plan as identified in Exhibits I and II of this agreement;
2) Actively participate in all relevant convenings, communities of practice, or other practice-sharing events that are organized or sponsored by the State or by the U.S. Department of Education ("ED");
3) Post to any website specified by the State or ED, in a timely manner, all non-proprietary products and lessons learned developed using funds associated with the Race to the Top grant;
4) Participate, as requested, in any evaluations of this grant conducted by the State or ED;
5) Be responsive to State or ED requests for information including on the status of the project, project implementation, outcomes, and any problems anticipated or encountered;
6) Participate in meetings and telephone conferences with the State to discuss (a) progress of the project, (b) potential dissemination of resulting non-proprietary products and lessons learned, (c) plans for subsequent years of the Race to the Top grant period, and (d) other matters related to the Race to the Top grant and associated plans.

B. STATE RESPONSIBILITIES

In assisting Participating LEAs 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 carrying out the LEA Plan as identified in Exhibits I and II of this agreement;
2) Timely distribute the LEA's portion of Race to the Top grant funds during the course of the project period and in accordance with the LEA Plan identified in Exhibit II;
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 project.

C. JOINT RESPONSIBILITIES

1) The State and the Participating LEA will each appoint a key contact person for the Race to the Top grant.
2) These key contacts from the State and the Participating LEA will maintain frequent communication to facilitate cooperation under this MOU.
3) State and Participating LEA grant personnel will work together to determine appropriate timelines for project updates and status reports throughout the whole grant period.
4) State and Participating LEA grant personnel will negotiate in good faith to continue to achieve the overall goals of the State's Race to the Top grant, even when the State Plan requires modifications that affect the Participating LEA, or when the LEA Plan requires modifications.

D. STATE RECOURSE FOR LEA NON-PERFORMANCE

If the State determines that the LEA is not meeting its goals, timelines, budget, or annual targets or is not fulfilling other applicable requirements, the State grantee will take appropriate enforcement action, which could include a collaborative process between the State and the LEA, or any of the enforcement measures that are detailed in 34 CFR section 80.43 including putting the LEA on reimbursement payment status, temporarily withholding funds, or disallowing costs.

III. ASSURANCES

The Participating LEA hereby certifies and represents that it:
1) Has all requisite power and authority to execute this MOU;
2) Is familiar with the State's Race to the Top grant application and is supportive of and committed to working on all or significant portions of the State Plan;
3) Agrees to be a Participating LEA and will implement those portions of the State Plan indicated in Exhibit I, if the State application is funded,
4) Will provide a Final Scope of Work to be attached to this MOU as Exhibit II only if the State's application is funded; will do so in a timely fashion but no later than 90 days after a grant is awarded; and will describe in Exhibit II the LEA's specific goals, activities, timelines, budgets, key personnel, and annual targets for key performance measures ("LEA Plan ") in a manner that is consistent with the Preliminary Scope of Work (Exhibit I) and with the State Plan; and
5) Will comply with all of the terms of the Grant, the State's subgrant, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99).

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, and in consultation with ED.

V. DURATION/TERMINATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a grant is received, ending upon the expiration of the grant project period, or upon mutual agreement of the parties, whichever occurs first.

VI. SIGNATURES

LEA Superintendent (or equivalent authorized signatory) - required**:**

_____

Signature/Date

_____

Print Name/Title

President of Local School Board (or equivalent, if applicable)**:**

_____

Signature/Date

_____

Print Name/Title

Local Teachers' Union Leader (if applicable)**:**

_____

Signature/Date

_____

Print Name/Title

Authorized State Official - required**:**
By its signature below, the State hereby accepts the LEA as a Participating LEA.

_____

Signature/Date

_____

Print Name/Title

A. EXHIBIT I – PRELIMINARY SCOPE OF WORK

LEA hereby agrees to participate in implementing the State Plan in each of the areas identified below.

Elements of State Reform Plans	LEA Participation (Y/N)	Comments from LEA (optional)
A. State Success Factors		
The LEAs will set and reach ambitious yet achievable goals, overall and by student subgroup:		
(a) Increasing student achievement in (at a minimum) reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA		
(b) Decreasing achievement gaps between subgroups in reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA;		
(c) Increasing high school graduation rates (as defined in this notice); and		
(d) Increasing college enrollment (as defined in this notice) and increasing the number of students who complete at least a year's worth of college credit that is applicable to a degree within two years of enrollment in an institution of higher education.		
B. Standards and Assessments		
(B)(3) Supporting the transition to enhanced standards and high-quality assessments		
C. Data Systems to Support Instruction		
(C)(3) Using data to improve instruction:		
(i) Use of local instructional improvement systems		
(ii) Professional development on use of data		
(iii) Availability and accessibility of data to researchers		
D. Great Teachers and Leaders		
(D)(2) Improving teacher and principal effectiveness based on performance:		
(i) Measure student growth		
(ii) Design and implement evaluation systems		
(iii) Conduct annual evaluations		
(iv)(a) Use evaluations to inform professional development		
(iv)(b) Use evaluations to inform compensation, promotion, and retention		
(iv)(c) Use evaluations to inform tenure and/or full certification		
(iv)(d) Use evaluations to inform removal		
(D)(3) Ensuring equitable distribution of effective teachers and principals:		
(i) High-poverty and/or high-minority schools		

Elements of State Reform Plans	LEA Participation (Y/N)	Comments from LEA (optional)
(ii) Hard-to-staff subjects and specialty areas		
(D)(5) Providing effective support to teachers and principals:		
(i) Quality professional development		
(ii) Measure effectiveness of professional development		
E. Turning Around the Lowest-Achieving Schools		
(E)(2) Turning around the lowest-achieving schools		
F. State Reform Efforts		
Participate fully in State reform efforts.		

For the Participating LEA

Authorized LEA Signature/Date

Print Name/Title

For the State

Authorized State Signature/Date

Print Name/Title

LEA Preliminary Minimum Allocations

Race to the Top - Anticipated Allocations	
Participating School District	**Amount**
Alpine	$6,876,975
Beaver	$448,727
Box Elder	$1,168,279
Cache	$1,332,601
Canyons	$4,090,428
Carbon	$1,000,000
Daggett	$134,423
Davis	$6,991,357
Duchesne	$1,000,000
Emery	$775,768
Garfield	$383,850
Grand	$688,344
Granite	$16,211,117
Iron	$2,394,990
Jordan	$4,310,533
Juab	$571,476
Kane	$428,972
Logan	$1,350,928
Millard	$991,040
Morgan	$430,151
Murray	$1,000,000
Nebo	$2,908,316
North Sanpete	$878,351
North Summit	$330,507
Ogden	$4,839,408
Park City	$1,000,000
Piute	$250,000
Provo	$3,631,359
Rich	$221,447
Salt Lake	$10,268,541
San Juan	$1,745,552
Sevier	$1,000,000
South Sanpete	$1,000,000
South Summit	$365,377
Tintic	$200,396
Tooele	$1,112,769
Uintah	$1,000,000
Wasatch	$1,000,000

Race to the Top - Anticipated Allocations	
Participating School District	**Amount**
Washington	$4,308,800
Wayne	$250,000
Weber	$3,049,321

Race to the Top - Anticipated Allocations	
Participating Charter School	**Amount**
American Leadership Academy	$485,896
American Preparatory Academy	$310,084
AMES	$250,000
Beehive (BSTA)	$122,341
Canyon Rim Academy	$147,823
Channing Hall	$196,586
City Academy	$158,422
CS Lewis Academy	$181,849
Davinci Academy	$216,337
Dual Immersion Academy	$229,360
Early Light Academy	$176,882
East Hollywood High	$170,253
Edith Bowen Laboratory School	$151,125
Entheos Academy	$236,135
Excelsior Academy	$228,641
Fast Forward High	$113,827
Freedom Academy	$282,593
Gateway Preparatory Academy	$280,887
George Washington Academy	$200,069
Guadalupe School	$142,615
Hawthorn Academy	$243,430
Intech Collegiate High School	$108,099
Itineris Early College High	$116,302
John Hancock Charter School	$122,789
Karl G Maeser	$139,358
Lakeview Academy	$250,000
Legacy Preparatory Academy	$213,616
Liberty Academy	$109,715
Lincoln Academy	$154,882

Race to the Top - Anticipated Allocations	
Participating Charter School	**Amount**
Merit College Preparatory Academy	$171,732
Moab Community School	$88,911
Monticello Academy	$268,040
Mountainville Academy	$214,474
Navigator Pointe Academy	$209,079
Noah Webster Academy	$202,455
North Davis Preparatory Academy	$286,932
North Star Academy	$148,062
NUAMES	$144,303
Odyssey Charter School	$177,884
Ogden Preparatory Academy	$286,299
Open Classroom	$161,143
Open High School	$70,889
Oquirrh Mountain	$222,725
Paradigm High School	$239,565
Pinnacle Canyon Academy	$312,691
Providence Hall	$167,659
Quest Academy	$187,093
Ranches Academy	$143,396
Reagan Academy	$252,207
Renaissance Academy	$250,000
Rockwell Charter High School	$237,416
Salt Lake Arts Academy	$117,561
Salt Lake Center for Science Education	$127,325
Salt Lake School for the Performing Arts	$74,419
Soldier Hollow Charter School	$160,367
Spectrum Academy	$131,177
Success Academy	$123,460
Success School	$60,300
Summit Academy	$250,000
Syracuse Arts Academy	$235,564
Thomas Edison (North + South)	$271,234
Timpanogos Academy	$145,012
Tuacahn	$106,186
UCAS	$135,193
Uintah River High	$104,424
Utah Virtual Academy	$102,652

Race to the Top - Anticipated Allocations	
Participating Charter School	**Amount**
Venture Academy	$201,882
Vista at Entrada	$137,953
Walden School of Liberal Arts	$241,424
Wasatch Peak Academy	$150,791

General Budget Table

Budget Categories	Amount Budgeted
LEA Base Allocations	**$87,500,000**
SEA Addition to participating LEA Allocations	**$18,000,000**
SEA Reform Projects	
Reform Area One	**26,691,508**
Reform Area Two	**12,925,000**
Reform Area Three	**19,931,862**
Reform Area Four	**5,000,000**
SEA Administration and Evaluation	**$4,951,630**
Total:	**$175,000,000**

Participating LEA Memorandum of Understanding

This Memorandum of Understanding ("MOU") is entered into by and between the Utah Board of Education and _____ ("Participating LEA"). The purpose of this agreement is to establish a framework of collaboration, as well as articulate specific roles and responsibilities in support of the State in its implementation of an approved Race to the Top grant project.

IV. SCOPE OF WORK

Exhibit I, the Preliminary Scope of Work, indicates which portions of the State's proposed reform plans ("State Plan") the Participating LEA is agreeing to implement. (Note that, in order to participate, the LEA must agree to implement all or significant portions of the State Plan.)

V. PROJECT ADMINISTRATION

A. PARTICIPATING LEA RESPONSIBILITIES

In assisting the State in implementing the tasks and activities described in the State's Race to the Top application, the Participating LEA subgrantee will:

1) Implement the LEA plan as identified in Exhibits I and II of this agreement;
2) Actively participate in all relevant convenings, communities of practice, or other practice-sharing events that are organized or sponsored by the State or by the U.S. Department of Education ("ED");
3) Post to any website specified by the State or ED, in a timely manner, all non-proprietary products and lessons learned developed using funds associated with the Race to the Top grant;
4) Participate, as requested, in any evaluations of this grant conducted by the State or ED;
5) Be responsive to State or ED requests for information including on the status of the project, project implementation, outcomes, and any problems anticipated or encountered;
6) Participate in meetings and telephone conferences with the State to discuss (a) progress of the project, (b) potential dissemination of resulting non-proprietary products and lessons learned, (c) plans for subsequent years of the Race to the Top grant period, and (d) other matters related to the Race to the Top grant and associated plans.

B. STATE RESPONSIBILITIES

In assisting Participating LEAs 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 carrying out the LEA Plan as identified in Exhibits I and II of this agreement;
2) Timely distribute the LEA's portion of Race to the Top grant funds during the course of the project period and in accordance with the LEA Plan identified in Exhibit II;
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 project.

C. JOINT RESPONSIBILITIES

1) The State and the Participating LEA will each appoint a key contact person for the Race to the Top grant.
2) These key contacts from the State and the Participating LEA will maintain frequent communication to facilitate cooperation under this MOU.
3) State and Participating LEA grant personnel will work together to determine appropriate timelines for project updates and status reports throughout the whole grant period.
4) State and Participating LEA grant personnel will negotiate in good faith to continue to achieve the overall goals of the

State's Race to the Top grant, even when the State Plan requires modifications that affect the Participating LEA, or when the LEA Plan requires modifications.

D. STATE RECOURSE FOR LEA NON-PERFORMANCE

If the State determines that the LEA is not meeting its goals, timelines, budget, or annual targets or is not fulfilling other applicable requirements, the State grantee will take appropriate enforcement action, which could include a collaborative process between the State and the LEA, or any of the enforcement measures that are detailed in 34 CFR section 80.43 including putting the LEA on reimbursement payment status, temporarily withholding funds, or disallowing costs.

VI. ASSURANCES

The Participating LEA hereby certifies and represents that it:

1) Has all requisite power and authority to execute this MOU;

2) Is familiar with the State's Race to the Top grant application and is supportive of and committed to working on all or significant portions of the State Plan;

3) Agrees to be a Participating LEA and will implement those portions of the State Plan indicated in Exhibit I, if the State application is funded,

4) Will provide a Final Scope of Work to be attached to this MOU as Exhibit II only if the State's application is funded; will do so in a timely fashion but no later than 90 days after a grant is awarded; and will describe in Exhibit II the LEA's specific goals, activities, timelines, budgets, key personnel, and annual targets for key performance measures ("LEA Plan ") in a manner that is consistent with the Preliminary Scope of Work (Exhibit I) and with the State Plan; and

5) Will comply with all of the terms of the Grant, the State's subgrant, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99).

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, and in consultation with ED.

V. DURATION/TERMINATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a grant is received, ending upon the expiration of the grant project period, or upon mutual agreement of the parties, whichever occurs first.

VI. SIGNATURES

LEA Superintendent (or equivalent authorized signatory) - required**:**

_____

Signature/Date

_____

Print Name/Title

President of Local School Board (or equivalent, if applicable)**:**

_____

Signature/Date

_____

Print Name/Title

Local Teachers' Union Leader (if applicable)**:**

_____

Signature/Date

_____

Print Name/Title

Authorized State Official - required**:**
By its signature below, the State hereby accepts the LEA as a Participating LEA.

_____

Signature/Date

_____

Print Name/Title

A. EXHIBIT I – PRELIMINARY SCOPE OF WORK

LEA hereby agrees to participate in implementing the State Plan in each of the areas identified below.

Elements of State Reform Plans	LEA Participation (Y/N)	Comments from LEA (optional)
A. State Success Factors		
The LEAs will set and reach ambitious yet achievable goals, overall and by student subgroup:		
(e) Increasing student achievement in (at a minimum) reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA		
(f) Decreasing achievement gaps between subgroups in reading/language arts and mathematics, as reported by the NAEP and the assessments required under the ESEA;		
(g) Increasing high school graduation rates (as defined in this notice); and		
(h) Increasing college enrollment (as defined in this notice) and increasing the number of students who complete at least a year's worth of college credit that is applicable to a degree within two years of enrollment in an institution of higher education.		
B. Standards and Assessments		
(B)(3) Supporting the transition to enhanced standards and high-quality assessments		
C. Data Systems to Support Instruction		
(C)(3) Using data to improve instruction:		
(i) Use of local instructional improvement systems		
(ii) Professional development on use of data		
(iii) Availability and accessibility of data to researchers		
D. Great Teachers and Leaders		
(D)(2) Improving teacher and principal effectiveness based on performance:		
(i) Measure student growth		
(ii) Design and implement evaluation systems		
(iii) Conduct annual evaluations		
(iv)(a) Use evaluations to inform professional development		
(iv)(b) Use evaluations to inform compensation, promotion, and retention		
(iv)(c) Use evaluations to inform tenure and/or full certification		
(iv)(d) Use evaluations to inform removal		
(D)(3) Ensuring equitable distribution of effective teachers and principals:		
(i) High-poverty and/or high-minority schools		
(ii) Hard-to-staff subjects and specialty areas		
(D)(5) Providing effective support to teachers and principals:		
(i) Quality professional development		
(ii) Measure effectiveness of professional development		
E. Turning Around the Lowest-Achieving Schools		
(E)(2) Turning around the lowest-achieving schools		

Elements of State Reform Plans	LEA Participation (Y/N)	Comments from LEA (optional)
F. State Reform Efforts		
Participate fully in State reform efforts.		

For the Participating LEA

Authorized LEA Signature/Date

Print Name/Title

For the State

Authorized State Signature/Date

Print Name/Title

Letters of Support Table of Contents

UTAH STATE BOARD OF EDUCATION

250 East Cesar E. Chavez Blvd.
(500 South)
P.O. Box 144200
Salt Lake City, UT
84114-4200

Voice: (801) 538-7517
Fax: (801) 538-7768
TDD: (801) 538-7876

January 8, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW, Room 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

In its meeting of January 7, 2010 the Utah State Board of Education unanimously adopted a motion of support for the Race to the Top application prepared under the leadership of the Utah State Office of Education. Utah's State Board of Education is a directly elected body with constitutional authority for "general control and supervision" of our state's system of public education.

The preparation of Utah's application has included a program of outreach to stakeholders across the state and across the range of interests. Regional roundtable meetings were held with hundreds of participants—teachers, parents, local school boards, local business leaders, principals, and students. Our legislature has been a collaborative partner from the beginning of the preparation of our application. We have worked closely with our teachers, principals, and superintendents. You can have confidence in the broad base of support for the reform efforts that are proposed.

Our Utah Race to the Top application is also carefully aligned to the State Board of Education's statement of vision and mission, *Promises to Keep*. Prior to the advent of ARRA and Race to the Top, Utah was well along a path of hard work to improve the quality of schools and outcomes for all students.

The mission of public education, as adopted by the State Board of Education is:

- Ensuring literacy and numeracy for all Utah children.
- Providing high quality instruction for all Utah children.
- Establishing curriculum with high standards and relevance for all Utah children.
- Requiring effective assessment to inform high quality instruction and accountability.

We were pleased to find that the "Core Reform Areas" enunciated in Race to the Top were very similar to the mission elements already in place in Utah.

The Utah application arises from a unique context. Our school systems are extraordinarily lean and efficient. We believe that our success in the Utah economic and fiscal environment will be a useful example that will result in important knowledge for other states in the future. We have a tradition of doing much more with less, so we think the results from a Race to the Top investment in Utah will be very valuable.

We appreciate the opportunity to work with the United States Department of Education to accomplish our Utah mission and request that you consider this application for the benefit of Utah children.

Sincerely,

Debra G. Roberts, Chair
Utah State Board of Education

State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Office of the Governor

January 12, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Room 3E108
Washington, D.C. 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler,

It is my pleasure to write this letter of support for Utah's Race to The Top application. I reviewed our state's plan and offer my highest recommendation for the plan and our team of professionals.

Utah leads the nation in many aspects of education. Our state leads in teacher quality and credentialing, as well as data and information systems, and in the areas of curriculum and assessment. Our recommendations for accountability and assessment are cutting edge and afford state-of-the-art technology in providing information to parents and teachers.

Our state is well positioned to assist other states in education improvements and reforms. We have a strong charter school program, a voucher program for students with disabilities and a high level of participation of students in dual enrollment programs. While our per pupil spending is the lowest in the nation and our class sizes are the largest; our students perform above the national average on the ACT. Utah is getting it right!

We would be honored to be selected as a state to be recognized by receiving a Race to The Top Grant.

Sincerely,

Gary R. Herbert
Governor

Utah School Superintendents Association

Steven H. Peterson, Ed. D., Executive Director
860 East 9085 South, Sandy, UT 84094
(801) 566-1207, Fax (801) 561-4579
Email address: speterson@usba.cc

January 7, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah School Superintendents Association would like to show support for the Utah State Office of Education's Race to the Top application.

The purpose of The Utah School Superintendents Association (USSA) is:

- To be an advocate for children and public education.
- To discuss current and likely future problems in public education and provide leadership on statewide educational matters.
- To provide in-service and professional growth opportunities to members.
- To cooperate with other educational groups and administrative organizations to maximize influence and for professional development.
- To actively seek and support needed legislation and funding for public education.

This grant application will provide Utah with the opportunity to provide the best education for all Utah's children.

Sincerely,

Supt. Ronald Wolff, President of Utah School Superintendents Asso.

UTAH EDUCATION ASSOCIATION
www.utea.org

Utah Education Association

Kim Campbell, President
Ellen Thompson, Vice President
Mark D. Mickelsen, Executive Director
Ryan Anderson, NEA State Director
Jesse DeHay, NEA State Director

May 26, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm that the Utah Education Association supports the Utah State Office of Education's Race to the Top application.

The UEA understands that it is the intention of this application that the programs undertaken in Utah by the Race to the Top grant will be developed in collaboration with educators through the voice of their local associations, as well as the state association, and be based on solid education research which will inform policy and practice.

Supporting this grant application will allow Utah to continue to improve public education for all Utah's children and teachers. Thank you for your consideration of our request.

Sincerely,

(b)(6)

Kim Campbell
President

Utah Association of Secondary School Principals

January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah Association of Elementary School Principals (UAESP) supports this Race to the Top application from the Utah State Office of Education.

The Utah Association of Secondary School Principals is a non-profit organization, whose purpose is to ever nurture and prize the vital leadership role of the secondary school principal in improving the quality of education for Utah's children.

Please consider funding this application to assist all Utah children in their futures.

Sincerely,

(b)(6)

Todd Quarnberg
Utah Association of Secondary School Principals

Office: (801) 538-7885 or (801) 538-7886 • Fax: (801) 538-7588 • carl.boyington@schools.utah.gov
250 East 500 South • P.O Box 144200 • Salt Lake City, UT 84114-4200

Utah Association of Elementary School Principals
250 East 500 South, P.O. Box 144200, Salt Lake City, Utah 84114-4200
Dr. Luana G. Searle, Executive Director – Kathy Jackson, Secretary

January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah Association of Elementary School Principals (UAESP) supports this Race to the Top application from the Utah State Office of Education.

The mission of the National Association of Elementary School Principals (NAESP), and thereby the UAESP, is to lead in the advocacy and support for elementary and middle level principals and other education leaders in their commitment for all children.

Please consider funding this application to assist all Utah children in their futures.

Sincerely,

Luana Searle
Executive Director
Utah Association of Elementary School Principals

(801) 538-7887 or 538-7888 / Fax (801) 538-7588 / E-Mail Address: luana.searle@schools.utah.gov
E-Mail Address: kathy.jackson@schools.utah.gov
An Affiliate of NAESP

State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Office of the Governor

CHRISTINE KEARL
Deputy for Education

January 12, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler,

It is an honor for me to write this letter of recommendation for Utah's application for a Race to The Top Grant. Utah is deserving of such an award and has much to share with the nation on school reforms.

Our legislature requires Utah to do more with less. We have some unique demographics with a large student population. While most States have access to property taxes for education, 70% of Utah is owned by the federal government making funding for education difficult. Utah income tax goes to support education, but 20% of the residents in Utah are K-12 student population. Given these circumstances Utah students score above the national average on the ACT. Utah does a remarkable job given the challenges.

Utah is leading the nation in many respects. We have a robust information and data collection system. Utah is well connected and implements a unique student identifier connecting PreK to 20. Utah is also leading the nation with assessment reform, providing immediate feedback to teachers to drive instruction.

Utah would be honored to be selected as a State to be recognized in receiving a Race to The Top Grant and look forward to leading the nation with innovation in education.

Sincerely,

Christine Kearl

Christine Kearl
Governor's Education Deputy

HOUSE OF REPRESENTATIVES
STATE OF UTAH
OFFICE OF THE SPEAKER

SPEAKER DAVID CLARK
DISTRICT 74
WASHINGTON COUNTY

350 N. STATE STREET, SUITE 350
P.O. BOX 145030
SALT LAKE CITY, UTAH 84054
(801) 538-1930
E-Mail: dclark@utah.gov

January 14, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

As the Utah Speaker of the House of Representatives, I submit this letter of support for the Utah State Office of Education's grant application for Race to the Top.

Utah has the highest population of children per adult in the nation. We value our families and want our students to have the best education possible.

We request that you consider approving this request for the benefit of Utah children.

Sincerely,

David Clark
Speaker, Utah House of Representatives

SENATOR
PATRICIA W. JONES
MINORITY LEADER

FOURTH DISTRICT

UTAH STATE SENATE

4571 SYCAMORE DRIVE
HOLLADAY, UT 84117
(W) 801-522-5722
(H) 801-278-7667
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pjones@utahsenate.org

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801-538-1035 • www.utahsenate.org

January 12, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Dear Mr. Butler:

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

As the Utah Senate Minority Leader, it is my pleasure to write a letter strongly supporting the Utah State Office of Education's grant application for Race to the Top. Joining me in support of the Utah State Office of Education's grant application for Race to the Top are my colleagues in the Utah State Senate Minority Caucus.

Due to the numerous benefits Utah students would receive, I urge your consideration in approving this grant application.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Patricia W. Jones

Senator Patricia W. Jones
Senate Minority Leader

njd

UTAH STATE OFFICE OF EDUCATION

Leadership...Service...Accountability

Larry K. Shumway, Ed.D., State Superintendent of Public Instruction
Voice: (801) 538-7500 Fax: (801) 538-7521 TDD: (801) 538-7876
250 East Cesar E. Chavez Blvd. (500 South) P.O. Box 144200 Salt Lake City, UT 84114-4200

January 7, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah State Charter School Board enthusiastically supports the Utah State Office of Education's application for the above-referenced funding opportunity. Utah has a strong tradition of striving for quality in education and has done a remarkable job with limited resources. While our citizens carry one of the highest tax burdens per taxpayer for funding public education, because of the large number of children in the system, Utah continues to struggles to raise itself from the bottom of the ladder when it comes to funding per pupil. Nevertheless, the teachers, parents, administrators and others involved in the system have dedicated themselves to achieving positive results. The funding that could be available to Utah through the Race to the Top program would assist in the creation, implementation and acceleration of our student achievement improvement programs. These programs will be a great help for our struggling students and are programs we could only dream about given the current economic environment and our unique demographics.

There are 72 Charter Schools currently operating in Utah, serving approximately 7% of our total public school student population. Together, with our traditional neighborhood schools, we are working hard to innovate, offer more choices to parents and find better ways to educate our children. The State Charter School Board and the charter schools of Utah are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

Thank you for considering Utah's proposal. The charter school community and the Utah State Charter School Board strongly encourage your favorable recommendation and approval of this request. It will be a tremendous benefit for Utah children.

Sincerely,

(b)(6)

Brian R. Allen
Chair, Utah State Charter School Board

UAPCS
Utah Association of Public Charter Schools
P.O. Box 58201 * Salt Lake City, Utah 84158 * 801-953-2748
www.utahcharters.org info@utahcharters.org

January 12, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah Association of Public Charter Schools is enthusiastic in its support of the Utah State Office of Education's application for the Race to the Top funding opportunity.

The R2T education reform initiative effectively aligns with the *Promises to Keep* effort launched this school year by our state's board and office of public education. *Promises* has been an important way to remind people at all levels of our public education system about our duty to the children we serve. *Promises* has been a call for reform.

We have reviewed and understand the objectives and goals outlined in the four reform areas of Utah's Comprehensive Plan. They are indeed essential for excellence and we strongly support them.

The mission of UAPCS is to promote and support quality public schools for Utah children through resources and assistance to Utah's public charter schools. Our mission will be well served by participation as a partner in the implementation of Utah's R2T Comprehensive Reform Plan.

Your support of this grant application will help all of Utah's children and teachers. Please consider our request.

Sincerely,

Steven Winitzky
Executive Director

cc Brenda Hales, Associate Superintendent, Utah State Office of Education
Larry Shumway, Superintendent of Public Instruction, Utah State Office of Education

Utah PTA
everychild. onevoice.

January 11, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm that the Utah Parent Teacher Association supports the Utah State Office of Education's Race to the Top application.

Utah PTA will help every child realize his full potential and will:
Advocate:
Support and speak of behalf of children and youth, and
Involve:
Encourage positive involvement in all facets of a child's life, and
Develop:
Assist in developing skills to raise and protect children and youth.

Supporting this grant application will help all Utah's children and teachers. Please consider our request.

Sincerely,

(b)(6)

Ilene Mecham
President, Utah Parent Teacher Association

5192 South Greenpine Drive, Salt Lake City, UT 84123
801-261-3100, 801-261-3110 Fax, 1-866-PTA-UTAH
kids@utahpta.org, www.utahpta.org

UTAH SYSTEM OF HIGHER EDUCATION
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State Board of Regents
Board of Regents Building, The Gateway
60 South 400 West
Salt Lake City, Utah 84101-1284

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Fax 801.321.7199
TDD 801.321.7130
www.utahsbr.edu

January 7, 2010

Mr. James Butler
U.S. Department of Education
400 Maryland Avenue, S.W., Room 3E108
Washington, D.C. 20202

RE: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah Board of Regents, the governing board for the Utah System of Higher Education, strongly supports the efforts of the Utah State Office of Education (USOE) to secure funds under the Federal Race to the Top legislation. In Utah both K-12 and higher education enjoy a very close working relationship as both systems strive to improve the quality of teacher instruction and student performance.

The learning goals within the application are those that both public and higher education continue to address collaboratively through the K-16 Alliance and various committees on which both systems are represented. Currently, the Curriculum and Assessment Subcommittee of the K-16 Alliance is working to articulate a seamless transition between high school and college, particularly in mathematics and composition. The Teacher Education Subcommittee is working to improve not only preparation of teachers but also school cultures that will best support their success and the success of their students. Faculty, program specialists and administrators represent both systems on the mathematics core curriculum steering committee, math endorsement committee, and system-wide higher education math faculty committee to improve math instruction from pre-service through in-service. The USOE core curriculum committee on language arts includes K-12 and higher education faculty, subject specialists and administrators. The goal of this committee is to improve curriculum and teacher practices in language arts.

The Race to the Top application submitted by the Utah State Office of Education not only builds upon its work but also the collaborative work the State Office and higher education have done together. In our judgment, the application meets the intent and spirit of the law.

We strongly urge you to approve this application for it will provide needed resources to move Utah's K-12 system into the future in order to meet its obligation to prepare students for a changing and challenging world.

Sincerely,

William A. Sederburg
Commissioner

Jed H. Pitcher
Chair, Board of Regents

Bonnie Jean Beesley
Vice Chair, Board of Regents

Utah School Boards Association

860 East 9085 South • Sandy, Utah 84094
(801) 566-1207 • FAX (801) 561-4579

Richard C. Stowell
Executive Director

Support Utah Public Schoo
...where learning comes first!

January 12, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

RE: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah School Boards Association representing all 41 School Districts unanimously supports this Race to the Top application from the Utah State Office of Education.

The mission of the Utah School Boards Association is to provide leadership, advocacy, training, and quality services for effective school board governance. We believe that student achievement is further enhanced when parents, students, and the educational community work together.

Please consider funding this application to assist all Utah children in their futures.

Sincerely,

Barbara Corry

Barbara Corry
President
Utah School Boards Association

BC/jl

THE UNIVERSITY OF UTAH
COLLEGE OF EDUCATION

January 11, 2010

Mr. James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: Letter of support for Utah State Office of Education Application to American Recovery and Reinvestment Act of 2009 Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

As Dean of the College of Education at the University of Utah, I am pleased to confirm our full support for the Utah State Office of Education's application for Race to the Top funding. The vision and mission of the University of Utah's College of Education is to create and foster learning environments for discovery and dissemination of knowledge to promote learning, equitable access, and enhanced learning outcomes for all university students. Through the integration of outstanding teaching, research, and community outreach, the College of Education focuses on research-to-practice innovations on the significant issues that impact education policy and practice, while preparing students for leadership and excellence within a diverse and changing educational community.

The College of Education is pleased to have this opportunity to collaborate with the Utah State Office of Education to significantly increase student achievement and accelerate reforms that will improve the quality of instructional programs for Utah's students now and into the future. I fully support this proposal and ask that you strongly consider approving this application.

Sincerely,

Michael L. Hardman, Dean
College of Education

1705 Campus Center Drive, Milton Bennion Hall #225 • Salt Lake City, Utah 84112-9251
Phone: 801.581.8221 • Fax: 801.581.5223 • www.ed.utah.edu

OFFICE OF THE DEAN
DAVID O. MCKAY SCHOOL OF EDUCATION
BRIGHAM YOUNG UNIVERSITY
301 MCKB
PROVO, UTAH 84602
(801) 422-3694 / FAX: (801) 422-0200

January 11, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of Brigham Young University's David O. McKay School of Education for the Utah State Office of Education's application for Race to the Top funding.

The mission of the David O. McKay School of Education is to improve learning and teaching in the school as well as in the home, church, and community worldwide.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

K. Richard Young

K. Richard Young, Dean
David O. McKay School of Education
Brigham Young University

Emma Eccles Jones
College of Education & Human Services
UtahState UNIVERSITY

Office of the Dean

January 7, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of Utah State University's Emma Eccles Jones College of Education and Human Services for the Utah State Office of Education's application for Race to the Top funding.

As members of the Emma Eccles Jones College of Education and Human Services we provide teaching, service, and research in a variety of disciplines to improve the teaching/learning transaction wherever it takes place and to increase the effectiveness of services for individuals, families, communities, schools, and organizations.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Carol Strong

Carol J. Strong, Dean
Utah State University
Emma Eccles Jones College of Education and Human Services

SUU SOUTHERN UTAH UNIVERSITY
LEARNING LIVES FOREVER

Beverley Taylor Sorenson College of Education and Human Development

Office of the Dean – OM 311
351 West University Boulevard
Cedar City, Utah 84720
Phone (435) 586-7800 or (435) 865-8320
FAX (435) 865-8046

January 6, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of Southern Utah University's Beverley Taylor Sorenson College of Education & Human Development for the Utah State Office of Education's application for Race to the Top funding. Utah's Comprehensive Reform Plan is not only thorough and well designed, but it has broad-based support from educators, leaders, and school patrons statewide.

The Beverley Taylor Sorenson College of Education and Human Development is committed to improving the quality of education in Utah. The College views its primary mission as advancing education, human performance and family development through knowledge, compassion, and action. To accomplish this the College is dedicated to the establishment of collaborative partnerships with local, state, and national agencies.

The College seeks to prepare and develop dynamic, professional educators, administrators, leaders, and career specialists who constantly search for truth and excellence through effective practice, collaboration, and scholarship.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms. We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Prent Klag, Ed.D.
Dean

UVU

UTAH VALLEY UNIVERSITY

SCHOOL of EDUCATION

January 8, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler,

This is to confirm the support of the School of Education at Utah Valley University for the Utah State Office of Education's application for *Race to the Top* funding.

The goal of our programs is to empower candidates to become knowledgeable, prepared, ethical individuals who can assume the role of teacher in public and private settings, and to prepare them for further career choices and advancement. Additionally, the programs enable participants to become more proficient in selecting optimum research-based curriculum design strategies that best apply to specific teaching situations.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Briant J. Farnsworth
Dean, School of Education
Utah Valley University
Orem, Utah

Linda E. Pierce
Associate Dean, School of Education
Utah Valley University
Orem, Utah

WEBER STATE UNIVERSITY

JERRY & VICKIE MOYES
COLLEGE OF
EDUCATION

January 8, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of the Weber State University Jerry & Vickie Moyes College of Education for the Utah State Office of Education's application for Race to the Top funding.

The Jerry and Vickie Moyes College of Education's purpose is two-fold. The first is to provide professional programs and personal growth experiences for the preparation of undergraduate students to serve in a variety of settings:

- public schools, business, industry and government
- careers and personal roles related to marriage, family and young children
- professions involved in promoting health and enhancing human performance

The second is to provide courses for graduate students that extend the professional knowledge, skills and attitudes of educators, including those in schools, business, industry and higher education.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Jack L. Rasmussen, Dean,
Jerry & Vickie Moyes College of Education

OFFICE OF THE DEAN
WEBER STATE UNIVERSITY 1302 UNIVERSITY CIRCLE OGDEN UT 84408-1302
(801) 626-6272 (801) 626-7427 FAX WEBER.EDU/EDUCATION

DIXIE STATE
COLLEGE OF UTAH

Department of Education
Department of Family and Consumer Science

225 South 700 East
St. George, Utah 84770

January 8, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of the Dixie State College of Utah Education Department for the Utah State Office of Education's application for Race to the Top funding.

The main focus of our Education Department is to develop competent, caring, and qualified educators by ensuring they demonstrate professional abilities in academic and pedagogical knowledge, caring teaching skills, and demonstrate dispositions of reflective practitioners.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Brenda Sabey

Brenda Sabey, Ph.D.
Associate Dean and Department Chair of Education
Dixie State College
225 S. 700 E.
St. George, UT 84770
sabey@dixie.edu
(435) 652-7841

UTAH COLLEGE OF APPLIED TECHNOLOGY
Board of Regents Building, The Gateway • 60 South 400 West • Salt Lake City, UT 84101-1284
Telephone: 801-456-7400 • Fax: 801-456-7425 • www.ucat.edu

January 11, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah College of Applied Technology (UCAT) supports Utah's Race to the Top application, which is being submitted by the Utah State Office of Education.

At its core, UCAT exists to meet the needs of Utah's employers for technically-skilled workers by providing market-driven technical education to both secondary and adult students.

Industry-driven technical education plays a critical role in assuring that school children have the best and most relevant opportunities to succeed in school, in the workplace and in post-secondary education. With cross-representation on K-12, UCAT, and higher education boards at the local and state levels, UCAT and its eight regional applied technology college campuses have significant experience over many years working hand-in-hand with employers, local school districts, and colleges and universities to assure that:

- Technical programs are structured to provide the technical and academic competencies needed by current employers for existing and future jobs.
- High school students have access to and opportunities to succeed in educational programs tailored to their interests and aptitudes that will prepare them for graduation and for employment or continued training.

We appreciate your consideration in approving Utah's request for the benefit of all Utah children.

Sincerely,

Robert O. Brems, President
Utah College of Applied Technology

January 14, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of Utah's largest business association, the Salt Lake Chamber, for the Utah State Office of Education's application for Race to the Top funding. As Utah's business leader, we support the stellar work of the Utah State Office of Education in improving student outcomes and preparing Utah's future workforce.

Utah business leaders are united in proclaiming that a high quality education is the key to Utah's economic success. Utah educators achieve great outcomes with limited resources. The Race to the Top funding will do much to raise student achievement and inspire innovative improvements.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Lane Beattie
President & CEO, Salt Lake Chamber

THE PAIUTE INDIAN TRIBE OF UTAH
440 North Paiute Drive · Cedar City, Utah 84720 · (435) 586-1112

Date: January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of the Paiute Indian Tribe of Utah for the Utah State Office of Education's application for Race to the Top funding.

The Paiute Indian Tribe of Utah as a sovereign nation recognizes the importance of collaborating with the Utah State Office of Education to increase educational opportunities and success for its members. We understand the value of quality education for all students.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

(b)(6)

Jeanine Borchardt
Paiute Indian Tribe of Utah
Chairwoman

UTE INDIAN TRIBE
Education Department
P.O. Box 190
Fort Duchesne, Utah 84026
Phone: (435) 725-4087· Fax: (435) 722-0811

January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

RE: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the Ute Indian Tribe's support of the Duchesne County School District's support for the Utah State Office of Education's application for the above-referenced funding opportunity as a participating school.

The Duchesne County School District consists of 14 schools, and 4300 students served within the State of Utah.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this request for the benefit of Utah children.

Sincerely,

Raymond Murray
President of Ute Indian Tribe Education Board

UTE INDIAN TRIBE
Education Department
P.O. Box 190
Fort Duchesne, Utah 84026
Phone: (435) 725-4087· Fax: (435) 722-0811

January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

RE: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the Ute Indian Tribe's support of the Uintah School District's support for the Utah State Office of Education's application for the above-referenced funding opportunity as a participating school.

The Uintah School District consists of 12 schools, and 6000 students served within the State of Utah.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this request for the benefit of Utah children.

Sincerely,

Raymond Murray
President of Ute Indian Tribe Education Board

UTAH STATE OFFICE OF EDUCATION

Leadership...Service...Accountability Larry K. Shumway, Ed.D., State Superintendent of Public Instruction
Voice: (801) 538-7500 Fax: (801) 538-7521 TDD: (801) 538-7876
250 East Cesar E. Chavez Blvd. (500 South) P.O. Box 144200 Salt Lake City, UT 84114-4200

January 13, 2010

James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

This is to confirm the support of the Coalition of Minorities Advisory Committee (CMAC) for the Utah State Office of Education's application for Race to the Top funding.

Our purpose is to be an effective advocacy group for the educational needs of ethnic minority students.

We are happy to have this opportunity to work with the Utah State Office of Education to raise student achievement and accelerate reforms.

We request that you consider approving this application for the benefit of all Utah children.

Sincerely,

Robert R. De Poe III
Utah State Board of Education
Coalition of Minorities Advisory Committee

Utah Technology Council™

January 7, 2010

Mr. James Butler
U.S. Department of Education
400 Maryland Avenue, SW., Rm. 3E108
Washington, DC 20202

Re: American Recovery and Reinvestment Act of 2009
Race to the Top CFDA Number 84.395A

Dear Mr. Butler:

The Utah Technology Council (UTC) strongly supports the Race to the Top application from the Utah State Office of Education (USOE).

Since Utah's technology industry #1 issue is Quality Workforce - Science, technology, engineering and math (STEM) skills are essential to sustain high-growth and innovative companies.

Given this high importance, the UTC, the USOE, educational and industry leaders invested many hours as part of the recent State Math Steering Committee. The committee produced a number of valuable recommendations which will help Utah improve the rigor and relevance in our public and higher education school systems. We hope that these recommendations will be fully implemented. A number of these recommendations tie very well into the USOE's application.

Over the past thirty years, the U.S. high-tech and life science industries have helped America build an innovation-based economy and created high-value, high-wage U.S. jobs. Utah is home to over 5,000 of these companies. These industries provide roughly 66,000 high-paying, high-quality jobs in the state and generate an estimated $3.6 billion in annual wages. These jobs pay, on average, 58% more than the statewide average annual nonagricultural wage. The Milken Institute ranks Utah #1 in technology concentration and dynamism.

We respectfully request that your consideration to approve the USOE's request for the benefit of all Utah children.

Sincerely,

Richard R. Nelson
President & CEO
Utah Technology Council

2855 East Cottonwood Parkway, Suite 110 | Salt Lake City, UT 84121
801-568-3500 | Fax 801-568-1072
utahtechcouncil.org

Appendix 6

Summary of Stakeholder Responses

HQI

Conditions that Need to Exist	Policies or Initiatives Needed	Priorities
High quality professional development	Legislative restoration of funding for professional development	Quality professional development
Professional Learning Communities	Scheduling to support Professional Learning Communities to meet during contract time	Quality teacher preparation programs
Teacher compensation that reinforces quality instruction	Consistency in teacher preparation & licensing (reciprocity)	Competitive teacher salaries
Use of research-based instructional strategies	Supports for new and struggling teachers	Research-based instructional strategies
Consistent use of formative assessments	High expectations for student achievement	Supports for struggling students (including early intervention)
Use of data to inform instruction	Assessment results used to inform instruction	Use of common assessments
Supports for struggling students (3-Tier Model)	Student learning needs to be relevant and lead to post-secondary opportunities	
Curriculum mapping - vertical alignment	Strong emphasis on reading/language and mathematics	
Reduced class size	Interventions for struggling students	

C&CRS

Conditions that Need to Exist	Policies or Initiatives Needed	Priorities
Common expectations of high achievement	High school graduation standards that align with national standards	Rigorous standards that align with national standards (both college and careers)
Awareness of cultural/ethnic needs of all students	Valid and reliable assessment tools that show both achievement and growth	Quality assessment system that provides valid and reliable measures of college and career readiness
Rigorous standards that align with national goals and reflect Utah priorities	Quality professional development for educators	Use data to inform instructional decisions
Assessments that have validated alignment with college/career readiness	Differentiated compensation based on performance and outcomes	Shared vision among stakeholders concerning college and career readiness (strong alliances)

Assessments that move beyond content knowledge	Shared vision among stakeholders concerning college and career readiness	Differentiated instruction that meets individual student needs (supports for struggling students, additional challenge for gifted)
Supports for struggling students	Meaningful parental involvement and training	
Quality career preparation programs (including Pathways)	Interventions for struggling students	
Clearly defined PreK-20 alignment		
Meaningful parental involvement		

ISS

Conditions that Need to Exist	Policies or Initiatives Needed	Priorities
Strong collaboration among teachers and administrators that focuses on student learning	Provide instructional support for teachers (mentoring, coaching, professional development)	Identify struggling students early on and provide interventions
Strong instructional leadership	Interventions for struggling students	Provide high quality instruction
Common definition of what a "struggling school" means	Differentiated compensation based on performance and outcomes	Use data to inform instructional decisions
Highly effective teachers	An educator evaluation system that is fair and valid	Provide quality professional development in research-based instruction
Supports for teachers, including mentoring and professional development	Provide outside consultants to assist in the planning for improvement	Create an environment that encourages parental input and involvement
Effective use of data to inform instruction	Meaningful parental involvement and training	Involve all stakeholders in accountability
Culture of high expectations and success	Hold schools accountable for student outcomes	
Meaningful parental involvement		
Supports for struggling students		

SSL&N

Conditions that Need to Exist	Policies or Initiatives Needed	Priorities
Ensure high quality instruction in every classroom	Competitive compensation for teachers; opportunties to extend contracts	Provide adequate resources
Staff:student ratio allows for individualized attention	Provide instructional support for teachers (mentoring, coaching, professional development)	Provide instructional support for teachers (mentoring, coaching, professional development)

Ability to identify which students need extra help	Interventions for struggling students	Enhance student assessments aligned with the state core that inform instruction and provide accountability based on student growth
Differentiated instruction that provides supports for struggling students and challenge for gifted students	Provide common formative assessments that align with the state core curriculum	Provide high quality instruction in reading /language arts and mathematics
Supports for teachers, including mentoring and professional development	Adopt rigorous standards that align with national standards	Meaningful parent and community involvement
Effective use of data to inform instruction	Provide accountability that includes growth as well as achievement level	Provide technology to support quality instruction
Culture of high expectations and success		
A culture that encourages parental involvement		
Availability of quality preschool programs		

DUGPE

Conditions that Need to Exist	Policies or Initiatives Needed	Priorities
Clear communication	Clearly defined high expectations for students that prepare them for post-secondary opportunities	Engage in respectful dialog among stakeholders
Clearly define the role of each stakeholder group	Create mechanisms that ensure clear communication between stakeholders	Provide adequate resources
Strong collaboration	Ensure both horizontal and vertical alignment of curriculum aligned to state core curriculum	Establish and maintain clear communication
Build an environment of trust	Provide common assessments that align with the state core curriculum and facilitate formative assessments	Assess students regularly and provide support to struggling students
Establish accountability for all	Hold all stakeholder groups accountable for their role in achieving student success	
Valid and reliable assessments that align to the state core curriculum	Ensure that policies are current and support positive learning environments; eliminate unnecessary policies	
Strong commitment to student learning		
A culture that encourages parental input		

Appendix 7

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Race/Ethnicity
Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
ALPINE DISTRICT	All Students	84.50%	84.74%	84.92%	86.26%	77.71%	77.48%	78.71%	73.96%
	Asian	89.31%	87.33%	83.28%	89.60%	84.96%	84.12%	82.20%	81.01%
	African American	64.49%	72.15%	66.10%	70.87%	58.57%	53.88%	54.88%	48.75%
	White	86.61%	87.06%	87.38%	88.41%	80.03%	80.07%	81.40%	76.83%
	Hispanic/Latino	62.96%	63.12%	63.34%	67.52%	55.34%	54.66%	55.84%	49.98%
	American Indian	77.30%	72.60%	74.21%	75.58%	63.45%	62.59%	68.49%	58.28%
	Pacific Islander	77.24%	72.09%	75.14%	80.05%	68.51%	63.58%	66.27%	64.55%
BEAVER DISTRICT	All Students	81.78%	84.64%	83.98%	87.01%	81.58%	84.23%	88.31%	81.78%
	Asian	100.00%	83.33%	66.67%	75.00%	100.00%	100.00%	66.67%	100.00%
	African American			100.00%	100.00%			100.00%	100.00%
	White	84.64%	86.28%	86.97%	89.17%	84.73%	86.57%	90.30%	83.85%
	Hispanic/Latino	55.29%	71.11%	64.36%	70.10%	57.47%	65.96%	76.70%	65.63%
	American Indian	92.31%	90.00%	70.00%	90.00%	75.00%	90.00%	77.78%	87.50%
	Pacific Islander		100.00%				100.00%		
BOX ELDER DISTRICT	All Students	79.00%	80.01%	80.50%	81.21%	75.66%	75.57%	74.51%	68.33%
	Asian	75.00%	76.47%	79.63%	82.00%	68.42%	69.23%	71.15%	68.09%
	African American	75.00%	75.00%	68.63%	78.72%	56.10%	71.74%	60.87%	52.27%
	White	81.58%	82.46%	83.18%	83.32%	78.77%	78.32%	77.59%	70.96%
	Hispanic/Latino	53.98%	58.10%	56.28%	60.37%	48.74%	51.08%	48.51%	45.03%
	American Indian	63.64%	56.10%	61.36%	71.43%	51.28%	48.84%	41.86%	37.50%
	Pacific Islander	75.00%	38.46%	66.67%	69.23%	72.73%	58.33%	60.00%	58.33%
CACHE DISTRICT	All Students	88.17%	88.89%	89.60%	91.24%	85.76%	86.56%	86.25%	83.52%
	Asian	92.11%	94.12%	97.87%	95.92%	96.67%	100.00%	95.00%	90.20%
	African American	70.21%	80.36%	81.82%	80.95%	75.61%	77.36%	69.77%	61.36%
	White	89.87%	90.97%	91.57%	92.67%	87.69%	88.76%	88.36%	85.94%
	Hispanic/Latino	68.12%	66.97%	66.90%	74.78%	63.36%	63.66%	64.35%	57.43%
	American Indian	81.82%	57.69%	76.00%	76.19%	71.43%	59.09%	68.18%	71.43%
	Pacific Islander	72.73%	75.76%	80.65%	76.32%	56.25%	66.67%	63.33%	72.73%
CARBON DISTRICT	All Students	78.90%	80.21%	79.78%	78.69%	74.37%	70.11%	72.41%	65.55%
	Asian	84.62%	100.00%	75.00%	87.50%	72.73%	85.71%	62.50%	75.00%
	African American	44.44%	61.11%	65.00%	59.09%	50.00%	61.11%	57.14%	54.55%
	White	80.65%	82.39%	81.91%	80.82%	77.06%	72.87%	75.64%	68.24%
	Hispanic/Latino	72.00%	69.08%	70.81%	68.48%	63.48%	54.17%	56.10%	50.84%
	American Indian	51.52%	44.44%	45.45%	40.74%	40.00%	48.48%	47.06%	26.92%
	Pacific Islander	100.00%	100.00%	100.00%		100.00%	100.00%	33.33%	
DAGGETT DISTRICT	All Students	89.89%	90.36%	92.50%	93.41%	87.06%	86.25%	89.04%	88.16%
	Asian								
	African American								
	White	90.70%	92.21%	91.89%	94.05%	87.65%	86.67%	89.39%	87.14%
	Hispanic/Latino	50.00%	33.33%	100.00%	80.00%	66.67%	66.67%	80.00%	100.00%
	American Indian	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Pacific Islander								
DAVIS DISTRICT	All Students	83.50%	84.20%	84.18%	85.22%	76.84%	75.86%	77.40%	72.54%
	Asian	85.33%	83.27%	85.11%	86.33%	78.22%	76.97%	81.35%	73.53%
	African American	71.49%	69.49%	67.29%	70.45%	54.43%	52.94%	55.85%	49.02%
	White	85.52%	86.60%	86.79%	87.58%	79.31%	78.98%	80.19%	75.84%
	Hispanic/Latino	62.08%	62.55%	61.97%	66.08%	54.03%	50.18%	54.17%	47.45%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Race/Ethnicity
Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
	American Indian	74.46%	71.64%	67.22%	68.33%	61.02%	49.18%	55.95%	47.02%
	Pacific Islander	79.92%	79.25%	78.64%	76.25%	71.31%	70.90%	72.88%	62.99%
DUCHESNE DISTRICT	All Students	75.88%	76.66%	73.51%	75.73%	74.60%	70.89%	70.88%	62.23%
	Asian	83.33%	75.00%	100.00%	100.00%	60.00%	100.00%	71.43%	72.73%
	African American	100.00%	75.00%	85.71%	80.00%	100.00%	66.67%	71.43%	
	White	78.77%	79.55%	76.32%	79.24%	77.76%	73.79%	73.99%	65.68%
	Hispanic/Latino	62.07%	58.93%	50.00%	45.98%	57.45%	58.18%	50.82%	29.87%
	American Indian	52.63%	52.69%	49.43%	48.52%	46.75%	46.11%	44.65%	38.46%
	Pacific Islander	100.00%	66.67%	77.78%	72.73%	100.00%	66.67%	50.00%	50.00%
EMERY DISTRICT	All Students	83.20%	84.20%	84.17%	83.80%	74.24%	76.67%	79.70%	69.67%
	Asian	90.00%	75.00%	100.00%	87.50%	80.00%	66.67%	100.00%	66.67%
	African American	100.00%	100.00%	90.00%	85.71%	57.14%	100.00%	100.00%	62.50%
	White	84.44%	85.57%	84.88%	85.32%	75.05%	77.59%	79.96%	70.57%
	Hispanic/Latino	63.51%	61.76%	66.04%	63.29%	65.28%	63.08%	69.64%	58.23%
	American Indian	75.00%	81.82%	83.33%	62.50%	50.00%	50.00%	71.43%	57.14%
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GARFIELD DISTRICT	All Students	83.86%	86.24%	83.57%	86.43%	80.83%	83.78%	84.58%	74.68%
	Asian	75.00%	100.00%			75.00%	100.00%		
	African American	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	66.67%	25.00%
	White	87.47%	88.14%	85.40%	88.55%	84.25%	86.10%	86.45%	78.09%
	Hispanic/Latino	61.29%	66.67%	60.00%	52.17%	58.06%	57.89%	55.56%	30.43%
	American Indian	56.52%	60.00%	62.50%	66.67%	57.14%	60.00%	75.00%	44.44%
	Pacific Islander		33.33%		50.00%			100.00%	100.00%
GRAND DISTRICT	All Students	76.70%	74.58%	79.00%	79.64%	66.27%	69.97%	66.85%	59.87%
	Asian	66.67%	71.43%	85.71%	85.71%	66.67%	71.43%	71.43%	77.78%
	African American	80.00%	100.00%	100.00%	50.00%	60.00%	100.00%	50.00%	25.00%
	White	81.12%	80.39%	83.39%	84.12%	70.68%	75.86%	71.97%	65.44%
	Hispanic/Latino	68.66%	58.44%	64.56%	64.65%	57.14%	50.00%	50.59%	40.20%
	American Indian	40.63%	37.31%	49.12%	55.77%	32.81%	39.13%	38.98%	34.62%
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%
GRANITE DISTRICT	All Students	70.29%	71.29%	68.99%	71.79%	66.84%	66.25%	64.99%	57.13%
	Asian	78.48%	78.50%	77.14%	79.97%	79.18%	77.43%	77.40%	66.48%
	African American	54.89%	57.07%	53.46%	55.57%	47.49%	45.96%	47.63%	39.23%
	White	77.77%	78.85%	77.30%	79.54%	74.10%	73.64%	72.98%	65.71%
	Hispanic/Latino	52.12%	55.19%	53.50%	57.94%	49.93%	51.56%	50.45%	43.02%
	American Indian	57.80%	60.78%	55.22%	58.31%	55.84%	56.86%	54.38%	41.27%
	Pacific Islander	59.74%	61.61%	60.75%	66.15%	56.84%	54.38%	57.05%	48.24%
IRON DISTRICT	All Students	82.42%	84.88%	84.85%	86.99%	79.66%	79.53%	82.18%	75.50%
	Asian	95.83%	92.59%	93.33%	92.59%	88.00%	96.15%	90.00%	82.61%
	African American	77.42%	72.50%	79.49%	83.72%	67.74%	62.50%	71.79%	66.67%
	White	85.20%	87.02%	87.37%	89.09%	82.41%	81.66%	84.41%	77.72%
	Hispanic/Latino	60.79%	69.45%	66.22%	73.13%	58.98%	64.76%	66.40%	63.00%
	American Indian	56.30%	65.41%	63.58%	70.07%	56.43%	60.48%	66.67%	54.41%
	Pacific Islander	80.00%	77.27%	86.36%	85.00%	90.48%	70.00%	75.00%	68.18%
JORDAN	All Students	81.13%	82.04%	81.41%	82.05%	73.00%	72.65%	73.27%	68.80%
	Asian	85.89%	87.84%	89.38%	88.88%	80.14%	84.60%	84.50%	80.00%
	African American	64.86%	66.18%	65.74%	68.08%	51.76%	50.77%	53.19%	45.58%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Race/Ethnicity
Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
JORDAN DISTRICT	White	83.42%	84.60%	84.15%	84.76%	75.57%	75.52%	76.23%	72.14%
	Hispanic/Latino	60.31%	60.49%	59.67%	61.76%	51.29%	49.54%	51.01%	45.34%
	American Indian	68.38%	64.52%	62.30%	64.41%	53.36%	50.43%	52.51%	44.66%
	Pacific Islander	69.55%	70.42%	71.89%	72.18%	61.09%	61.24%	59.28%	53.90%
JUAB DISTRICT	All Students	88.94%	90.56%	89.92%	100.00%	87.04%	88.20%	87.33%	100.00%
	Asian	100.00%	100.00%	90.91%		100.00%	100.00%	81.82%	
	African American	83.33%	77.78%	85.71%	100.00%	83.33%	87.50%	85.71%	100.00%
	White	89.21%	91.13%	90.68%	100.00%	87.24%	88.45%	87.75%	100.00%
	Hispanic/Latino	77.42%	77.14%	66.67%		77.42%	77.78%	74.19%	
	American Indian	87.50%	75.00%	85.71%		87.50%	87.50%	85.71%	
	Pacific Islander	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	
KANE DISTRICT	All Students	82.64%	85.38%	85.69%	86.53%	86.16%	85.79%	85.98%	79.96%
	Asian	100.00%	100.00%	100.00%	100.00%	50.00%	100.00%	100.00%	100.00%
	African American		100.00%	100.00%	100.00%		100.00%	100.00%	100.00%
	White	83.20%	85.51%	87.65%	87.36%	86.59%	86.50%	86.96%	80.91%
	Hispanic/Latino	66.67%	76.19%	64.52%	77.78%	80.95%	73.91%	81.48%	69.23%
	American Indian	77.78%	90.91%	55.56%	68.75%	80.00%	72.73%	58.82%	57.14%
	Pacific Islander		100.00%	100.00%	100.00%		100.00%	100.00%	100.00%
LOGAN DISTRICT	All Students	82.55%	85.10%	83.53%	84.50%	77.25%	77.51%	77.10%	73.11%
	Asian	87.50%	89.52%	86.27%	88.30%	85.90%	83.33%	82.29%	77.65%
	African American	71.11%	78.38%	87.88%	83.72%	57.14%	64.71%	74.07%	56.76%
	White	90.05%	91.59%	89.69%	90.48%	85.25%	84.62%	84.52%	80.96%
	Hispanic/Latino	59.84%	66.62%	68.01%	68.99%	54.21%	58.88%	58.63%	55.09%
	American Indian	59.52%	70.45%	62.26%	65.71%	55.26%	58.54%	66.00%	54.55%
	Pacific Islander	93.33%	85.71%	80.77%	80.00%	92.86%	75.00%	64.00%	57.69%
MILLARD DISTRICT	All Students	81.60%	81.94%	79.92%	82.67%	80.44%	80.42%	83.54%	74.84%
	Asian	83.33%	80.00%	92.31%	92.86%	75.00%	78.57%	83.33%	80.00%
	African American	66.67%	66.67%	50.00%	85.71%	42.86%	50.00%	70.00%	42.86%
	White	85.26%	86.41%	83.91%	87.33%	83.59%	84.16%	86.95%	79.03%
	Hispanic/Latino	60.10%	58.10%	58.56%	58.05%	63.59%	61.43%	67.61%	54.98%
	American Indian	58.82%	50.00%	64.71%	81.82%	70.59%	72.22%	58.82%	80.00%
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
MORGAN DISTRICT	All Students	89.26%	87.39%	88.07%	89.93%	87.59%	87.13%	90.20%	83.86%
	Asian	77.78%	88.89%	88.89%	100.00%	88.89%	85.71%	100.00%	100.00%
	African American	100.00%	60.00%	100.00%	80.00%	100.00%	60.00%	75.00%	60.00%
	White	89.71%	87.79%	88.37%	90.02%	87.70%	87.38%	90.55%	84.17%
	Hispanic/Latino	72.73%	73.91%	75.00%	80.00%	80.95%	83.33%	74.07%	66.67%
	American Indian	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%	75.00%
MURRAY DISTRICT	All Students	82.53%	82.36%	81.95%	81.79%	74.41%	75.55%	75.93%	69.51%
	Asian	89.39%	88.24%	88.51%	88.10%	83.87%	87.50%	88.16%	82.72%
	African American	67.53%	71.01%	73.08%	68.89%	55.84%	51.39%	64.94%	55.56%
	White	85.81%	84.85%	84.63%	84.89%	78.10%	79.60%	79.16%	73.17%
	Hispanic/Latino	65.71%	70.02%	66.83%	66.00%	55.84%	57.11%	59.25%	50.44%
	American Indian	51.35%	57.50%	66.67%	65.79%	50.00%	41.03%	42.50%	65.79%
	Pacific Islander	64.44%	78.57%	71.43%	80.65%	63.04%	67.57%	84.62%	53.85%
	All Students	83.25%	83.23%	83.05%	81.08%	80.90%	79.00%	80.63%	73.91%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Race/Ethnicity
Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
NEBO DISTRICT	Asian	87.93%	85.96%	87.04%	80.26%	86.79%	90.38%	81.13%	78.26%
	African American	83.33%	77.97%	74.32%	75.86%	80.39%	73.33%	71.83%	68.67%
	White	85.23%	85.52%	85.78%	83.57%	82.69%	81.43%	83.33%	76.63%
	Hispanic/Latino	61.09%	60.90%	57.86%	59.36%	61.64%	56.27%	56.64%	49.85%
	American Indian	74.40%	77.59%	73.39%	67.65%	70.25%	71.19%	67.52%	57.25%
	Pacific Islander	84.44%	82.42%	85.45%	79.82%	83.13%	78.72%	90.38%	80.18%
NORTH SANPETE DISTRICT	All Students	81.05%	80.29%	83.84%	82.75%	82.79%	82.75%	80.34%	73.75%
	Asian	100.00%	100.00%	83.33%	85.71%	100.00%	100.00%	100.00%	87.50%
	African American	57.14%	100.00%	77.78%	83.33%	66.67%	85.71%	55.56%	50.00%
	White	83.41%	81.83%	86.43%	84.57%	84.02%	83.97%	82.31%	77.15%
	Hispanic/Latino	62.70%	63.64%	62.40%	66.41%	74.11%	72.41%	65.35%	47.33%
	American Indian	75.00%	83.33%	80.00%	100.00%	66.67%	66.67%	80.00%	100.00%
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
NORTH SUMMIT DISTRICT	All Students	84.92%	83.66%	82.41%	83.84%	85.34%	76.08%	83.07%	75.71%
	Asian	100.00%	100.00%	100.00%		100.00%	100.00%		100.00%
	African American	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	100.00%	75.00%
	White	88.11%	86.62%	85.07%	85.84%	87.56%	78.42%	85.14%	77.83%
	Hispanic/Latino	45.24%	46.15%	53.19%	62.22%	57.50%	50.00%	61.70%	53.33%
	American Indian								
	Pacific Islander	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
OGDEN DISTRICT	All Students	63.38%	64.86%	62.00%	64.19%	58.03%	55.89%	53.48%	44.51%
	Asian	79.52%	83.95%	84.81%	81.69%	85.33%	86.11%	76.06%	71.67%
	African American	53.64%	61.57%	57.79%	61.39%	50.79%	47.59%	45.73%	36.67%
	White	77.32%	77.87%	74.85%	77.24%	72.20%	69.14%	67.45%	60.40%
	Hispanic/Latino	48.11%	51.42%	49.59%	52.35%	42.81%	42.61%	39.90%	30.97%
	American Indian	64.00%	55.81%	51.65%	52.63%	44.44%	45.83%	44.87%	27.50%
	Pacific Islander	74.19%	81.25%	71.79%	81.25%	75.00%	76.67%	69.70%	60.00%
PARK CITY DISTRICT	All Students	89.20%	90.09%	90.53%	91.00%	88.03%	86.48%	87.31%	82.79%
	Asian	95.45%	96.15%	96.30%	97.44%	95.83%	96.15%	92.31%	85.00%
	African American	83.33%	78.57%	100.00%	90.00%	90.91%	87.50%	92.31%	100.00%
	White	94.08%	95.19%	95.00%	95.03%	92.68%	91.93%	92.46%	88.10%
	Hispanic/Latino	47.50%	50.38%	56.12%	62.80%	51.20%	47.67%	53.92%	48.68%
	American Indian			100.00%	75.00%			100.00%	50.00%
	Pacific Islander	100.00%	100.00%	100.00%	62.50%	100.00%	100.00%	75.00%	62.50%
PIUTE DISTRICT	All Students	80.92%	82.80%	81.36%	80.36%	81.03%	80.25%	83.67%	74.83%
	Asian								
	African American	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	66.67%
	White	83.87%	83.09%	84.52%	81.88%	81.94%	81.02%	85.83%	77.61%
	Hispanic/Latino	46.67%	77.78%	50.00%	62.50%	68.75%	70.59%	64.71%	50.00%
	American Indian								
	Pacific Islander								
PROVO DISTRICT	All Students	80.83%	81.80%	80.78%	82.62%	79.23%	78.90%	78.95%	73.73%
	Asian	83.33%	89.29%	84.35%	86.88%	88.41%	87.97%	84.92%	88.16%
	African American	71.21%	70.49%	69.86%	80.26%	57.58%	58.93%	61.67%	60.56%
	White	88.13%	88.71%	88.94%	89.50%	85.88%	86.15%	86.61%	82.29%
	Hispanic/Latino	61.03%	63.53%	61.02%	65.46%	61.47%	60.89%	61.22%	53.90%
	American Indian	70.59%	75.49%	68.42%	82.93%	73.26%	68.69%	64.20%	69.74%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
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Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
	Pacific Islander	75.76%	82.67%	83.23%	78.95%	84.43%	84.67%	85.42%	65.63%
RICH DISTRICT	All Students	93.95%	92.34%	92.24%	89.24%	89.30%	89.50%	89.90%	78.57%
	Asian				100.00%				
	African American		100.00%						
	White	93.93%	92.17%	92.17%	89.72%	89.25%	89.39%	89.81%	80.50%
	Hispanic/Latino	100.00%	100.00%	100.00%	83.33%	100.00%	100.00%	100.00%	57.14%
	American Indian			100.00%	50.00%			100.00%	
	Pacific Islander								
SALT LAKE DISTRICT	All Students	70.60%	71.72%	70.82%	72.31%	64.19%	64.17%	64.14%	55.72%
	Asian	83.08%	86.93%	86.14%	81.42%	74.07%	80.13%	79.77%	70.31%
	African American	50.47%	51.01%	49.46%	53.98%	41.70%	36.03%	43.49%	37.16%
	White	86.53%	86.75%	86.89%	87.48%	77.73%	78.75%	79.10%	72.02%
	Hispanic/Latino	52.69%	55.50%	55.36%	58.59%	51.63%	51.24%	50.87%	41.74%
	American Indian	54.90%	56.09%	53.04%	60.17%	48.26%	48.46%	46.72%	37.83%
	Pacific Islander	64.97%	68.27%	68.82%	67.77%	58.26%	59.63%	61.14%	45.49%
SAN JUAN DISTRICT	All Students	59.50%	63.39%	64.95%	70.41%	54.92%	57.79%	60.20%	53.73%
	Asian	50.00%	33.33%	66.67%	100.00%	50.00%	50.00%	66.67%	100.00%
	African American	80.00%		60.00%	100.00%	60.00%		60.00%	
	White	85.58%	84.13%	85.89%	87.78%	84.02%	85.82%	86.70%	79.70%
	Hispanic/Latino	65.63%	70.27%	71.05%	80.00%	57.58%	73.33%	82.35%	57.50%
	American Indian	39.26%	46.72%	47.45%	54.17%	35.58%	36.81%	38.05%	30.01%
	Pacific Islander	66.67%	85.71%	71.43%	71.43%	40.00%	71.43%	71.43%	71.43%
SEVIER DISTRICT	All Students	84.68%	86.92%	83.43%	100.00%	83.03%	85.77%	83.93%	100.00%
	Asian	100.00%	100.00%	100.00%		100.00%	85.71%	100.00%	
	African American	85.71%	85.71%	85.71%		71.43%	71.43%	71.43%	
	White	85.65%	88.13%	85.09%	100.00%	84.06%	86.70%	85.32%	100.00%
	Hispanic/Latino	75.86%	73.40%	62.04%		67.44%	78.41%	69.90%	
	American Indian	58.62%	62.30%	56.90%		69.49%	63.64%	59.65%	100.00%
	Pacific Islander	100.00%	100.00%	87.50%		75.00%	100.00%	75.00%	
SOUTH SANPETE DISTRICT	All Students	86.27%	84.38%	85.55%	85.49%	90.95%	88.04%	87.63%	82.29%
	Asian	87.50%	100.00%	66.67%	100.00%	100.00%	100.00%	100.00%	50.00%
	African American	100.00%	100.00%	100.00%	71.43%	80.00%	100.00%	75.00%	57.14%
	White	88.48%	86.12%	88.84%	87.27%	91.97%	89.95%	89.79%	84.60%
	Hispanic/Latino	64.12%	65.00%	58.55%	70.32%	81.25%	72.11%	71.34%	66.06%
	American Indian	76.47%	84.62%	75.00%	87.50%	87.50%	78.57%	73.33%	80.00%
	Pacific Islander	94.44%	96.00%	86.67%	88.89%	94.12%	92.00%	86.67%	90.00%
SOUTH SUMMIT DISTRICT	All Students	84.67%	86.01%	86.76%	85.84%	82.97%	87.52%	87.55%	81.28%
	Asian		100.00%		100.00%				100.00%
	African American	80.00%	83.33%	100.00%	85.71%	66.67%	66.67%	62.50%	85.71%
	White	86.99%	87.39%	88.06%	87.23%	84.84%	89.25%	89.69%	83.19%
	Hispanic/Latino	50.00%	61.54%	66.67%	70.59%	50.00%	60.53%	65.38%	62.16%
	American Indian	50.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Pacific Islander								
TINTIC DISTRICT	All Students	83.72%	89.17%	81.20%	86.33%	73.88%	72.97%	83.17%	70.71%
	Asian								
	African American								
	White	83.33%	90.18%	80.18%	85.93%	73.39%	75.24%	82.47%	70.59%

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LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
[illegible]	Hispanic/Latino	100.00%	66.67%	100.00%	100.00%	50.00%	33.33%	100.00%	66.67%
	American Indian	83.33%	80.00%	100.00%	100.00%	100.00%	33.33%	100.00%	100.00%
	Pacific Islander								
TOOELE DISTRICT	All Students	79.23%	79.13%	78.65%	78.56%	73.21%	70.99%	73.64%	64.09%
	Asian	89.19%	83.72%	80.43%	89.13%	77.78%	68.29%	79.49%	75.61%
	African American	75.28%	80.81%	66.98%	74.49%	77.11%	65.66%	56.86%	58.16%
	White	81.88%	81.24%	81.49%	80.91%	75.78%	73.65%	76.25%	66.52%
	Hispanic/Latino	60.21%	64.23%	59.51%	61.17%	53.91%	54.61%	56.65%	47.40%
	American Indian	60.18%	68.47%	68.18%	65.17%	60.38%	55.75%	64.77%	51.14%
	Pacific Islander	88.37%	77.05%	83.87%	87.50%	73.33%	68.33%	83.61%	73.02%
UINTAH DISTRICT	All Students	74.68%	73.52%	69.67%	72.98%	74.46%	70.71%	71.64%	63.71%
	Asian	62.50%	80.00%	83.33%	78.57%	100.00%	88.89%	80.00%	55.56%
	African American	45.45%	77.78%	64.29%	64.29%	77.78%	55.56%	53.85%	61.54%
	White	78.21%	77.91%	74.14%	76.96%	77.26%	75.04%	75.65%	68.11%
	Hispanic/Latino	65.45%	66.36%	68.70%	69.88%	62.73%	60.17%	68.64%	54.09%
	American Indian	53.89%	41.46%	30.59%	39.22%	58.26%	43.87%	39.39%	29.33%
	Pacific Islander	80.00%	82.35%	83.33%	71.43%	90.00%	52.94%	83.33%	66.67%
WASATCH DISTRICT	All Students	80.26%	80.89%	82.03%	83.60%	76.74%	78.89%	77.47%	71.57%
	Asian	66.67%	83.33%	71.43%	88.24%	75.00%	90.00%	84.62%	76.47%
	African American	81.82%	91.67%	50.00%	87.50%	54.55%	66.67%	28.57%	25.00%
	White	84.16%	85.74%	87.28%	89.53%	80.10%	83.74%	82.71%	77.88%
	Hispanic/Latino	52.17%	48.16%	54.00%	53.16%	54.28%	51.13%	51.14%	41.79%
	American Indian	57.14%	83.33%	72.73%	60.00%	75.00%	72.73%	72.73%	60.00%
	Pacific Islander	40.00%	60.00%	28.57%	87.50%	66.67%	50.00%	28.57%	71.43%
WASHINGTON DISTRICT	All Students	80.12%	79.49%	78.85%	80.55%	75.61%	73.72%	76.24%	70.60%
	Asian	82.26%	88.57%	85.71%	87.65%	82.76%	88.52%	87.67%	83.33%
	African American	56.82%	67.35%	66.96%	68.07%	58.02%	59.14%	57.27%	50.44%
	White	83.27%	83.47%	83.13%	84.14%	78.88%	77.47%	80.07%	74.42%
	Hispanic/Latino	60.47%	54.53%	54.40%	59.68%	54.07%	51.16%	55.40%	49.40%
	American Indian	52.92%	55.90%	50.00%	52.92%	60.43%	56.50%	54.50%	46.61%
	Pacific Islander	71.12%	77.32%	73.57%	74.90%	64.48%	68.56%	73.06%	63.71%
WAYNE DISTRICT	All Students	84.48%	84.42%	86.90%	85.96%	82.40%	82.35%	83.40%	74.44%
	Asian	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%	100.00%	100.00%
	African American	100.00%	50.00%	100.00%	100.00%	50.00%	100.00%	100.00%	
	White	84.12%	84.41%	86.13%	86.99%	81.96%	81.48%	82.33%	75.10%
	Hispanic/Latino	100.00%	100.00%	100.00%	57.14%	100.00%	100.00%	100.00%	50.00%
	American Indian	50.00%	66.67%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	Pacific Islander	100.00%	100.00%	100.00%	66.67%	100.00%	100.00%	100.00%	66.67%
WEBER DISTRICT	All Students	79.70%	80.56%	78.66%	78.91%	72.92%	72.31%	70.91%	62.24%
	Asian	83.18%	85.19%	81.03%	76.23%	75.92%	78.35%	75.37%	58.82%
	African American	64.84%	64.44%	58.99%	65.00%	58.45%	52.53%	48.08%	43.14%
	White	81.88%	82.81%	81.15%	81.45%	75.17%	74.74%	73.54%	65.60%
	Hispanic/Latino	61.43%	62.83%	60.41%	60.99%	54.66%	53.20%	52.52%	39.77%
	American Indian	63.06%	66.02%	70.37%	68.18%	60.19%	60.42%	65.71%	53.00%
	Pacific Islander	70.51%	72.22%	73.39%	73.47%	56.16%	70.89%	63.73%	55.21%
	All Students	83.32%	83.12%	83.35%	83.95%	78.52%	78.15%	80.05%	71.96%
	Asian	85.26%	86.44%	86.61%	88.69%	84.44%	82.28%	86.43%	82.06%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Race/Ethnicity

Includes all grades included in AYP

LEA	Race/Ethnicity	English Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
ALL CHARTER SCHOOL	African American	73.21%	70.83%	69.41%	77.49%	56.00%	63.25%	61.88%	58.57%
	White	84.87%	84.29%	85.09%	85.27%	80.66%	79.58%	81.96%	74.51%
	Hispanic/Latino	70.66%	71.81%	71.49%	74.03%	61.19%	64.76%	64.81%	51.36%
	American Indian	51.39%	68.67%	66.97%	78.63%	44.74%	60.23%	61.76%	50.46%
	Pacific Islander	77.61%	81.58%	74.05%	75.62%	71.19%	70.59%	75.84%	63.78%
ALL DISTRICTS AND CHARTERS	All Students	79.61%	80.37%	79.76%	80.87%	74.36%	73.86%	74.53%	68.22%
	Asian	83.44%	84.47%	83.95%	84.84%	80.03%	81.22%	81.20%	74.11%
	African American	62.53%	64.52%	61.99%	65.47%	53.05%	51.18%	52.94%	46.08%
	White	84.01%	84.76%	84.51%	85.22%	78.79%	78.51%	79.35%	73.60%
	Hispanic/Latino	56.90%	58.84%	57.82%	61.26%	52.92%	52.65%	53.10%	45.29%
	American Indian	56.30%	58.20%	55.73%	59.81%	52.38%	51.16%	51.72%	42.68%
	Pacific Islander	68.12%	70.14%	70.24%	72.22%	62.79%	62.49%	64.87%	55.77%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Economically Disadvantaged, SWD, ELL

Includes all grades included in AYP. ELL scores not included for 2006 or 2007 because ELL designations changed in 2008.

LEA	Subgroup	Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
ALPINE DISTRICT	All Students	84.50%	84.74%	84.92%	86.26%	77.71%	77.48%	78.71%	73.96%
	Econ Disadv	73.96%	72.98%	71.96%	75.52%	66.49%	63.53%	65.46%	60.24%
	SWD	49.42%	48.63%	51.41%	54.44%	47.27%	44.91%	49.54%	46.89%
	ELL			55.23%	55.33%			51.94%	45.71%
BEAVER DISTRICT	All Students	81.78%	84.64%	83.98%	87.01%	81.58%	84.23%	88.31%	81.78%
	Econ Disadv	75.30%	76.79%	76.37%	80.92%	76.54%	79.79%	85.06%	77.83%
	SWD	54.46%	53.92%	62.96%	72.58%	63.33%	70.11%	80.00%	80.53%
	ELL			27.27%	46.15%			69.23%	37.50%
BOX ELDER DISTRICT	All Students	79.00%	80.01%	80.50%	81.21%	75.66%	75.57%	74.51%	68.33%
	Econ Disadv	69.05%	70.42%	70.55%	71.36%	67.64%	66.20%	66.10%	57.94%
	SWD	39.13%	40.69%	46.84%	48.19%	47.80%	42.30%	41.36%	39.28%
	ELL			45.00%	57.04%			39.11%	39.38%
CACHE DISTRICT	All Students	88.17%	88.89%	89.60%	91.24%	85.76%	86.56%	86.25%	83.52%
	Econ Disadv	82.20%	82.00%	83.34%	86.39%	80.61%	79.75%	80.03%	76.01%
	SWD	51.78%	56.90%	60.44%	65.19%	53.82%	58.60%	59.21%	54.89%
	ELL			56.25%	70.72%			54.28%	54.25%
CARBON DISTRICT	All Students	78.90%	80.21%	79.78%	78.69%	74.37%	70.11%	72.41%	65.55%
	Econ Disadv	71.84%	72.78%	71.38%	72.46%	69.32%	63.02%	64.63%	57.98%
	SWD	45.18%	45.24%	50.18%	45.77%	49.69%	45.29%	50.96%	40.73%
	ELL				58.82%			12.50%	58.82%
DAGGETT DISTRICT	All Students	89.89%	90.36%	92.50%	93.41%	87.06%	86.25%	89.04%	88.16%
	Econ Disadv	88.89%	93.33%	100.00%	94.44%	86.21%	81.25%	75.00%	93.33%
	SWD	54.55%	66.67%	71.43%	88.89%	54.55%	70.00%	57.14%	71.43%
	ELL								
DAVIS DISTRICT	All Students	83.50%	84.20%	84.18%	85.22%	76.84%	75.86%	77.40%	72.54%
	Econ Disadv	70.99%	71.70%	72.29%	74.07%	64.44%	62.22%	65.51%	59.09%
	SWD	45.79%	46.17%	48.10%	50.83%	43.39%	42.92%	46.82%	43.54%
	ELL			61.68%	64.75%			57.84%	49.50%
DUCHESNE DISTRICT	All Students	75.88%	76.66%	73.51%	75.73%	74.60%	70.89%	70.88%	62.23%
	Econ Disadv	67.82%	67.59%	63.32%	65.92%	65.21%	60.86%	61.31%	52.89%
	SWD	27.00%	36.48%	33.13%	39.89%	34.34%	41.03%	38.03%	29.97%
	ELL			51.61%	38.64%			50.00%	25.64%
EMERY DISTRICT	All Students	83.20%	84.20%	84.17%	83.80%	74.24%	76.67%	79.70%	69.67%
	Econ Disadv	80.87%	79.05%	78.02%	78.35%	71.33%	73.14%	76.39%	64.90%
	SWD	63.44%	59.80%	60.51%	59.83%	65.91%	64.10%	66.67%	52.81%
	ELL			42.86%	48.15%			50.00%	55.17%
GARFIELD DISTRICT	All Students	83.86%	86.24%	83.57%	86.43%	80.83%	83.78%	84.58%	74.68%
	Econ Disadv	80.00%	81.63%	78.08%	82.66%	76.52%	79.74%	83.87%	67.08%
	SWD	48.19%	53.95%	53.33%	62.12%	52.94%	61.33%	56.96%	57.58%
	ELL			70.00%	41.18%			63.64%	31.25%
GRAND DISTRICT	All Students	76.70%	74.58%	79.00%	79.64%	66.27%	69.97%	66.85%	59.87%
	Econ Disadv	68.41%	65.92%	67.76%	68.52%	58.45%	61.18%	56.08%	50.00%
	SWD	32.76%	37.39%	39.18%	45.83%	43.36%	37.27%	37.76%	38.95%
	ELL			21.43%	41.30%			26.47%	24.00%
GRANITE DISTRICT	All Students	70.29%	71.29%	68.99%	71.79%	66.84%	66.25%	64.99%	57.13%
	Econ Disadv	58.50%	60.99%	57.19%	61.63%	56.69%	57.57%	55.45%	47.59%
	SWD	31.85%	33.58%	35.17%	36.29%	36.90%	35.57%	39.94%	33.57%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Economically Disadvantaged, SWD, ELL

Includes all grades included in AYP. ELL scores not included for 2006 or 2007 because ELL designations changed in 2008.

LEA	Subgroup	Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
	ELL			49.93%	51.27%			48.44%	40.03%
IRON DISTRICT	All Students	82.42%	84.88%	84.85%	86.99%	79.66%	79.53%	82.18%	75.50%
	Econ Disadv	75.72%	79.10%	78.37%	81.11%	72.24%	74.65%	77.59%	70.20%
	SWD	47.58%	49.05%	55.29%	60.67%	53.89%	53.90%	61.41%	50.35%
	ELL			52.87%	62.86%			59.66%	59.65%
JORDAN DISTRICT	All Students	81.13%	82.04%	81.41%	82.05%	73.00%	72.65%	73.27%	68.80%
	Econ Disadv	66.44%	67.34%	65.16%	67.63%	59.11%	57.98%	57.67%	52.45%
	SWD	41.76%	44.28%	45.06%	47.18%	41.43%	41.77%	43.60%	38.82%
	ELL			40.85%	49.67%			38.73%	39.64%
JUAB DISTRICT	All Students	88.94%	90.56%	89.92%	100.00%	87.04%	88.20%	87.33%	100.00%
	Econ Disadv	85.98%	89.20%	85.50%	100.00%	86.81%	87.89%	84.60%	100.00%
	SWD	66.67%	72.18%	73.08%	100.00%	68.75%	73.72%	72.80%	100.00%
	ELL								
KANE DISTRICT	All Students	82.64%	85.38%	85.69%	86.53%	86.16%	85.79%	85.98%	79.96%
	Econ Disadv	77.60%	79.09%	76.56%	80.66%	81.88%	82.25%	81.67%	72.97%
	SWD	41.84%	48.81%	50.60%	60.81%	54.76%	56.94%	62.34%	53.16%
	ELL				63.64%			25.00%	72.73%
LOGAN DISTRICT	All Students	82.55%	85.10%	83.53%	84.50%	77.25%	77.51%	77.10%	73.11%
	Econ Disadv	72.06%	77.12%	76.24%	76.35%	66.67%	68.74%	68.53%	65.35%
	SWD	44.21%	48.96%	49.86%	51.29%	42.15%	51.43%	49.27%	46.99%
	ELL			46.64%	55.81%			40.89%	45.80%
MILLARD DISTRICT	All Students	81.60%	81.94%	79.92%	82.67%	80.44%	80.42%	83.54%	74.84%
	Econ Disadv	73.37%	74.59%	71.18%	74.11%	75.82%	75.74%	80.18%	69.05%
	SWD	48.24%	50.20%	49.81%	54.44%	56.92%	57.03%	65.64%	54.80%
	ELL			60.00%	52.63%			67.57%	52.94%
MORGAN DISTRICT	All Students	89.26%	87.39%	88.07%	89.93%	87.59%	87.13%	90.20%	83.86%
	Econ Disadv	86.46%	84.82%	85.00%	85.64%	86.56%	83.70%	91.76%	78.72%
	SWD	42.86%	46.99%	49.38%	43.24%	44.16%	45.95%	57.14%	42.11%
	ELL			75.00%	80.00%			33.33%	60.00%
MURRAY DISTRICT	All Students	82.53%	82.36%	81.95%	81.79%	74.41%	75.55%	75.93%	69.51%
	Econ Disadv	69.22%	72.26%	69.74%	70.38%	60.06%	63.98%	63.78%	58.21%
	SWD	45.75%	42.35%	47.92%	47.66%	42.21%	43.00%	45.29%	42.07%
	ELL			47.87%	58.55%			51.18%	47.12%
NEBO DISTRICT	All Students	83.25%	83.23%	83.05%	81.08%	80.90%	79.00%	80.63%	73.91%
	Econ Disadv	73.31%	72.34%	71.54%	70.37%	73.04%	68.67%	70.32%	64.08%
	SWD	52.45%	51.20%	52.49%	52.21%	57.72%	50.45%	57.77%	48.76%
	ELL			54.92%	53.41%			53.86%	47.07%
NORTH SANPETE DISTRICT	All Students	81.05%	80.29%	83.84%	82.75%	82.79%	82.75%	80.34%	73.75%
	Econ Disadv	76.95%	74.29%	77.65%	76.73%	81.08%	79.87%	76.07%	67.92%
	SWD	39.87%	44.13%	52.43%	50.85%	66.90%	62.64%	61.22%	50.57%
	ELL			61.22%	64.71%			61.62%	47.12%
NORTH SUMMIT DISTRICT	All Students	84.92%	83.66%	82.41%	83.84%	85.34%	76.08%	83.07%	75.71%
	Econ Disadv	68.85%	68.22%	69.23%	76.23%	76.72%	64.71%	77.60%	70.63%
	SWD	47.46%	55.56%	44.62%	49.09%	50.00%	40.74%	53.13%	38.98%
	ELL			48.00%	59.52%			59.26%	50.00%
OGDEN	All Students	63.38%	64.86%	62.00%	64.19%	58.03%	55.89%	53.48%	44.51%
	Econ Disadv	55.73%	57.17%	54.30%	56.72%	51.40%	48.48%	45.45%	36.65%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Economically Disadvantaged, SWD, ELL

Includes all grades included in AYP. ELL scores not included for 2006 or 2007 because ELL designations changed in 2008.

LEA	Subgroup	Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
DISTRICT	SWD	27.89%	26.22%	29.38%	32.75%	29.90%	25.55%	28.06%	27.75%
	ELL			38.03%	44.14%			30.76%	26.55%
PARK CITY DISTRICT	All Students	89.20%	90.09%	90.53%	91.00%	88.03%	86.48%	87.31%	82.79%
	Econ Disadv	55.25%	53.31%	57.54%	65.79%	58.55%	52.72%	57.44%	54.24%
	SWD	56.55%	62.21%	65.77%	62.30%	63.99%	58.72%	63.50%	54.55%
	ELL			45.65%	54.85%			46.36%	43.38%
PIUTE DISTRICT	All Students	80.92%	82.80%	81.36%	80.36%	81.03%	80.25%	83.67%	74.83%
	Econ Disadv	75.00%	79.12%	74.47%	75.73%	78.70%	75.82%	82.28%	69.23%
	SWD	52.17%	57.69%		58.33%	50.00%	48.15%		70.59%
	ELL			55.56%	42.86%			55.56%	33.33%
PROVO DISTRICT	All Students	80.83%	81.80%	80.78%	82.62%	79.23%	78.90%	78.95%	73.73%
	Econ Disadv	69.88%	72.48%	69.94%	73.51%	69.85%	69.83%	68.75%	62.67%
	SWD	50.40%	51.24%	51.38%	54.33%	52.16%	52.23%	52.88%	48.24%
	ELL			57.36%	56.76%			59.55%	49.15%
RICH DISTRICT	All Students	93.95%	92.34%	92.24%	89.24%	89.30%	89.50%	89.90%	78.57%
	Econ Disadv	91.23%	87.61%	88.79%	86.09%	85.15%	87.50%	88.79%	70.34%
	SWD	61.90%	73.33%	69.23%	57.14%	68.42%	71.43%	75.00%	41.38%
	ELL				75.00%				50.00%
SALT LAKE DISTRICT	All Students	70.60%	71.72%	70.82%	72.31%	64.19%	64.17%	64.14%	55.72%
	Econ Disadv	59.38%	59.91%	58.74%	60.89%	56.12%	54.30%	53.45%	44.03%
	SWD	39.28%	41.21%	41.96%	45.00%	40.90%	44.03%	47.39%	39.51%
	ELL			54.04%	52.63%			49.76%	40.37%
SAN JUAN DISTRICT	All Students	59.50%	63.39%	64.95%	70.41%	54.92%	57.79%	60.20%	53.73%
	Econ Disadv	50.61%	55.40%	55.67%	63.25%	46.72%	48.99%	49.80%	44.07%
	SWD	19.88%	15.57%	28.66%	24.53%	31.79%	30.26%	30.07%	24.66%
	ELL			27.74%	46.61%			29.92%	31.36%
SEVIER DISTRICT	All Students	84.68%	86.92%	83.43%	100.00%	83.03%	85.77%	83.93%	100.00%
	Econ Disadv	79.89%	82.15%	75.96%	100.00%	78.04%	81.00%	79.60%	100.00%
	SWD	47.39%	53.26%	46.42%	100.00%	55.12%	61.65%	56.23%	100.00%
	ELL			52.17%				65.15%	
SOUTH SANPETE DISTRICT	All Students	86.27%	84.38%	85.55%	85.49%	90.95%	88.04%	87.63%	82.29%
	Econ Disadv	82.44%	79.82%	80.13%	80.42%	88.37%	84.97%	83.99%	76.77%
	SWD	67.60%	52.75%	67.82%	63.18%	77.98%	74.57%	71.02%	63.30%
	ELL			51.72%	67.20%			67.23%	61.48%
SOUTH SUMMIT DISTRICT	All Students	84.67%	86.01%	86.76%	85.84%	82.97%	87.52%	87.55%	81.28%
	Econ Disadv	73.19%	75.76%	74.02%	76.02%	70.77%	78.74%	77.94%	73.99%
	SWD	44.12%	53.85%	56.58%	57.78%	51.61%	61.90%	60.27%	54.44%
	ELL			45.83%	66.10%			40.74%	62.50%
TINTIC DISTRICT	All Students	83.72%	89.17%	81.20%	86.33%	73.88%	72.97%	83.17%	70.71%
	Econ Disadv	65.38%	72.73%	78.26%	83.33%	46.15%	61.54%	81.67%	71.60%
	SWD	60.00%	69.23%	60.00%	58.33%	65.22%	42.86%	46.67%	71.43%
	ELL								
TOOELE DISTRICT	All Students	79.23%	79.13%	78.65%	78.56%	73.21%	70.99%	73.64%	64.09%
	Econ Disadv	71.01%	71.31%	68.99%	68.37%	66.24%	64.91%	64.78%	54.12%
	SWD	45.39%	41.45%	44.77%	45.48%	47.17%	44.88%	52.14%	42.31%
	ELL			52.74%	51.26%			47.24%	43.67%
	All Students	74.68%	73.52%	69.67%	72.98%	74.46%	70.71%	71.64%	63.71%

Percent Proficient on Criterion-Referenced Tests (Utah's ESEA Assessment)
For Charter Schools and Each District, By Economically Disadvantaged, SWD, ELL

Includes all grades included in AYP. ELL scores not included for 2006 or 2007 because ELL designations changed in 2008.

LEA	Subgroup	Language Arts				Mathematics			
		2006	2007	2008	2009	2006	2007	2008	2009
UINTAH DISTRICT	Econ Disadv	67.03%	64.96%	58.51%	62.76%	68.75%	63.01%	62.49%	54.27%
	SWD	33.60%	32.45%	34.19%	37.05%	43.22%	33.60%	36.27%	34.15%
	ELL			53.85%	64.10%			46.15%	52.38%
WASATCH DISTRICT	All Students	80.26%	80.89%	82.03%	83.60%	76.74%	78.89%	77.47%	71.57%
	Econ Disadv	65.92%	62.43%	67.80%	66.14%	64.65%	64.09%	64.61%	54.90%
	SWD	45.43%	49.36%	47.68%	54.91%	52.02%	57.32%	53.47%	48.80%
	ELL			48.07%	50.56%			47.30%	40.06%
WASHINGTON DISTRICT	All Students	80.12%	79.49%	78.85%	80.55%	75.61%	73.72%	76.24%	70.60%
	Econ Disadv	70.88%	68.52%	67.56%	71.18%	67.47%	65.33%	68.95%	62.93%
	SWD	43.85%	40.85%	42.63%	44.99%	47.17%	41.75%	48.06%	39.88%
	ELL			35.80%	48.19%			44.14%	44.04%
WAYNE DISTRICT	All Students	84.48%	84.42%	86.90%	85.96%	82.40%	82.35%	83.40%	74.44%
	Econ Disadv	83.97%	82.40%	86.13%	81.53%	78.08%	78.45%	80.95%	70.75%
	SWD	41.94%	35.90%	41.03%	41.38%	35.71%	54.29%	38.24%	33.33%
	ELL								50.00%
WEBER DISTRICT	All Students	79.70%	80.56%	78.66%	78.91%	72.92%	72.31%	70.91%	62.24%
	Econ Disadv	69.12%	69.94%	67.10%	67.31%	62.61%	62.44%	60.01%	50.69%
	SWD	37.60%	40.49%	39.04%	41.46%	38.29%	39.84%	39.57%	36.13%
	ELL			49.01%	40.52%			40.79%	28.57%
ALL CHARTER SCHOOL	All Students	83.32%	83.12%	83.35%	83.95%	78.52%	78.15%	80.05%	71.96%
	Econ Disadv	75.68%	77.33%	74.90%	77.15%	64.86%	70.44%	69.92%	61.06%
	SWD	45.15%	43.55%	51.37%	52.27%	45.89%	43.32%	51.49%	41.74%
	ELL			50.50%	65.16%			34.76%	41.47%
ALL DISTRICTS AND CHARTERS	All Students	79.61%	80.37%	79.76%	80.87%	74.36%	73.86%	74.53%	68.22%
	Econ Disadv	67.46%	68.65%	66.58%	69.22%	63.60%	62.96%	62.71%	55.58%
	SWD	42.83%	43.85%	45.90%	48.13%	44.84%	44.01%	47.55%	41.94%
	ELL			50.43%	53.07%			48.36%	41.78%

Appendix 8

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 21st 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 standards 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 standards 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:	
Chief State School Officer:	

May 2009

Dear State Partners:

Thank you so much for taking a look at this *unproofed, unformatted* final version of the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects.

This final version is built on your excellent and thorough feedback. We want to begin by thanking you again for your work and that of your teams and the educators in your state. As you may know, we were also in receipt of ten thousand comments from the public Web site, so this draft reflects those comments as well. Finally, of course, several teacher organizations and other leading educational organizations and experts have continued to give us detailed feedback, so our work reflects this as well.

So thank you, thank you, thank you for your constructive feedback, conversation, and joint problem solving throughout the process. We never would have gotten to this final version without so much help and input from you. We hope you can now consider it your own work as well as ours.

In this note, we wanted to outline briefly themes from the feedback, how we incorporated the feedback, and what will be in the appendices and glossary that are not being sent now but will be in the published version.

Themes from the feedback and how we revised the Standards:

1. *Attending more fully to technical reading and writing*: Several states felt we had not adequately addressed technical reading and writing, and the Standards are substantially enhanced in this regard. You will notice the change in the title to make technical texts explicit. Also, we have threaded the demands of technical reading and writing throughout the grade-specific standards. Additional samples of technical reading will be added to Appendix B, and samples of student technical writing will be included in Appendix C.

2. *Ensuring text complexity is treated as a goal that does not overly constrain student reading throughout the year*: States were concerned that the way we had framed the text complexity requirements of the Standards seemed to limit attention to individual student needs during the year. We have substantially revised standard 10 on reading complex texts to ensure it is clear that it is an end-of-year expectation.

3. *Clarifying the grade-by-grade progressions, rendering them smoother and clearer to support high-quality instruction and assessment*. All of the progressions have been reviewed repeatedly and with care; we think you will find them far clearer as grade-specific standards year to year.

4. *Making sure the K–2 material is developmentally appropriate*: We have revised the K–2 standards to ensure that they are developmentally appropriate and that key skills such as fluency are extended to grade 5. In a similar vein, we have made standards pertaining to such areas as media and research applicable at the earliest grades in response to overwhelming feedback to do so.

5. *Expanding the richness of multimedia literacy and global diversity:* We have enhanced the Standards to address a fuller range of media and electronic text. We have also added clearer language on the need to study world literature and works from diverse cultures.

There are many other changes, based, as always, on our understanding of the feedback as well as the evidence for college and career readiness. We have made several clarifications that have been requested. We consider all of the changes we have made refinements, not radical revisions.

The appendices and glossary that will be published with the final Standards:

As requested, we will be adding a glossary of key terms. We are also refining Appendices A, B, and C in accord with your feedback.

Now that this is the final version, we are asking whether there are inadvertent errors that remain. Please let us know of any such errors by May 18th. We will not have the capacity to add significant new material or to make significant changes. However, we ask that states keep in mind their flexibility to add 15 percent to the Standards if they believe there is essential material that needs greater attention.

We have made every effort to listen closely and act with care and judgment. Thanks again for all your help and collaboration.

Best regards,

The ELA/Literacy Writing Team (Sue, David, and Jim)

COMMON CORE STATE STANDARDS FOR

English Language Arts
&
Literacy in History/Social Studies, Science, and Technical Subjects

Table of Contents

Introduction

The Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects ("the Standards") are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of K–12 standards in order to help ensure that all students are college and career ready in literacy no later than the end of high school.

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 on the most important international models as well as research and input from numerous sources, including state departments of education, scholars, assessment developers, professional organizations, educators from kindergarten through college, and parents, students, and other members of the public. In their design and content, refined through successive drafts and numerous rounds of feedback, 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 included in the document only when the best available evidence indicated that its mastery was essential for college and career readiness in a twenty-first-century, globally competitive society. The Standards are intended to be a living work: 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, speaking, listening, and language as well as in mathematics. The CCR Reading, Writing, and Speaking and Listening Standards, released in draft form in September 2009, serve, in revised form, as the backbone for the present document. Grade-specific K–12 standards in reading, writing, speaking, listening, and language translate the broad (and, for the earliest grades, seemingly distant) aims of the CCR standards into age- and attainment-appropriate terms.

The Standards set requirements for English language arts (ELA) but also for literacy in history/social studies, science, and technical subjects. Just as students must learn to read, write, speak, listen, and use language effectively in a variety of content areas, so too must the Standards specify the literacy skills and understandings required for college and career readiness in multiple disciplines. Literacy standards for grade 6 and above are predicated on teachers of ELA, history/social studies, science, and technical subjects using their content area expertise to help students meet the particular challenges of reading, writing, speaking, listening, and language in their respective fields. It is important to note that the 6–12 literacy standards in history/social studies, science, and technical subjects are not meant to replace content standards in those areas but rather to supplement them. States may incorporate the standards into their standards for these subjects or adopt them as content area literacy standards.

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 are expected to demonstrate have wide applicability outside the classroom or workplace. Students who meet the Standards readily undertake the close, attentive reading that is at the heart of understanding and enjoying complex works of literature. They habitually perform the critical reading necessary to pick carefully through the staggering amount of information available today in print and digitally. They actively seek the wide, deep, and thoughtful engagement with high-quality literary and informational texts that builds knowledge, enlarges experience, and broadens worldviews. They reflexively demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic. In short, students who meet the Standards develop the skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language.

May 2010

Key Design Considerations

CCR and grade-specific standards

The CCR standards anchor the document and define general, cross-disciplinary literacy expectations that must be met for students to be prepared to enter college and workforce training programs ready to succeed. The K–12 grade-specific standards define end-of-year expectations and a cumulative progression designed to enable students to meet college- and career-readiness expectations no later than the end of high school. The CCR and high school grade-specific standards work in tandem to define the college- and career-readiness line—the former providing broad standards, the latter providing additional specificity. Hence, both should be considered when developing college- and career-readiness assessments.

Students advancing through the grades are expected to meet each year's grade-specific standards, retain or further develop skills and understandings mastered in preceding grades, and work steadily toward meeting the more general expectations described by the CCR standards.

Grade levels for K–8; grade bands for 9–10 and 11–12

The Standards use individual grade levels in kindergarten through grade 8 to provide useful specificity; the Standards use two-year bands in grades 9–12 to allow schools, districts, and states flexibility in high school course design.

A focus on results rather than means

By emphasizing 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. Thus, the Standards do not mandate such things as a particular writing process or the full range of metacognitive strategies that students may need to monitor and direct their thinking and learning. Teachers are thus free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the Standards.

An integrated model of literacy

Although the Standards are divided into Reading, Writing, Speaking and Listening, and Language strands for conceptual clarity, the processes of communication are closely connected, as reflected throughout this document. For example, Writing standard 9 requires that students be able to write about what they read. Likewise, Speaking and Listening standard 4 sets the expectation that students will share findings from their research.

Research and media skills blended into the Standards as a whole

To be ready for college, workforce training, and life in a technological society, students need the ability to gather, comprehend, evaluate, synthesize, and report on information and ideas, to conduct original research in order to answer questions or solve problems, and to analyze and create a high volume and extensive range of print and nonprint texts in media forms old and new. The need to conduct research and to produce and consume media is embedded into every aspect of today's curriculum. In like fashion, research and media skills and understandings are embedded throughout the Standards rather than treated in a separate section.

Shared responsibility for students' literacy development

The Standards insist that instruction in reading, writing, speaking, listening, and language be a shared responsibility within the school. The K–5 standards include expectations for reading, writing, speaking, listening, and language applicable to a range of subjects, including but not limited to ELA. The grades 6–12 standards are divided into two sections, one for ELA and the other for history/social studies, science, and technical subjects. This division reflects the unique, time-honored place of ELA teachers in developing students' literacy skills while at the same time recognizing that teachers in other areas must have a role in this development as well.

Part of the motivation behind the interdisciplinary approach to literacy promulgated by the Standards is extensive research establishing the need for college- and career-ready students to be proficient in reading complex informational text independently in a variety of content areas. Most of the required reading in college and workforce training programs is informational in structure and challenging in content; postsecondary education programs typically provide students with both a higher volume of such reading than is generally required in K–12 schools and comparatively little scaffolding.

The Standards are not alone in calling for a special emphasis on informational text. The 2009 reading framework of the National Assessment of Educational Progress (NAEP) requires a high and increasing proportion of informational text on its assessment as students advance through the grades.

Distribution of Literary and Informational Passages by Grade in the 2009 NAEP Reading Framework

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

The Standards aim to align instruction with this framework so that many more students than at present can meet the requirements of college and career readiness. In K–5, the Standards follow NAEP's lead in balancing the reading of literature with the reading of informational texts, including texts in history/social studies, science, and technical subjects. In accord with NAEP's growing emphasis on informational texts in the higher grades, the Standards demand that a significant amount of reading of informational texts take place in and outside of the ELA classroom. Fulfilling the standards for 6–12 ELA requires much greater attention to a specific category of informational text—literary nonfiction—than has been traditional. Because the ELA classroom must focus on literature (stories, drama, and poetry) as well as literary nonfiction, a great deal of informational reading in grades 6–12 must take place in other classes if the NAEP assessment framework is to be matched instructionally.[1] To measure students' growth toward college and career readiness, assessments aligned with the Standards should adhere to the distribution of texts across grades cited in the NAEP framework.

NAEP likewise outlines a distribution across the grades of the core purposes and types of student writing. Similar to the Standards, the 2011 NAEP framework cultivates the development of three mutually reinforcing writing capacities: writing to persuade, to explain, and to convey real or imagined experience. Evidence concerning the demands of college and career readiness gathered during development of the Standards concurs with NAEP's shifting emphases: standards for grades 9–12 describe writing in all three forms, but, consistent with NAEP, the overwhelming focus of writing throughout high school should be on writing to argue and to inform or explain.[2]

Distribution of Communicative Purposes by Grade in the 2011 NAEP Writing Framework

Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

It follows that writing assessments aligned with the Standards should adhere to the distribution of writing purposes across grades outlined by NAEP.

What is not *covered by the Standards*

The Standards should be recognized for what they are *not* as well as what they are. The most important intentional design limitations are as follows:

1) The Standards define what all students are expected to know and be able to do, not how teachers should teach. The Standards must be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document.

2) While the Standards do attempt to focus on what is most essential, they do not describe all that can or should be taught. A great deal is left to the discretion of teachers and curiculum developers. The aim of the Standards is to articulate the fundamentals, not to set out an exhaustive list nor a set of restrictions that limits what can be taught beyond what is specified herein.

3) The Standards do not define the nature of advanced work for students who meet the Standards prior to the end of high school. For those students, advanced work in such areas as literature, composition, language, and journalism should be available. This

[1] The percentages on the table reflect the sum of student reading, not just reading in ELA settings. Teachers of senior English classes, for example, are not required to devote 70 percent of reading to informational texts. Rather, 70 percent of student reading across the grade should be informational.

[2] As with reading, the percentages in the table reflect the sum of student writing, not just writing in ELA settings.

work should provide the next logical step up from the college and career readiness baseline established here.

4) The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. It is also beyond the scope of the Standards to define the full range of supports appropriate for English language learners and for students with special needs. At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post-school lives. The Standards should be read as allowing for the widest possible range of students to participate fully from the outset, along with appropriate accommodations to ensure maximum participaton of students with special education needs. For example, for students with disabilities *reading* should allow for use of Braille, screen reader technology, or other assistive devices, while *writing* should include the use of a scribe, computer, or speech-to-text technology. In a similar vein, speaking and *listening* should be interpreted broadly to include sign language. No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom. However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students.

5) While the ELA and content area literacy components described herein are critical to college and career readiness, they do not define the whole of such readiness. Students require a wide-ranging, rigorous academic preparation and, particularly in the early grades, attention to such matters as social, emotional, and physical development and approaches to learning. Similarly, the Standards define literacy expectations in history/social studies, science, and technical subjects, but literacy standards in other areas, such as mathematics and health education, modeled on those herein are strongly encouraged to allow for a comprehensive, schoolwide literacy program.

The Student Who is College and Career Ready in Reading, Writing, Speaking, Listening, and Language

The descriptions that follow are not standards themselves but instead offer a portrait of students who meet the standards set out in this document. As students advance through the grades and master the standards in reading, writing, speaking, listening, and language, they are able to exhibit with increasing fullness and regularity these capacities of the literate individual.

- **They demonstrate independence.**

Students can, without significant scaffolding or support, comprehend and evaluate complex texts 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 and request clarification if something is not understood. They ask relevant questions, build on others' ideas, articulate their own ideas, and ask for confirmation that they have been understood. Without prompting, they observe language conventions, determine word meanings, attend to the connotations of words, and acquire new vocabulary.

- **They build strong content knowledge.**

Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking.

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

Students consider their communication in relation to audience, task, purpose, and discipline. They appreciate nuances, such as how the composition of an audience should affect tone when speaking 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).

- **They comprehend as well as critique.**

Students are engaged and open-minded—but discerning—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.

- **They value 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.

- **They use technology and digital media 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.

- **They come to understand other perspectives and cultures.**

Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own.

How to Read This Document

Overall Document Organization and Main Features

The Standards comprise three main sections: a comprehensive K–5 section and two content area–specific sections for grades 6–12, one for ELA and one for history/social studies, science, and technical subjects. Three appendices (lettered A, B, and C) accompany the main document.

Each section is divided into *strands*. K–5 and 6–12 ELA have Reading, Writing, Speaking and Listening, and Language strands; the 6–12 history/social studies, science, and technical subjects section focuses on Reading and Writing. Each strand is headed by a strand-specific set of *College and Career Readiness Anchor Standards* that is identical across all grades and content areas.

Standards for each grade within K–8 and for grades 9–10 and 11–12 follow the CCR standards in each strand. Each *grade-specific standard* (as these standards are collectively referred to) corresponds to the same-numbered CCR standard. Put another way, each CCR standard has an accompanying grade-specific standard translating the broader CCR statement into grade-appropriate end-of-year expectations.

Individual CCR standards can be identified by their strand, CCR status, and number (R.CCR.6, for example). Individual grade-specific standards can be identified by their strand, grade, and number or number and letter so that RI.4.3, for example, stands for Reading, Informational Text, grade 4, standard 3. Likewise, W.5.1a stands for Writing, grade 5, standard 1a. Strand designations can be found in brackets alongside the full strand title.

Who is responsible for which portion of the Standards

A single K–5 section lists CCR and grade-specific standards for reading, writing, speaking, listening, and language across the curriculum, reflecting the fact that most or all of the instruction students in these grades receive comes from one teacher. Grades 6–12 are covered in two content area–specific sections, the first for the English language arts teacher and the second for teachers of history/social studies, science, and technical subjects. Each section uses the same CCR standards but also includes grade-specific standards tuned to the literacy requirements of the particular discipline(s).

Key Features of the Standards

Reading: Text complexity and the growth of comprehension

The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by-grade "staircase" of increasing text complexity that rises from beginning reading to the college- and career-readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including 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.

Writing: Text types, responding to reading, and research

The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, are applicable to many types of writing, other skills are more properly defined in terms of specific writing types: arguments, informative/explanatory texts, and narratives. Standard 9 stresses the importance of the writing-reading connection by requiring students to draw and write about evidence from literary and informational texts. Because of the centrality of writing to most forms of inquiry, research standards are prominently included in this strand, though skills important to research are infused throughout the document.

Speaking and Listening: Flexible communication and collaboration

Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen to ideas, integrate information from oral, visual, and multimodal sources, evaluate what they hear, use digital media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task.

Language: Conventions and vocabulary

The standards on conventions and effective language use 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. The vocabulary standards focus on understanding words, their relationships, and

their nuances and on acquiring new words and phrases, particularly general academic and domain-specific vocabulary.

Appendices A, B, and C

Appendix A contains supplementary material on reading, writing, speaking and listening, and language as well as a glossary of key terms. Appendix B consists of text exemplars illustrating the complexity, quality, and range of reading appropriate for various grade levels. Appendix C includes annotated samples demonstrating at least adequate performance in student writing at various grade levels.

Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

K–5

College and Career Readiness Anchor Standards for Reading

The K–5 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and explain how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented graphically, visually, orally, and multimodally as well as in words within and across print and digital sources.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

*Please see "Research to Build and Present Knowledge" in Writing and "Comprehension and Collaboration" in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

Note on range and content of student reading

To build a foundation for college and career readiness, students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. Students also acquire the habits of reading independently and closely, which are essential to their future success.

Reading Standards for Literature K–5 [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Kindergartners:	Grade 1 students:	Grade 2 students:
Key Ideas and Details		
1. With prompting and support, ask and answer questions about key details in a text.	**1.** Ask and answer questions about key details in a text.	**1.** Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
2. With prompting and support, retell familiar stories, including key details.	**2.** Retell stories, including key details, and demonstrate understanding of their central message or lesson.	**2.** Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
3. With prompting and support, identify characters, settings, and major events in a story.	**3.** Describe characters, settings, and major events in a story, using key details.	**3.** Describe how characters in a story respond to major events and challenges.
Craft and Structure		
4. Ask and answer questions about unknown words in a text.	**4.** Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	**4.** Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
5. Recognize common types of texts (e.g., storybooks, poems).	**5.** Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	**5.** Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	**6.** Identify who is telling the story at various points in a text.	**6.** Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.
Integration of Knowledge and Ideas		
7. With prompting and support, describe the connection between pictures or other illustrations and the overall story in which they appear.	**7.** Refer to pictures, illustrations, and details in a story to describe characters, setting, or events.	**7.** Use information from illustrations, other visual elements (e.g., maps), and the words in a print or digital text to demonstrate understanding of the characters, setting, or plot.
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	**9.** Compare and contrast the adventures and experiences of characters in stories.	**9.** Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.
Range of Reading and Level of Text Complexity		
10. Actively engage in group reading activities with purpose and understanding.	**10.** With prompting and support, read appropriately complex prose and poetry for grade 1.	**10.** By the end of the year, read literature, including stories, poetry, and drama, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	**1.** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	**1.** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2. Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.	**2.** Determine a theme of a story, drama, or poem from details in the text; summarize the text.	**2.** Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.	**3.** Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	**3.** Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
Craft and Structure		
4. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.	**4.** Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., *Herculean*), drawing on a wide reading of classic myths from a variety of cultures and periods.	**4.** Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
5. Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as *chapter*, *scene*, and *stanza*; describe how each successive part builds on earlier sections.	**5.** Explain major differences between poems, drama, and prose and refer to the core structural elements of poems (e.g., stanza, verse, rhythm, meter) and drama (e.g., casts of characters, setting descriptions, dialogue, acts, scenes, stage directions) when writing or speaking about a text.	**5.** Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
6. Distinguish their own point of view from that of the narrator or those of the characters.	**6.** Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	**6.** Describe how a narrator's or speaker's point of view influences how events are described.
Integration of Knowledge and Ideas		
7. Explain how specific images and illustrations contribute to or clarify a story (e.g., create mood, emphasize particular aspects of characters or settings).	**7.** Integrate information gained from illustrations and other visual elements in a text with the words to demonstrate understanding of how the characters, setting, and plot interact and develop.	**7.** Analyze how visual and multimedia elements in conjunction with words contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction).
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)
9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).	**9.** Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	**9.** Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Range of Reading and Level of Text Complexity		
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 2–3 text complexity band independently and proficiently.	**10.** By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**10.** By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band independently and proficiently.

Reading Standards for Informational Text K–5 [RI]

Kindergartners:	Grade 1 students:	Grade 2 students:
Key Ideas and Details		
1. With prompting and support, ask and answer questions about key details in a text.	**1.** Ask and answer questions about key details in a text.	**1.** Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
2. With prompting and support, identify the main topic and retell key details of a text.	**2.** Identify the main topic and retell key details of a text.	**2.** Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	**3.** Describe the connection between two individuals, events, ideas, or pieces of information in a text.	**3.** Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
Craft and Structure		
4. With prompting and support, ask and answer questions about unknown words in a text.	**4.** Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	**4.** Determine the meaning of words and phrases in a text relevant to a *grade 2 topic or subject area*.
5. Identify the front cover, back cover, and title page of a book.	**5.** Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	**5.** Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text quickly and efficiently.
6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	**6.** Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	**6.** Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
Integration of Knowledge and Ideas		
7. With prompting and support, describe the connection between pictures or other illustrations and the overall text in which they appear.	**7.** Use pictures, illustrations, and details in a text to describe its key ideas.	**7.** Explain how specific images and other illustrations contribute to and clarify a text (e.g., show how something works).
8. With prompting and support, identify the reasons an author gives to support points in a text.	**8.** Identify the reasons an author gives to support points in a text.	**8.** Describe how reasons support specific points the author makes in a text.
9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	**9.** Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	**9.** Compare and contrast the most important points presented by two texts on the same topic.
Range of Reading and Level of Text Complexity		
10. Actively engage in group reading activities with purpose and understanding.	**10.** With prompting and support, read appropriately complex informational texts for grade 1.	**10.** By the end of year, read and comprehend informational texts, including historical, scientific and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range

Reading Standards for Informational Text K–5 [RI]

Grade 3 students:	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	**1.** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	**1.** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
2. Determine the main idea of a text; recount the key details and explain how they support the main idea.	**2.** Determine the main idea of a text and explain how it is supported by key details; summarize the text.	**2.** Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	**3.** Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	**3.** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
Craft and Structure		
4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area*.	**4.** Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.	**4.** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.
5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic quickly and efficiently.	**5.** Describe the overall structure of events, ideas, concepts, or information (e.g., chronology, comparison, cause/effect) in a text or part of a text.	**6.** Compare and contrast the organizational structure of events, ideas, concepts, or information (e.g., chronology, comparison, cause/effect, problem/solution) in two or more texts.
6. Distinguish their own point of view from that of the author of a text.	**6.** Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	**7.** Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
Integration of Knowledge and Ideas		
7. Use information gained from illustrations, other visual elements (e.g., maps, photographs), and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	**7.** Interpret factual information presented graphically or visually (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to understanding the text in which they appear.	**7.** Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	**8.** Explain how an author uses reasons and evidence to support particular points in a text.	**8.** Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence supports which point(s).
9. Compare and contrast the most important points and key details presented in two texts on the same topic.	**9.** Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	**9.** Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Range of Reading and Level of Text Complexity		
10. By the end of the year, read and comprehend informational texts, including historical, scientific, and technical texts, in the grades 2–3 text complexity band independently and proficiently.	**10.** By the end of year, read and comprehend informational texts, including historical, scientific, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as necessary at the high end of the range.	**10.** By the end of the year, read and comprehend informational text, including historical, scientific, and technical texts, in the grades 4–5 text complexity band level independently and proficiently.

Reading Standards: Foundational Skills (K–5) [RF]

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These Foundational Skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: Good readers will need much less practice with these concepts than struggling readers. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

**** In Kindergarten children are expected to demonstrate increasing awareness and competence in the areas that follow.***

Kindergartners:	Grade 1 students:
Print Concepts	
1. Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page-by-page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper- and lowercase letters of the alphabet.	**1.** Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).
Phonological Awareness	
2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words. b. Count, pronounce, blend, and segment syllables in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (CVC) words.[1] (This does not include CVCs ending with /l/, /r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	**2.** Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words . b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

[1]Words, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

Reading Standards: Foundational Skills (K–5) [RF]

** In Kindergarten children are expected to demonstrate increasing awareness and competence in the areas that follow.*

Kindergartners:*	Grade 1 students:	Grade 2 students:
Phonics and Word Recognition		
3. 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. Associate the long and short sounds with the common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight. (e.g., *the, of, to, you, she, my, is, are, do, does*). d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	**3.** Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs.(two letters that represent one sound). b. Decode regularly spelled one-syllable words. c. Know final *-e* and common vowel team conventions for representing long vowel sounds. d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. e. Decode two-syllable words following basic patterns by breaking the words into syllables. f. Read words with inflectional endings. g. Recognize and read grade-appropriate irregularly spelled words.	**3.** Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading regularly spelled one-syllable words. b. Know spelling-sound correspondences for additional common vowel teams. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes. e. Identify words with inconsistent but common spelling-sound correspondences. f. Recognize and read grade-appropriate irregularly spelled words.
4. Read emergent-reader texts with purpose and understanding.	**4.** Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**4.** Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Phonics and Word Recognition		
3. 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. b. Decode words with common Latin suffixes. c. Decode multisyllable words. d. Read grade-appropriate irregularly spelled words.	**3.** Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.	**3.** Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.
Fluency		
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**4.** Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	**4.** Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

College and Career Readiness Anchor Standards for Writing

The K–5 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes[1]

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.[2]
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

[1]These broad types of writing include many subgenres. See Appendix A for definitions of key writing types.
[2]See standards 1–3 in Language, pages 26–31, for specific editing expectations.

Note on range and content of student writing

To build a foundation for college and career readiness, students need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveying real and imagined experiences and events. They learn to appreciate that a key purpose of writing is to communicate clearly to an external, sometimes unfamiliar audience, and they begin to adapt the form and content of their writing to accomplish a particular task and purpose.. They develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the year.

Writing Standards K–5 [W]

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in Appendix C.

Kindergartners:	Grade 1 students:	Grade 2 students:
Text Types and Purposes		
1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *My favorite book is . . .*).	**1.** Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	**1.** Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., *because*, *and*, *also*) to connect opinion and reasons, and provide a concluding statement or section.
2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	**2.** Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	**2.** Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
3. Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	**3.** Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	**3.** Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.
Production and Distribution of Writing		
4. (Begins in grade 3)	**4.** (Begins in grade 3)	**4.** (Begins in grade 3)
5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	**5.** With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.	**5.** With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	**6.** With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	**6.** With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
Research to Build and Present Knowledge		
7. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	**7.** Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).	**7.** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	**8.** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	**8.** Recall information from experiences or gather information from provided sources to answer a question.
9. (Begins in grade 4)	**9.** (Begins in grade 4)	**9.** (Begins in grade 4)
Range of Writing		
10. (Begins in grade 3)	**10.** (Begins in grade 3)	**10.** (Begins in grade 3)

Grade 3 students:	Grade 4 students:	Grade 5 students:
Text Types and Purposes		
1. Write opinion pieces on familiar topics or texts, supporting a point of view with reasons. a. Introduce the topic or book they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., *because*, *therefore*, *since*, *for example*) to connect opinion and reasons. d. Provide a concluding statement or section.	**1.** Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., *for instance*, *in order to, in addition*). d. Provide a concluding statement or section related to the opinion presented.	**1.** Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*). d. Provide a concluding statement or section related to the opinion presented.
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., *also*, *another*, *and*, *more*, *but*) to connect ideas within categories of information. d. Provide a concluding statement or section.	**2.** Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., *another*, *for example*, *also*, *because*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	**2.** Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast*, *especially*). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.
3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	**3.** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	**3.** Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Production and Distribution of Writing		
4. With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	**4.** Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	**4.** Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	**5.** With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	**5.** With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.	**6.** With some guidance and support from adults, use technology, including the Internet, to produce and publish writing (using the keyboard) as well as to interact and collaborate with others.	**6.** With some guidance and support from adults, use technology, including the Internet, to produce and publish a minimum of two pages of writing (using the keyboard) as well as to interact and collaborate with others.
Research to Build Knowledge		
7. Conduct short research projects that build knowledge about a topic.	**7.** Conduct short research projects that build knowledge through investigation of different aspects of a topic.	**7.** Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	**8.** Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	**8.** Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
9. (Begins in grade 4)	**9.** Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grade 4 Reading standards* to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text"). b. Apply *grade 4 Reading standards* to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	**9.** Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grade 5 Reading standards* to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text"). b. Apply *grade 5 Reading standards* to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence supports which point[s]").
Range of Writing		
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

College and Career Readiness Anchor Standards for Speaking and Listening

The K–5 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate content from multiple graphical, visual, oral, or multimodal sources.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts confront students with the potential for continually updated content and dynamically changing combinations of words, graphics, images, hyperlinks, and embedded video and audio.

Speaking and Listening Standards K–5 [SL]

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Kindergartners:	Grade 1 students:	Grade 2 students:
Comprehension and Collaboration		
1. Participate in collaborative conversations about *kindergarten topics and texts* with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.	**1.** Participate in collaborative conversations about *grade 1 topics and texts* with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion.	**1.** Participate in collaborative conversations about *grade 2 topics and texts* with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
2. Confirm understanding of written texts read aloud or information presented orally or through media by asking and answering questions about key details.	**2.** Demonstrate understanding of written texts read aloud or information presented orally or through media by asking and answering questions about key details and restating key elements.	**2.** Recount or describe key ideas or details from written texts read aloud or information presented orally or through media.
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	**3.** Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	**3.** Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
Presentation of Knowledge and Ideas		
4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	**4.** Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	**4.** Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.	**5.** Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.	**5.** Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
6. Speak audibly and express thoughts, feelings, and ideas clearly.	**6.** Produce complete sentences when appropriate to task and situation. (See standards 1–3 in Language, pages 26–31, for specific expectations.)	**6.** Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See standards 1–3 in Language, pages 26–31, for specific expectations.)

Grade 3 students:	Grade 4 students:	Grade 5 students:
Comprehension and Collaboration		
1. Engage effectively in a range of collaborative discussions (one-on-one and in groups) on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. c. Explain their own ideas and understanding in light of the discussion.	**1.** Engage effectively in range of collaborative discussions (one-on-one and in groups) on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussions. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	**1.** Engage effectively in a range of collaborative discussions (one-on-one and in groups) on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
2. Identify the main ideas and supporting details of written texts read aloud or information presented graphically, orally, visually, or multimodally.	**2.** Paraphrase portions of written texts read aloud or information presented graphically, orally, visually, or multimodally.	**2.** Summarize written texts read aloud or information presented graphically, orally, visually, or multimodally.
3. Ask and answer questions about information from a speaker's, offering appropriate elaboration and detail.	**3.** Identify the reasons and evidence a speaker provides to support particular points.	**3.** Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
Presentation of Knowledge and Ideas		
4. Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	**4.** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	**4.** Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	**5.** Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	**5.** Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See standards 1–3 in Language, pages 26–31, for specific expectations.)	**6.** Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See standards 1–3 in Language, pages 26–31, for specific expectations.)	**6.** Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See standards 1–3 in Language, pages 26–31, for specific expectations.)

College and Career Readiness Anchor Standards for Language

The K–5 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Conventions

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of capitalization, punctuation, and spelling when writing.

Effective Language Use

3. Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of word relationships and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific vocabulary sufficient for reading, writing, speaking, and listening at the college and career readiness level.

Note on range and content of student language use

To build a foundation for college and career readiness in language, students must gain control over many conventions of grammar, usage, and mechanics as well as learn ways to use language to enhance meaning. They must also be able to determine or clarify the meaning of grade-appropriate words encountered through listening, reading, and media use, come to appreciate that words have nonliteral meanings, shadings of meaning, and relationships to other words, and expand their vocabulary in the course of studying content. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.

Language Standards K–5 [L]

The following standards for grades K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*). See the table on page 31 for a complete list and Appendix A for an example of how these skills develop in sophistication.

Kindergartners:	Grade 1 students:	Grade 2 students:
Conventions		
1. Observe conventions of grammar and usage when writing or speaking. a. Print many upper- and lowercase letters. b. Use frequently occurring nouns and verbs. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog*, *dogs*; *wish*, *wishes*). d. Understand and use question words (interrogatives) (e.g., *who*, *what*, *where*, *when*, *why*, *how*). e. Use the most frequently occurring prepositions (e.g., *to*, *from*, *in*, *out*, *on*, *off*, *for*, *of*, *by*, *with*). f. Produce and expand complete sentences in shared language activities.	**1.** Observe conventions of grammar and usage when writing or speaking. a. Print all upper- and lowercase letters. b. Use common, proper, and possessive nouns. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., *He hops*; *We hop*). d. Use personal, possessive, and indefinite pronouns (e.g., *I*, *me*, *my*; *they*, *them*, *their*, *anyone*, *everything*). e. Use verbs to convey a sense of past, present, and future (e.g., *Yesterday I walked home*; *Today I walk home*; *Tomorrow I will walk home*). f. Use frequently occurring adjectives. g. Use frequently occurring conjunctions (e.g., *and*, *but*, *or*, *so*, *because*). g. Use determiners (e.g., articles, demonstratives). h. Use frequently occurring prepositions (e.g., *during*, *beyond*, *toward*). i. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to questions and prompts.	**1.** Observe conventions of grammar and usage when writing or speaking. a. Use collective nouns (e.g., *group*). b. Form and use frequently occurring irregular plural nouns (e.g., *feet*, *children*, *teeth*, *mice*, *fish*). c. Use reflexive pronouns (e.g., *myself*, *ourselves*). d. Form and use the past tense of frequently occurring irregular verbs (e.g., *sat*, *hid*, *told*). e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., *The boy watched the movie*; *The little boy watched the movie*; *The action movie was watched by the little boy*).
2. Observe conventions of capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun *I*. b. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people. b. Use end punctuation for sentences. c. Use commas in dates and to separate single words in a series. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic names. b. Use commas in greetings and closings of letters. c. Use an apostrophe to form contractions and frequently occurring possessives. d. Generalize learned spelling patterns when writing words (e.g., *cage* → *badge*; *boy* → *boil*). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
Effective Language Use		
3. (Begins in grade 3)	**3.** (Begins in grade 3)	**3.** (Begins in grade 3)

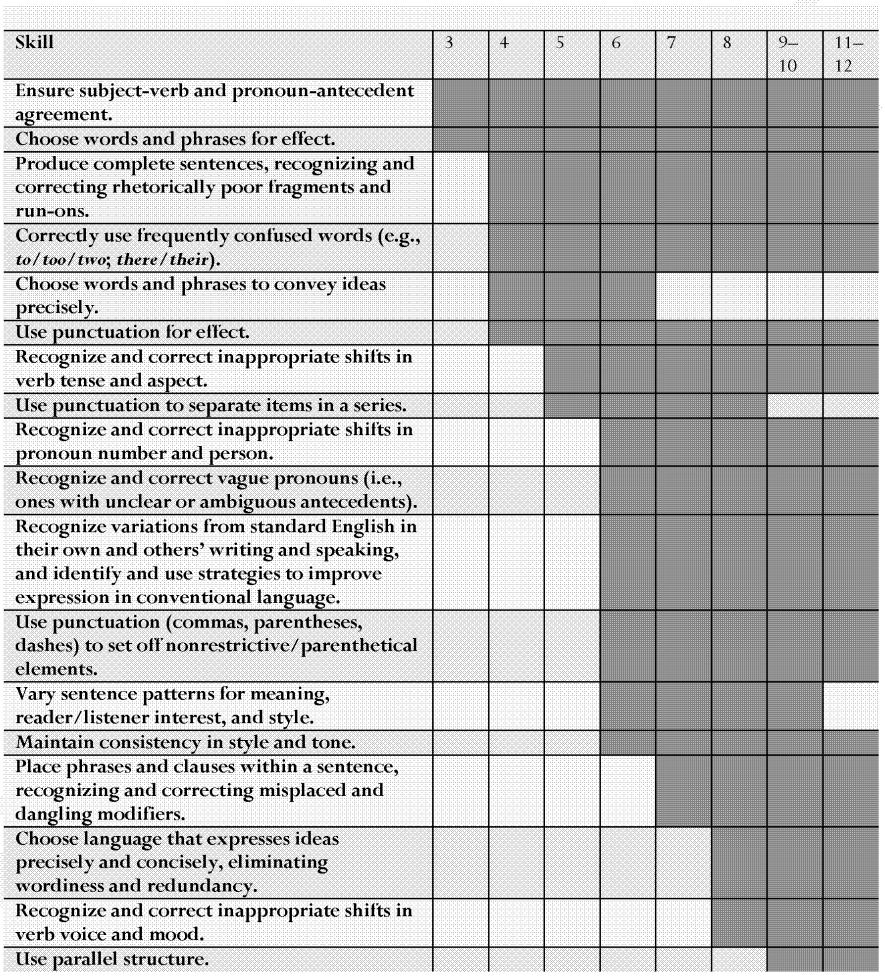
Kindergartners:	Grade 1 students:	Grade 2 students:
Vocabulary Acquisition and Use		
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* as a bird and learning the verb *to duck*). b. Use the most frequently occurring inflections and affixes (e.g., *-ed*, *-s*, *re-*, *un-*, *pre-*, *-ful*, *-less*) as a clue to the meaning of an unknown word.	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Use frequently occurring affixes as a clue to the meaning of a word. c. Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks*, *looked*, *looking*).	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 2 reading and content*, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., *happy/ unhappy*, *tell/ retell*). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *addition*, *additional*). d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., *birdhouse*, *lighthouse*, *housefly*; *bookshelf*, *notebook*, *bookmark*). e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
5. With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*). d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk*, *march*, *strut*, *prance*) by acting out the meanings.	**5.** With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. 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). c. Identify real-life connections between words and their use (e.g., note places at home that are *cozy*). d. Distinguish shades of meaning among verbs differing in manner (e.g., *look*, *peek*, *glance*, *stare*, *glare*, *scowl*) and adjectives differing in intensity (e.g., *large*, *gigantic*) by defining or choosing them or by acting out the meanings.	**5.** Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that *are spicy* or *juicy*). b. Distinguish shades of meaning among closely related verbs (e.g., *toss*, *throw*, *hurl*) and closely related adjectives (e.g., *thin*, *slender*, *skinny, scrawny*).
6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	**6.** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *I named my hamster Nibblet because she nibbles too much because she likes that*).	**6.** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., *When other kids are happy that makes me happy*).

Grade 3 students:	Grade 4 students:	Grade 5 students:
Conventions		
1. Observe conventions of grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., *childhood*). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., *I walked*; *I walk*; *I will walk*) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	**1.** Observe conventions of grammar and usage when writing or speaking. a. Use relative pronouns (*who*, *whose*, *whom*, *which*, *that*) and relative adverbs (*where*, *when*, *why*). b. Form and use the progressive (e.g., *I was walking*; *I am walking*; *I will be walking*) verb aspects. c. Use modal auxiliaries (e.g., *can*, *may*, *must*) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting rhetorically poor fragments and run-ons.* g. Correctly use frequently confused words (e.g., *to*, *too*, *two*; *there*, *their*).*	**1.** Observe conventions of grammar and usage when writing or speaking. a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., *I had walked*; *I have walked*; *I will have walked*) verb aspects. c. Use verb tense and aspect to convey various times, sequences, states, and conditions. d. Recognize and correct inappropriate shifts in verb tense and aspect.* e. Use correlative conjunctions.
2. Observe conventions of capitalization, punctuation, and spelling when writing. a. Capitalize important words in titles. b. Use commas in addresses. c. Use commas and quotation marks in dialogue. d. Form and use possessives. e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., *sitting*, *smiled*, *cries*, *happiness*). f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words. g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Use punctuation to separate items in a series.* b. Use a comma to separate an introductory element from the rest of the sentence. c. Use a comma to set off the words *yes* and *no* (e.g., *Yes, thank you*), to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*), and to indicate direct address (e.g., *Is that you, Steve?*). d. Use underlining, quotation marks, or italics to indicate titles of works. e. Spell grade-appropriate words correctly, consulting references as needed.
Effective Language Use		
3. Use language to achieve particular effects when writing or speaking. a. Choose words and phrases for effect.*	**3.** Use language to enhance meaning and achieve particular effects when writing or speaking. a. Choose words and phrases to convey ideas precisely.* b. Use punctuation for effect.*	**3.** Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Vocabulary Acquisition and Use		
4. Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on *grade 3 reading and content*, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., *agreeable/disagreeable*, *comfortable/uncomfortable*, *care/careless*, *heat/preheat*). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *company*, *companion*). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 4 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph*, *photograph*, *autograph*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph*, *photosynthesis*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
5. Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., *take steps*). b. Identify real-life connections between words and their use (e.g., describe people who are *friendly* or *helpful*). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., *knew*, *believed*, *suspected*, *heard*, *wondered*).	**5.** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	**5.** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.
6. Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific vocabulary, including words and phrases that signal spatial and temporal relationships (e.g., *After dinner that night we went looking for them*).	**6.** Acquire and use accurately grade-appropriate general academic and domain-specific vocabulary, including words and phrases that signal precise actions, emotions, or states of being (e.g., *quizzed*, *whined*, *stammered*) and words and phrases basic to a particular topic (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation).	**6**. Acquire and use accurately grade-appropriate general academic and domain-specific vocabulary, including words and phrases that signal contrast, addition, and other logical relationships (e.g., *however*, *although*, *nevertheless*, *similarly*, *moreover*, *in addition*).

Language Progressive Skills, by Grade

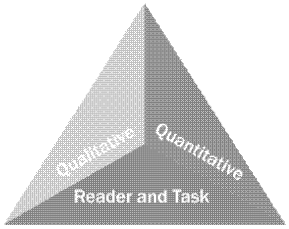
The following skills, marked with an asterisk (*) in Language standards 1–3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.



Skill	3	4	5	6	7	8	9–10	11–12
Ensure subject-verb and pronoun-antecedent agreement.								
Choose words and phrases for effect.								
Produce complete sentences, recognizing and correcting rhetorically poor fragments and run-ons.								
Correctly use frequently confused words (e.g., *to/too/two*; *there/their*).								
Choose words and phrases to convey ideas precisely.								
Use punctuation for effect.								
Recognize and correct inappropriate shifts in verb tense and aspect.								
Use punctuation to separate items in a series.								
Recognize and correct inappropriate shifts in pronoun number and person.								
Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.								
Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
Vary sentence patterns for meaning, reader/listener interest, and style.								
Maintain consistency in style and tone.								
Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
Choose language that expresses ideas precisely and concisely, eliminating wordiness and redundancy.								
Recognize and correct inappropriate shifts in verb voice and mood.								
Use parallel structure.								

Standard 10: Range, Quality, and Complexity of Student Reading K–5

Measuring Text Complexity: Three Factors



Qualitative evaluation of the text: Levels of meaning, structure, language conventionality and clarity, and knowledge demands

Quantitative evaluation of the text: Readability measures and other scores of text complexity

Matching reader to text and task: Reader knowledge, motivation, and interests as well as the complexity generated by the tasks assigned and the questions posed

Note: More detailed information on text complexity and how it is measured is contained in Appendix A.

Range of Text Types for K–5

Students in K–5 apply the Reading standards to the following range of text types, with texts selected from a broad range of cultures and periods.

Literature			Informational Text
Stories	**Dramas**	**Poetry**	**Literary Nonfiction and Historical, Scientific, and Technical Texts**
Includes children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth	Includes staged dialogue and brief familiar scenes	Includes nursery rhymes and the subgenres of the narrative poem, limerick, and free verse poem	Includes biographies and autobiographies; books about history, social studies, science, and the arts; technical texts, including directions, forms, and information displayed in graphs, charts, or maps; and digital sources on a range of topics

Texts Illustrating the Complexity, Quality, and Range of Student Reading K–5

* Read-aloud
** Read-along

	Literature: Stories, Drama, Poetry	Informational Texts: Literary Nonfiction and Historical, Scientific, and Technical Texts
K[1]	▪ *Over in the Meadow* by John Langstaff (traditional) (c1800)* ▪ *A Boy, a Dog, and a Frog* by Mercer Mayer (1967) ▪ *Pancakes for Breakfast* by Tomie DePaola (1978) ▪ *A Story A Story* by Gail E. Haley (1970)* ▪ *Kitten's First Full Moon* by Kevin Henkes (2004)*	▪ *My Five Senses* by Aliki (1962)* ▪ *Truck* by Donald Crews (1980) ▪ *I Read Signs* by Tana Hoban (1987) ▪ *What Do You Do With a Tail Like This?* by Steve Jenkins and Robin Page (2003)* ▪ *Amazing Whales!* by Sarah L. Thomson (2005)*
1[1]	▪ "Mix a Pancake" by Christina G. Rossetti (1893)** ▪ *Mr. Popper's Penguins* by Richard Atwater (1938)* ▪ *Little Bear* by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)** ▪ *Frog and Toad Together* by Arnold Lobel (1971)** ▪ *Hi! Fly Guy* by Tedd Arnold (2006)	▪ *A Tree Is a Plant* by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)** ▪ *My Five Senses* by Aliki (1962)** ▪ *Follow the Water from Brook to Ocean* by Arthur Dorros (1991)** ▪ *From Seed to Pumpkin* by Wendy Pfeffer, illustrated by James Graham Hale (2004)* ▪ *How People Learned to Fly* by Fran Hodgkins and True Kelley (2007)*
2–3	▪ "Who Has Seen the Wind?" by Christina G. Rossetti (1893) ▪ *Charlotte's Web* by E. B. White (1952)* ▪ *Sarah, Plain and Tall* by Patricia MacLachlan (1985) ▪ *Tops and Bottoms* by Janet Stevens (1995) ▪ *Poppleton in Winter* by Cynthia Rylant, illustrated by Mark Teague (2001)	▪ *A Medieval Feast* by Aliki (1983) ▪ *From Seed to Plant* by Gail Gibbons (1991) ▪ *The Story of Ruby Bridges* by Robert Coles (1995)* ▪ *A Drop of Water: A Book of Science and Wonder* by Walter Wick (1997) ▪ *Moonshot: The Flight of Apollo 11* by Brian Floca (2009)
4–5	▪ *Alice's Adventures in Wonderland* by Lewis Carroll (1865) ▪ "Casey at the Bat" by Ernest Lawrence Thayer (1888) ▪ *The Black Stallion* by Walter Farley (1941) ▪ "Zlateh the Goat" by Isaac Bashevis Singer (1984) ▪ *Bud, Not Buddy* by Christopher Paul Curtis (1999) ▪ *The Birchbark House* by Louise Erdrich (1999) ▪ *Where the Mountain Meets the Moon* by Grace Lin (2009)	▪ *Discovering Mars* by Melvin Berger (1992) ▪ *Hurricanes: Earth's Mightiest Storms* by Patricia Lauber (1996) ▪ *A History of US* by Joy Hakim (2005) ▪ *Horses* by Seymour Simon (2006) ▪ *Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea* by Sy Montgomery (2006)

Note: Given space limitations, the illustrative texts listed above are meant only to show individual titles that are representative of a wide range of topics and genres. (See Appendix B for excerpts of these and other texts illustrative of K–5 text complexity, quality, and range.) At a curricular or instructional level, within and across grade levels, texts need to be selected around topics or themes that generate knowledge and allow students to study those topics or themes in depth. On the next page is an example of progressions of texts building knowledge across grade levels.

[1]Children at the kindergarten and grade 1 levels should be expected to read texts independently that have been specifically written to correlate to their reading level and their word knowledge. Many of the titles listed above are meant to supplement carefully structured independent reading with books to read along with a teacher or that are read aloud to students to build knowledge and cultivate a joy in reading.

Staying on Topic Within a Grade and Across Grades: How to Build Knowledge Systematically in English Language Arts K–5

Building knowledge systematically in English language arts is like giving children various pieces of a puzzle in each grade that, over time, will form one big picture. At a curricular or instructional level, texts—within and across grade levels—need to be selected around topics or themes that systematically develop the knowledge base of students. Within a grade level, there should be an adequate number of titles on a single topic that would allow children to study that topic for a sustained period. The knowledge children have learned about particular topics in early grade levels should then be expanded and developed in subsequent grade levels to ensure an increasingly deeper understanding of these topics. Children in the upper elementary grades will generally be expected to read these texts independently and reflect on them in writing. However, children in the early grades (particularly K–2) should participate in rich, structured conversations with an adult in response to the written texts that are read aloud, *orally* comparing and contrasting as well as analyzing and synthesizing, in the manner called for by the *Standards*.

Preparation for reading complex informational texts should begin at the very earliest elementary school grades. What follows is one example that uses domain-specific nonfiction titles across grade levels to illustrate how curriculum designers and classroom teachers can infuse the English language arts block with rich, age-appropriate content knowledge and vocabulary in history/social studies, science, and the arts. Having students listen to informational read-alouds in the early grades helps lay the necessary foundation for students' reading and understanding of increasingly complex texts on their own in subsequent grades.

Exemplar Texts on a Topic Across Grades	K	1	2–3	4–5
The Human Body Students can begin learning about the human body starting in kindergarten and then review and extend their learning during each subsequent grade.	The five senses and associated body parts ▪ *My Five Senses* by Aliki (1989) ▪ *Hearing* by Maria Rius (1985) ▪ *Sight* by Maria Rius (1985) ▪ *Smell* by Maria Rius (1985) ▪ *Taste* by Maria Rius (1985) ▪ *Touch* by Maria Rius (1985) Taking care of your body: Overview (hygiene, diet, exercise, rest) ▪ *My Amazing Body: A First Look at Health & Fitness* by Pat Thomas (2001) ▪ *Get Up and Go!* by Nancy Carlson (2008) ▪ *Go Wash Up* by Doering Tourville (2008) ▪ *Sleep* by Paul Showers (1997) ▪ *Fuel the Body* by Doering Tourville (2008)	Introduction to the systems of the human body and associated body parts ▪ *Under Your Skin: Your Amazing Body* by Mick Manning (2007) ▪ *Me and My Amazing Body* by Joan Sweeney (1999) ▪ *The Human Body* by Gallimard Jeunesse (2007) ▪ *The Busy Body Book* by Lizzy Rockwell (2008) ▪ *First Encyclopedia of the Human Body* by Fiona Chandler (2004) Taking care of your body: Germs, diseases, and preventing illness ▪ *Germs Make Me Sick* by Marilyn Berger (1995) ▪ *Tiny Life on Your Body* by Christine Taylor-Butler (2005) ▪ *Germ Stories* by Arthur Kornberg (2007) ▪ *All About Scabs* by GenichiroYagu (1998)	Digestive and excretory systems ▪ *What Happens to a Hamburger* by Paul Showers (1985) ▪ *The Digestive System* by Christine Taylor-Butler (2008) ▪ *The Digestive System* by Rebecca L. Johnson (2006) ▪ *The Digestive System* by Kristin Petrie (2007) Taking care of your body: healthy eating and nutrition ▪ *Good Enough to Eat* by Lizzy Rockwell (1999) ▪ *Showdown at the Food Pyramid* by Rex Barron (2004) Muscular, skeletal, and nervous systems ▪ *The Mighty Muscular and Skeletal Systems* Crabtree Publishing (2009) ▪ *Muscles* by Seymour Simon (1998) ▪ *Bones* by Seymour Simon (1998) ▪ *The Astounding Nervous System* Crabtree Publishing (2009) ▪ *The Nervous System* by Joelle Riley (2004)	Circulatory system ▪ *The Heart* by Seymour Simon (2006) ▪ *The Heart and Circulation* by Carol Ballard (2005) ▪ *The Circulatory System* by Kristin Petrie (2007) ▪ *The Amazing Circulatory System* by John Burstein (2009) Respiratory system ▪ *The Lungs* by Seymour Simon (2007) ▪ *The Respiratory System* by Susan Glass (2004) ▪ *The Respiratory System* by Kristin Petrie (2007) ▪ *The Remarkable Respiratory System* by John Burstein (2009) Endocrine system ▪ *The Endocrine System* by Rebecca Olien (2006) ▪ *The Exciting Endocrine System* by John Burstein (2009)

Standards for English Language Arts

6–12

College and Career Readiness Anchor Standards for Reading

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented graphically, visually, orally, and multimodally as well as in words within and across print and digital sources. *
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

*Please see "Research to Build Knowledge" in Writing and "Comprehension and Collaboration" in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

Note on range and content of student reading

To become college and career ready, students must grapple with works of exceptional craft and thought whose range extends across genres, cultures, and centuries. Such works offer profound insights into the human condition and serve as models for students' own thinking and writing. Along with high-quality contemporary works, these texts should be chosen from among seminal U.S. documents, the classics of American literature, and the timeless dramas of Shakespeare. Through wide and deep reading of literature and literary nonfiction of steadily increasing sophistication, students gain a reservoir of literary and cultural knowledge, references, and images; the ability to evaluate intricate arguments; and the capacity to surmount the challenges posed by complex texts.

Reading Standards for Literature 6–12 [RL]

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Key Ideas and Details		
1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a theme or central idea of a text and analyze its development over the course of the text; summarize the text.	**2.** Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; summarize the text.	**2.** Determine a theme or central idea of a text and analyze its development over the course of the text, including how it is conveyed through particular details; provide an accurate summary of the text distinct from personal opinions or judgments.
3. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	**3.** Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).	**3.** Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
Craft and Structure		
4. Determine the meaning of words and phrases as they are used in a text, including figures of speech and the connotations (associations) of particular words and phrases; analyze the impact of a specific word choice on meaning and tone.	**4.** Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	**4.** Determine the meaning of words and phrases as they are used in a text, including analogies or allusions to other texts; analyze the impact of specific word choices on meaning and tone.
5. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.	**5.** Analyze how a drama's or poem's form or structure (e.g. sonnet, soliloquy) contributes to its meaning.	**5.** Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
6. Explain how an author establishes and develops the point of view of the narrator or speaker in a text.	**6.** Analyze how an author establishes and contrasts the points of view of different characters or narrators in a text.	**6.** Explain how differences in the point of view of characters and the audience or reader (e.g., created through the use of dramatic irony) creates such effects as suspense or humor.
Integration of Knowledge and Ideas		
7. Compare and contrast the experience of reading a story, poem, or dram to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.	**7.** Compare and contrast a story, poem, or drama to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, camera focus and angles).	**7.** Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)

Grade 6 students:	Grade 7 students:	Grade 8 students:
Integration of Knowledge and Ideas		
9. Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.	**9.** Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.	**9.** Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.
Range of Reading and Level of Text Complexity		
10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**10.** By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as necessary at the high end of the range.	**10.** By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band independently and proficiently.

Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
2. Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	**2.** Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.
3. Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.	**3.** Evaluate various explanations for characters' actions or for events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in the text and analyze the cumulative impact of several word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	**4.** Determine the meaning of words and phrases as they are used in the text and analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)
5. Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	**5.** Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice at what point to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.
6. Analyze a case in which grasping point of view requires distinguishing what is directly stated from what is implied (e.g., through the use of satire, sarcasm, irony, or understatement).	**6.** Analyze differences and similarities in points of view or cultural experience as reflected in various works from different countries, drawing on a wide reading of world literature.
Integration of Knowledge and Ideas	
7. Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's *Landscape with the Fall of Icarus*).	**7.** Analyze multiple interpretations of a story or drama (e.g., recorded or live production of a play or novel), evaluating how each version interprets the source text. (Include at least one play by Shakespeare as well as one play by an American dramatist.)
8. (Not applicable to literature)	**8.** (Not applicable to literature)
9. Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, drawing on how two or more texts from the same period treat similar themes or topics.	**9.** Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare draws on Ovid or the Bible or how a later author draws on a play by Shakespeare) in order to evaluate how the texts treat similar themes or topics.
Range of Reading and Level of Text Complexity	
10. By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band independently and proficiently.	**10.** By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band independently and proficiently.

Reading Standards for Informational Text 6–12 [RI]

Grade 6 students:	Grade 7 students:	Grade 8 students:
Key Ideas and Details		
1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a central idea of a text and analyze its development over the course of the text; summarize the text.	**2.** Determine two or more central ideas in a text and analyze their development over the course of the text and their relationship to one another; summarize the text.	**2.** Determine a central idea of a text and analyze its development over the course of the text, including how it is conveyed through particular details; provide an accurate summary of the text distinct from personal opinions or judgments.
3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).	**3.** Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	**3.** Analyze how a text makes connections among and distinctions between key individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
Craft and Structure		
4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.	**4.** Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.	**4.** Determine the meaning of words and phrases as they are used in a text, including analogies or allusions to other texts; analyze the impact of specific word choices on meaning and tone.
5. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	**5.** Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.	**5.** Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.
6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	**6.** Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her point of view from that of others.	**6.** Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
Integration of Knowledge and Ideas		
7. Integrate information presented in different formats (e.g., print or digital text, video, multimedia) to develop a coherent understanding of a topic or issue.	**7.** Compare and contrast the experience of reading a text to experiencing an audio, video, or multimedia version of it, analyzing the text's portrayal in each medium (e.g., how the delivery of a speech affects the impact of the words).	**7.** Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
8. Delineate and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	**8.** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is sufficient to support the claims.	**8.** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient and identifying when irrelevant evidence is introduced.
9. Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).	**9.** Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.	**9.** Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Range of Reading and Level of Text Complexity		
10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**10.** By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	**10.** By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band independently and proficiently.

Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	**2.** Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	**3.** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text and analyze the cumulative impact of several word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	**4.** Determine the meaning of words and phrases as they are used in a text and analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).
5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	**5.** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
6. Analyze documents of historical and literary significance, including seminal U.S. documents (e.g., the Declaration of Independence, the Preamble to the Constitution, the Bill of Rights), for their premises and purposes.	**6.** Analyze how various authors express different points of view on similar events or issues, assessing the authors' assumptions, use of evidence, and reasoning, including analyzing seminal U.S. documents (e.g., *The Federalist*, landmark U.S. Supreme Court majority opinions and dissents).
Integration of Knowledge and Ideas	
7. Evaluate the accounts of a subject in different mediums (e.g., a person's life story told in print or digital text, film, or multimedia), analyzing each version for which details are emphasized and how the account unfolds.	**7.** Integrate and evaluate multiple sources of information presented in different formats (e.g., print or digital text, video, multimedia) in order to address a question or solve a problem, resolving conflicting information when possible.
8. Delineate and evaluate the argument and claims in a text, assessing the relevance and sufficiency of the evidence and the validity of the reasoning and identifying false statements and fallacious reasoning.	**8.** Delineate and evaluate the argument and claims in a text, assessing the relevance and sufficiency of the evidence and the validity of the reasoning, identifying and evaluating stated and unstated premises and assumptions.
9. Analyze a case in which authors disagree with or otherwise respond to one another's ideas or accounts of events, evaluating the strength of each author's evidence, reasoning, and interpretation.	**9.** Synthesize information, explanations, and arguments from a range of sources to provide a coherent account of events or ideas, resolving conflicting information when possible.
Range of Reading and Level of Text Complexity	
10. By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction in the grades 9–10 text complexity band independently and proficiently.	**10.** By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction in the grades 11–CCR text complexity band independently and proficiently.

College and Career Readiness Anchor Standards for Writing

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes[1]

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.[2]
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

[1]These broad types of writing include many subgenres. See Appendix A for definitions of key writing types.
[2]See standards 1–3 in Language, pages 53–57, for specific editing expectations.

Note on range and content of student writing

For students, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career-ready writers, students must take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately. They need to know how to combine elements of different kinds of writing—for example, to use narrative strategies within argument and explanation within narrative—to produce complex and nuanced writing. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner. They must have the flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline as well as the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it.

Writing Standards 6–12 [W]

The following standards for grades 6–12 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in Appendix C.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Text Types and Purposes		
1. Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s) and organize the reasons and evidence clearly. b. Support claim(s) with clear reasons and relevant evidence, demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from the argument presented.	**1.** Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	**1.** Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from the information or explanation presented.	**2.** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	**2.** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Text Types and Purposes (continued)		
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	**3.** Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	**3.** Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.
Production and Distribution of Writing		
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	**4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	**4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	**5.** With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	**5.** With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
6. Use technology, including the Internet, to produce and publish a minimum of three pages of writing as well as to interact and collaborate with others.	**6.** Use technology, including the Internet, to produce and publish a minimum of four pages of writing as well as to interact and collaborate with others.	**6.** Use technology, including the Internet, to produce and publish a minimum of five pages of writing as well as to interact and collaborate with others.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Research to Build and Present Knowledge		
7. Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	**7.** Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	**7.** Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	**8.** Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grade 6 Reading standards* to literature (e.g., "Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics."). b. Apply *grade 6 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").	**9.** Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grade 7 Reading standards* to literature (e.g., "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history]). b. Apply *grade 7 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is sufficient to support the claims").	**9.** Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grade 8 Reading standards* to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new"). b. Apply *grade 8 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient and identifying when irrelevant evidence is introduced").
Range of Writing		
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes	
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.	**1.** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language and domain-specific vocabulary to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	**2.** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes (continued)	
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	**3.** Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	**4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	**5.** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	**6.** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
Research to Build and Present Knowledge	
7. Conduct short as well as more sustained research projects to answer a question (including a self-generate question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	**7.** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

Grades 9–10 students:	Grades 11–12 students:
Research to Build and Present Knowledge (continued)	
9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grades 9–10 Reading standards* to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, drawing on how two or more texts from the same period treat similar themes or topics"). b. Apply *grades 9–10 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and claims in a text, assessing the relevance and sufficiency of the evidence and the validity of the reasoning and identifying false statements and fallacious reasoning").	**9.** Draw evidence form literary or informational texts to support analysis, reflection, and research. a. Apply *grades 11–12 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare draws on Ovid or the Bible or how a later author draws on a play by Shakespeare) in order to evaluate how the texts treat similar themes or topics"). b. Apply *grades 11–12 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and claims in a text, assessing the relevance and sufficiency of the evidence and the validity of the reasoning, identifying and evaluating stated and unstated premises and assumptions").
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

College and Career Readiness Anchor Standards for Speaking and Listening

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate content from multiple graphical, visual, oral, or multimodal sources.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner—built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever their intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others' meritorious ideas while expressing their own clearly and persuasively.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. The Internet has accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change.

Speaking and Listening Standards 6–12 [SL]

The following standards for grades 6–12 offer a focus for instruction in each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Comprehension and Collaboration		
1. Engage effectively in a range of collaborative discussions (one-on-one and in groups) on *grade 6 topics, texts, and issues*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. With guidance and support from adults, work with peers to set rules for collegial discussions, clear goals and deadlines, and individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	**1.** Engage effectively in a range of collaborative discussions (one-on-one and in groups) on *grade 7 topics, texts, and issues*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Work with peers to set rules for collegial discussions, clear goals and deadlines, and individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views and understanding.	**1.** Engage effectively in a range of collaborative discussions (one-on-one and in groups) on *grade 8 topics, texts, and issues*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Work with peers to set rules for collegial discussions, clear goals and deadlines, and individual roles as needed. c. Pose questions that connect the ideas of several speakers and elicit elaboration, and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views and understanding in light of the evidence presented.
2. Interpret information presented in graphical, oral, visual or multimodal formats and explain how it contributes to a topic, text, or issue under study.	**2.** Analyze the main ideas and supporting details presented in graphical, oral, visual, or multimodal formats and explain how the ideas clarify a topic, text, or issue under study.	**2.** Determine the purpose of information in graphical, oral, visual, or multimodal formats and evaluate the motives (e.g., social, commercial, political) behind its presentation.
3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	**3.** Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance of the evidence.	**3.** Delineate a speaker's argument and specific claims, evaluating the validity of the reasoning and sufficiency of the evidence.
Presentation of Knowledge and Ideas		
4. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	**4.** Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	**4.** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
5. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	**5.** Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	**5.** Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See standards 1–3 in Language, pages 53–57, for specific expectations.)	**6.** Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See standards 1–3 in Language, pages 53–57, for specific expectations.)	**6.** Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See standards 1–3 in Language, pages 53–57, for specific expectations.)

Grades 9–10 students:	Grades 11–12 students:
Comprehension and Collaboration	
1. Initiate and participate effectively in a range of collaborative discussions (one-on-one and in groups) on *grades 9–10 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed. c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	**1.** Initiate and participate effectively in a range of collaborative discussions (one-on-one and in groups) on *grades 11–12 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
2. Synthesize information from multiple graphical, visual, or multimodal sources with other information presented orally, noting any discrepancies among the data.	**2.** Integrate information from multiple graphical, oral, visual, or multimodal sources in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and resolving conflicting information when possible.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	**3.** Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
Presentation of Knowledge and Ideas	
4. Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	**4.** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks.
5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	**5.** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See standards 1–3 in Language, pages 53–57, for specific expectations.)	**6.** Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See standards 1–3 in Language, pages 53–57, for specific expectations.)

College and Career Readiness Anchor Standards for Language

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Conventions

1. Demonstrate command of the conventions of standard English grammar and usage.
2. Demonstrate command of the conventions of capitalization, punctuation, and spelling.

Effective Language Use

3. Use language to enhance meaning, convey style, and achieve particular effects when writing and speaking.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of word relationships and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific vocabulary sufficient for reading, writing, speaking, and listening at the college and career readiness level.

Note on range and content of student language use

To be college and career ready in language, students must have firm control over the conventions of grammar, usage, and mechanics. At the same time, they must come to appreciate that language is as at least as much a matter of craft as of rules and be able to use words, syntax, and punctuation to achieve particular rhetorical effects. They must also have extensive vocabularies, built through reading and study, enabling them to comprehend complex texts and engage in purposeful writing about and conversations around content. They need to become skilled in determining or clarifying the meaning of words and phrases they encounter, choosing flexibly from an array of strategies to aid them. They must learn to see an individual word as part of a network of other words—words, for example, that have similar denotations but different connotations. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.

Language Standards 6–12 [L]

The following standards for grades 6–12 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*). See the table on page 57 for a complete listing and Appendix A for an example of how these skills develop in sophistication.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Conventions		
1. Observe conventions of grammar and usage when writing or speaking. a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Use intensive pronouns (e.g., *myself, ourselves*). c. Recognize and correct inappropriate shifts in pronoun number and person.* d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).* e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*	**1.** Observe conventions of grammar and usage when writing or speaking. a. Explain the function of phrases and clauses in general and their function in specific sentences. b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.*	**1.** Observe conventions of grammar and usage when writing or speaking. a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. b. Form and use verbs in the active and passive voice. c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. d. Recognize and correct inappropriate shifts in verb voice and mood.*
2. Observe conventions of capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie* but not *He wore an old[,] green shirt*). b. Spell correctly.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. b. Use an ellipsis to indicate an omission. c. Spell correctly.
Effective Language Use		
3. Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Vary sentence patterns for meaning, reader/listener interest, and style.* b. Maintain consistency in style and tone.*	**3.** Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*	**3.** Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

Grade 6 students:	Grade 7 students:	Grade 8 students:
Vocabulary Acquisition and Use		
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 6 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience*, *auditory*, *audible*). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 7 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *belligerent*, *bellicose*, *rebel*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**4.** Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on *grade 8 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede*, *recede*, *secede*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., personification) in context. b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy*, *scrimping*, *economical*, *unwasteful*, *thrifty*).	**5.** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined*, *respectful*, *polite*, *diplomatic*, *condescending*).	**5.** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g. verbal irony, puns) in context. b. Use the relationship between particular words to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *bullheaded*, *willful*, *firm*, *persistent*, *resolute*).
6. Acquire and use accurately grade-appropriate general academic and domain-specific vocabulary.	**6.** Acquire and use accurately grade-appropriate general academic and domain-specific vocabulary.	**6.** Acquire and use accurately grade-appropriate general academic and domain-specific vocabulary.

Grades 9–10 students:	Grades 11–12 students:
Conventions	
1. Observe conventions of grammar and usage when writing or speaking. a. Use parallel structure.* b. 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 or presentations.	**1.** Observe conventions of grammar and usage when writing or speaking. a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. b. Resolve issues of complex or contested usage, consulting references (e.g., *Merriam-Webster's Dictionary of English Usage*, *Garner's Modern American English*) as needed.
2. Observe conventions of capitalization, punctuation, and spelling when writing. a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. b. Use a colon to introduce a list or quotation. c. Spell correctly.	**2.** Observe conventions of capitalization, punctuation, and spelling when writing. a. Observe hyphenation conventions. b. Spell correctly.
Effective Language Use	
3. Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Write and edit work so that it conforms to the guidelines in a style manual (e.g., *MLA Handbook*, Turabian's *Manual for Writers*) appropriate for the discipline and writing type.	**3.** Use language to enhance meaning, convey style, and achieve particular effects when writing or speaking. a. Vary syntax for effect, consulting references (e.g., Tufte's *Artful Sentences*) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9–10 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze*, *analysis*, *analytical*; *advocate*, *advocacy*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	**4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive*, *conception*, *conceivable*). c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., satire, sarcasm) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.	**5.** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.
6. Acquire and use accurately general academic and domain-specific vocabulary sufficient for reading, writing, speaking, and listening at the college and career readiness level.	**6.** Acquire and use accurately general academic and domain-specific vocabulary sufficient for reading, writing, speaking, and listening at the college and career readiness level.

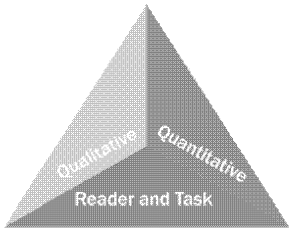
Language Progressive Skills, by Grade

The following skills, marked with an asterisk (*) in Language standards 1–3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Skill	3	4	5	6	7	8	9–10	11–12
Ensure subject-verb and pronoun-antecedent agreement.	■	■	■	■	■	■	■	■
Choose words and phrases for effect.	■	■	■	■	■	■	■	■
Produce complete sentences, recognizing and correcting rhetorically poor fragments and run-ons.		■	■	■	■	■	■	■
Correctly use frequently confused words (e.g., *to/too/two*; *there/their*).		■	■	■	■	■	■	■
Choose words and phrases to convey ideas precisely.		■	■	■				
Use punctuation for effect.		■	■	■	■	■	■	■
Recognize and correct inappropriate shifts in verb tense and aspect.			■	■	■	■	■	■
Use punctuation to separate items in a series.			■	■	■	■		
Recognize and correct inappropriate shifts in pronoun number and person.				■	■	■	■	■
Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).				■	■	■	■	■
Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.				■	■	■	■	■
Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.				■	■	■	■	■
Vary sentence patterns for meaning, reader/listener interest, and style.				■	■	■	■	
Maintain consistency in style and tone.				■	■	■	■	■
Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.					■	■	■	■
Choose language that expresses ideas precisely and concisely, eliminating wordiness and redundancy.						■	■	■
Recognize and correct inappropriate shifts in verb voice and mood.						■	■	■
Use parallel structure.							■	■

Standard 10: Range, Quality, and Complexity of Student Reading 6–12

Measuring Text Complexity: Three Factors



Qualitative evaluation of the text: Levels of meaning, structure, language conventionality and clarity, and knowledge demands

Quantitative evaluation of the text: Readability measures and other scores of text complexity

Matching reader to text and task: Reader knowledge, motivation, and interests as well as the complexity generated by the tasks assigned and the questions posed

Note: More detailed information on text complexity and how it is measured is contained in Appendix A.

Range of Text Types for 6–12

Students in grades 6–12 apply the Reading standards to the following range of text types, with texts selected from a broad range of cultures and periods.

Literature			Informational Text
Stories	**Drama**	**Poetry**	**Literary Nonfiction**
Includes the subgenres of adventure stories, historical fiction, mysteries, myths, science fiction, realistic fiction, allegories, parodies, satire, and graphic novels	Includes one-act and multiact plays, both in written form and on film	Includes the subgenres of narrative poems, lyrical poems, free verse poems, sonnets, odes, ballads, and epics	Includes the subgenres of exposition, argument, and functional text in the form of personal essays, speeches, opinion pieces, essays about art or literature, biographies, memoirs, journalism, and historical, scientific, or economic accounts (including digital sources) written for a broad audience

Texts Illustrating the Complexity, Quality, and Range of Student Reading 6–12

	Literature: Stories, Dramas, Poetry	Informational Texts: Literary Nonfiction
6–8	▪ *Little Women* by Louisa May Alcott (1869) ▪ *The Adventures of Tom Sawyer* by Mark Twain (1876) ▪ "The Road Not Taken" by Robert Frost (1915) ▪ *The Dark Is Rising* by Susan Cooper (1973) ▪ *Dragonwings* by Laurence Yep (1975) ▪ *Roll of Thunder, Hear My Cry* by Mildred Taylor (1976)	▪ "Letter on Thomas Jefferson" by John Adams (1776) ▪ *Narrative of the Life of Frederick Douglass, an American Slave* by Frederick Douglass (1845) ▪ *Harriet Tubman: Conductor on the Underground Railroad* by Ann Petry (1955) ▪ *Travels with Charley: In Search of America* by John Steinbeck (1962) ▪ *The Great Fire* by Jim Murphy (1995) ▪ *This Land Was Made for You and Me: The Life and Songs of Woody Guthrie* by Elizabeth Partridge (2002)
9–10	▪ *The Tragedy of Romeo and Juliet* by William Shakespeare (1592) ▪ "Ozymandias" by Percy Bysshe Shelley (1817) ▪ "The Raven" by Edgar Allen Poe (1845) ▪ "The Gift of the Magi" by O. Henry (1906) ▪ *The Grapes of Wrath* by John Steinbeck (1939) ▪ *Fahrenheit 451* by Ray Bradbury (1953) ▪ *The Killer Angels* by Michael Shaara (1975)	▪ "Speech to the Second Virginia Convention" by Patrick Henry (1775) ▪ The Declaration of Independence by Thomas Jefferson (1776) ▪ "Second Inaugural Address" by Abraham Lincoln (1865) ▪ "State of the Union Address" by Franklin Delano Roosevelt (1941) ▪ *Cod: A Biography of the Fish That Changed the World* by Mark Kurlansky (1997) ▪ *The Race to Save Lord God Bird* by Phillip Hoose (2004)
11–CCR	▪ "Ode on a Grecian Urn" by John Keats (1820) ▪ *Jane Eyre* by Charlotte Brontë (1848) ▪ "Because I Could Not Stop for Death" by Emily Dickinson (1890) ▪ *The Great Gatsby* by F. Scott Fitzgerald (1925) ▪ *Their Eyes Were Watching God* by Zora Neale Hurston (1937) ▪ *A Raisin in the Sun* by Lorraine Hansberry (1959) ▪ *The Namesake* by Jhumpa Lahiri (2003)	▪ *The Crisis* by Thomas Paine (1776) ▪ *Walden* by Henry David Thoreau (1854) ▪ "Society and Solitude" by Ralph Waldo Emerson (1857) ▪ "Gettysburg Address" by Abraham Lincoln (1863) ▪ "Letter from Birmingham Jail" by Martin Luther King, Jr. (1964) ▪ *Google Hacks: Tips & Tools for Smarter Searching* by Tara Calishain and Rael Dornfest (2004) ▪ *America's Constitution: A Biography* by Akhil Reed Amar (2005)

Note: Given space limitations, the illustrative texts listed above are meant only to show individual titles that are representative of a range of topics and genres. (See Appendix B for excerpts of these and other texts illustrative of grades 6–12 text complexity, quality, and range.) At a curricular or instructional level, within and across grade levels, texts need to be selected around topics or themes that generate knowledge and allow students to study those topics or themes in depth.

Standards for Literacy in History/Social Studies, Science, and Technical Subjects

6–12

College and Career Readiness Anchor Standards for Reading

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented graphically, visually, orally, and multimodally as well as in words within and across print and digital sources.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

*Please see "Research to Build and Present Knowledge" in Writing for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

Note on range and content of student reading

Reading is critical to building knowledge in history/social studies as well as in science and technical subjects. College- and career-ready reading in these fields requires an appreciation of the norms and conventions of each discipline, such as the kinds of evidence used in history and science; an understanding of domain-specific words and phrases; an attention to precise details; and the capacity to evaluate intricate arguments, synthesize complex information, and follow detailed descriptions of events and concepts. In history/social studies, for example, students need to be able to analyze, evaluate, and differentiate primary and secondary sources. When reading scientific and technical texts, students need to be able to gain knowledge from challenging texts that often make extensive use of elaborate diagrams and data to convey information and illustrate concepts. Students must be able to read complex informational texts in these fields with *independence and confidence because the vast majority of reading in college and workforce training programs will be sophisticated nonfiction. It is important to note that these Reading standards are meant to complement the specific content demands of the disciplines, not replace them.*

Reading Standards for Literacy in History/Social Studies 6–12 [RH]

The standards below begin at grade 6; standards for K–5 reading in history/social studies, science, and technical subjects are integrated into the K–5 Reading standards.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details		
1. Cite specific textual evidence to support analysis of primary and secondary sources.	**1.** Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	**1.** Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.
2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	**2.** Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.	**2.** Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
3. Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered).	**3.** Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.	**3.** Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
Craft and Structure		
4. Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.	**4.** Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.	**4.** Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).
5. Describe how a text presents information (e.g., sequentially, comparatively, causally).	**5.** Analyze how a text uses structure to emphasize key points or advance a point of view.	**5.** Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.
6. Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).	**6.** Compare the point of view of two or more authors by comparing how they treat the same or similar history/social science topics, including which details they include and emphasize in their respective accounts.	**6.** Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
Integration of Knowledge and Ideas		
7. Integrate visual information (e.g., pictures, videos, maps) with other information within or across print or digital texts.	**7.** Integrate quantitative or technical information (e.g., charts, research data) with other information within or across print or digital texts.	**7.** Integrate and evaluate multiple sources of information presented in different formats (e.g., print or digital text, video, multimedia) in order to address a question, resolving conflicting information when possible.
8. Distinguish among fact, opinion, and reasoned judgment in a text.	**8.** Assess the extent to which the evidence in a text supports the author's claims.	**8.** Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other sources of information.
9. Analyze the relationship between a primary and secondary source on the same topic.	**9.** Compare and contrast treatments of the same topic in several primary and secondary sources.	**9.** Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
Range of Reading and Level of Text Complexity		
10. By the end of grade 8, read and comprehend history/social studies texts in the grades 6–8 text complexity band independently and proficiently.	**10.** By the end of grade 10, read and comprehend history/social studies texts in the grades 9–10 text complexity band independently and proficiently.	**10.** By the end of grade 12, read and comprehend history/social studies texts in the grades 11–12 text complexity band independently and proficiently.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details		
1. Cite specific textual evidence to support analysis of science and technical texts.	**1.** Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	**1.** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.	**2.** Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	**2.** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	**3.** Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks attending to special cases or exceptions defined in the text.	**3.** Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
Craft and Structure		
4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6–8 texts and topics*.	**4.** Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 9–10 texts and topics*.	**4.** Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 11–12 texts and topics*.
5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.	**5.** Analyze the structure of the relationships among concepts in a text, including relationships among key terms pertaining to important ideas and processes (e.g., *force*, *friction*, *reaction force*, *energy*).	**5.** Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	**6.** Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.	**6.** Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved or uncertain.
Integration of Knowledge and Ideas		
7. Integrate quantitative or technical information provided by the words in a text with a version of that information expressed graphically (e.g., in a flowchart, diagram, model, graph, or table).	**7.** Demonstrate understanding of quantitative or technical information by translating information provided by the words in a text into graphical form (e.g., a table or chart) or translating information expressed graphically or mathematically (e.g., in an equation) into words.	**7.** Integrate and evaluate multiple sources of information presented in different formats (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem, resolving conflicting information when possible.
8. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.	**8.** Assess the extent to which the evidence in a text supports a claim or a recommendation for solving a scientific or technical problem.	**8.** Evaluate the hypotheses, data, and conclusions in a science or technical text, verifying data and corroborating or challenging conclusions when possible by using other sources of information.
9. Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.	**9.** Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.	**9.** Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
Range and Level of Text Complexity		
10. By the end of grade 8, read and comprehend	**10.** By the end of grade 10, read and comprehend	**10.** By the end of grade 12, read and comprehend

science/technical texts in the grades 6–8 text complexity band independently and proficiently.	science/technical texts in the grades 9–10 text complexity band independently and proficiently.	science/technical texts in the grades 11–12 text complexity band independently and proficiently.

College and Career Readiness Anchor Standards for Writing

The grades 6–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They relate to their College and Career Readiness (CCR) counterparts by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Text Types and Purposes[1]

1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.[2]
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

[1]These broad types of writing include many subgenres. See Appendix A for definitions of key writing types.

Note on range and content of student writing

For students, writing is a key means of asserting and defending claims, showing what they know about a subject, and conveying what they have experienced, imagined, thought, and felt. To be college- and career-ready writers, students must take task, purpose, and audience into careful consideration, choosing words, information, structures, and formats deliberately. They need to be able to use technology strategically when creating, refining, and collaborating on writing. They have to become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner. They must have the flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline and the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and long time frames throughout the year.

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6–12 [WHST]

The standards below begin at grade 6; standards for K–5 writing in history/social studies, science, and technical subjects are integrated into the K–5 Writing standards.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes		
2. Write arguments focused on *discipline-specific content*. a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. f. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. g. Establish and maintain a formal style. c. Provide a concluding statement or section that follows from and supports the argument presented.	**1.** Write arguments focused on *discipline-specific content*. f. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. g. Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. h. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. i. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. j. Provide a concluding statement or section that follows from or supports the argument presented.	**1.** Write arguments focused on *discipline-specific content*. f. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. g. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. h. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. i. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. j. Provide a concluding statement or section that follows from or supports the argument presented.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes (continued)		
4. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. g. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. h. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. i. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. j. Use precise language and domain-specific vocabulary to inform about or explain the topic. k. Establish and maintain a formal style and objective tone. l. Provide a concluding statement or section that follows from and supports the information or explanation presented.	**3.** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. g. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. h. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. i. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts. j. Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers. k. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. l. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	**3.** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).
3. Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations that others can replicate them and (possibly) reach the same results.	**3.** Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations that others can replicate them and (possibly) reach the same results.	**3.** Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations that others can replicate them and (possibly) reach the same results.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Production and Distribution of Writing		
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	**4.** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	**5.** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	**5.** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
6. Use technology, including the Internet, to produce and publish a minimum of five pages of writing as well as to interact and collaborate with others.	**6.** Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	**6.** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
Research to Build and Present Knowledge		
7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	**7.** Conduct short as well as more sustained research projects to answer a question (including a self-generate question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	**7.** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
10. Draw evidence from informational texts to support analysis reflection, and research.	**9.** Draw evidence from informational texts to support analysis, reflection, and research.	**9.** Draw evidence from informational texts to support analysis, reflection, and research.
Range of Writing		
10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	**10.** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Math Common Core

Contents

Introduction
Toward greater focus and coherence

Mathematics experiences in early childhood settings should concentrate on (1) number (which includes whole number, operations, and relations) and (2) geometry, spatial relations, and measurement, with more mathematics learning time devoted to number than to other topics. [M]athematical process goals should be integrated in these content areas.

National Research Council, 2009

The composite standards [of Hong Kong, Korea and Singapore] have a number of features that can inform an international benchmarking process for the development of K–6 mathematics standards in the U.S. First, the composite standards concentrate the early learning of mathematics on the number, measurement, and geometry strands with less emphasis on data analysis and little exposure to algebra. The Hong Kong standards for grades 1–3 devote approximately half the targeted time to numbers and almost all the time remaining to geometry and measurement.

Ginsburg, Leinwand and Decker, 2009

Because the mathematics concepts in [U.S.] textbooks are often weak, the presentation becomes more mechanical than is ideal. We looked at both traditional and non-traditional textbooks used in the US and found this conceptual weakness in both.

Ginsburg et al., 2005

There are many ways to organize curricula. The challenge, now rarely met, is to avoid those that distort mathematics and turn off students.

Steen, 2007

For over a decade, research studies of mathematics education in high-performing countries have pointed to the conclusion that the mathematics curriculum in the United States must become substantially more focused and coherent in order to improve mathematics achievement in this country. To deliver on the promise of common standards, the standards must address the problem of a curriculum that is 'a mile wide and an inch deep.' These Standards are a substantial answer to that challenge.

It is important to recognize that "fewer standards" are no substitute for *focused* standards. Achieving "fewer standards" would be easy to do by resorting to broad, general statements. Instead, these Standards aim for clarity and specificity.

Assessing the coherence of a set of standards is more difficult than assessing their focus. William Schmidt and Richard Houang (2002) have said that content standards and curricula are coherent if they are:

> *articulated over time as a sequence of topics and performances that are logical and reflect, where appropriate, the sequential or hierarchical nature of the disciplinary content from which the subject matter derives. That is, what and how students are taught should reflect not only the topics that fall within a certain academic discipline,* ***but also the key ideas*** *that determine how knowledge is organized and generated within that discipline. This implies that "to be coherent," a set of content standards must evolve from particulars (e.g., the meaning and operations of whole numbers, including simple math facts and routine computational procedures associated with whole numbers and fractions) to deeper structures inherent in the discipline. This deeper structure then serves as a means for connecting the particulars (such as an understanding of the rational number system and its properties).* (emphasis added)

These Standards endeavor to follow such a design, not only by stressing conceptual understanding of key ideas, but also by continually returning to organizing principles such as place value or the laws of arithmetic to structure those ideas.

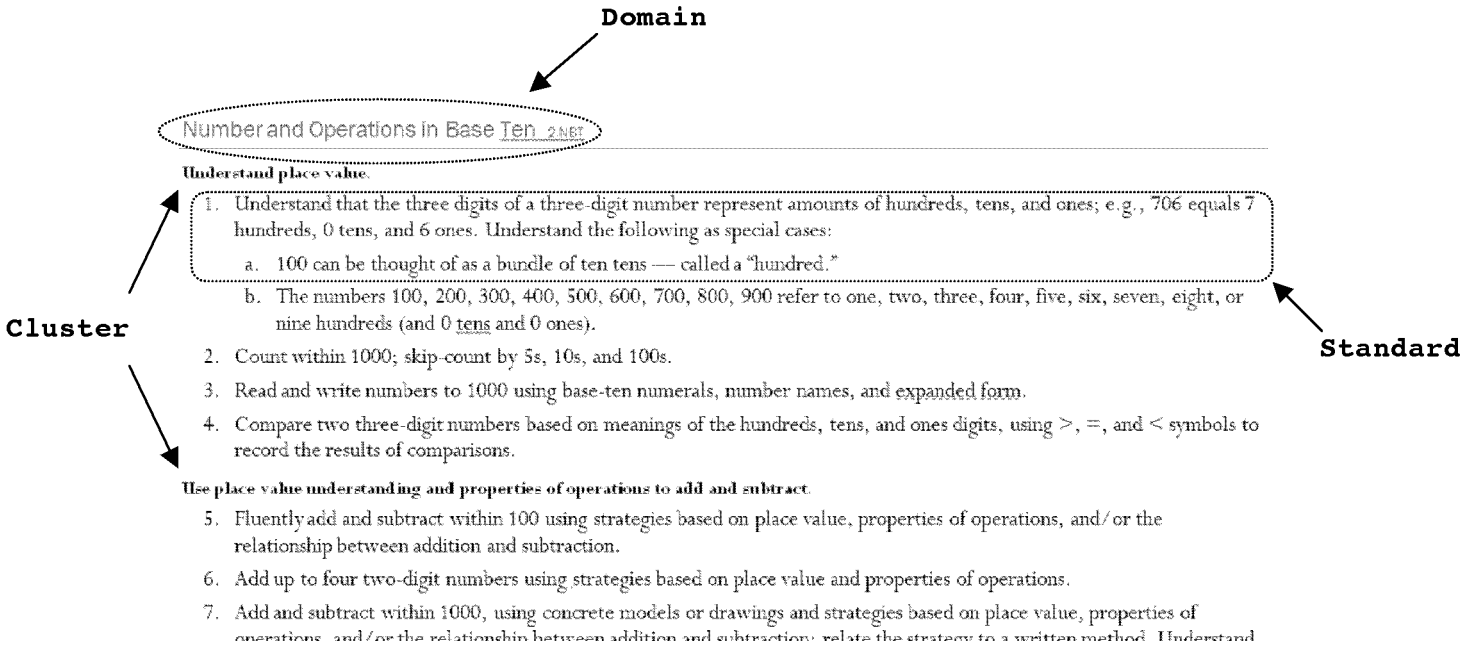
In addition, the 'sequence of topics and performances' that is outlined in a body of mathematics standards must also respect what is known about how students learn. As Confrey (2007) points out, developing "sequenced obstacles and challenges for students…absent the insights about meaning that derive from careful study of learning, would be unfortunate and unwise." In recognition of this, the development of these Standards began with research-based learning progressions detailing what is known today about how students' mathematical knowledge, skill, and understanding develop over time.

Understanding mathematics

These Standards define what students should understand and be able to do in their study of mathematics. Asking a student to understand something means asking a teacher to assess whether the student has understood it. But what does mathematical understanding look like? One hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, *why* a particular mathematical statement is true or where a mathematical rule comes from. There is a world of difference between a student who can summon a mnemonic device to expand a product such as $(a + b)(x + y)$ and a student who can explain where the mnemonic comes from. The student who can explain the rule understands the mathematics, and may have a better chance to succeed at a less familiar task such as expanding $(a + b + c)(x + y)$. Mathematical understanding and procedural skill are equally important, and both are assessable using mathematical tasks of sufficient richness.

The Standards begin on the next page with eight Standards for Mathematical Practice.

How to read the grade level standards



Standards define what students should understand and be able to do. **Clusters** summarize groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject. **Domains** are larger groups of related standards. Standards from different domains may sometimes be closely related.

Dotted Underlines: Dotted underlines, for example, associative property, indicate terms that are defined in the Glossary. In each grade, underlining is used for the first occurrence of a defined term, but not in subsequent occurrences.

Mathematics | Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education: the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections; and the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

1 Make sense of 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 analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches. Key related processes: Problem solving. Key related proficiencies: Conceptual understanding, strategic competence, productive disposition.

2 Reason abstractly and quantitatively.

Mathematically proficient students make sense of the quantities and their relationships in problem situations. Students bring two complementary abilities to bear on problems involving quantitative relationships: 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 referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects. Key related processes: Problem solving, Representation. Key related Key related proficiencies: Strategic competence, productive disposition.

3 Construct viable arguments and critique the reasoning of others.

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 are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They 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. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments. Key related processes: Problem solving, Representation. Key related proficiencies: Strategic competence, productive disposition.

4 Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose. Key related processes: Representation. Key related proficiencies: Adaptive reasoning.

5 Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, ruler, protractor, calculator, spreadsheet, computer algebra system, statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts. Key related processes: Problem solving. Key related proficiencies: Strategic competence.

6 Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions. Key related processes: Problem solving, Representation. Key related proficiencies: Procedural fluency.

7 Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y. Key related processes: Reasoning and proof. Key related proficiencies: Adaptive reasoning.

8 Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x -$

1) = 3. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results. Key related processes: Problem solving, Reasoning and proof. Key related proficiencies: Adaptive reasoning.

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

The Standards for Mathematical Practice describe ways in which developing student-practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years. Designers of curriculum, assessment, and professional development should all attend to the need to connect the mathematical practices to mathematical content in mathematics instruction.

The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word "understand" are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices.

In this respect, those content standards which set an expectation of understanding are potential "points of intersection" between the Standards for Mathematical Content and the Standards for Mathematical Practice. These points of intersection are intended to be weighted toward central and generative concepts in the school mathematics curriculum that most merit the time, resources, innovative energies, and focus necessary to qualitatively improve curriculum, instruction, assessment, professional development, and student achievement in mathematics.

Mathematics | Kindergarten

In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

(1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

(2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Grade Level Overview

Counting and Cardinality	• Know number names and the count sequence. • Count to tell the number of objects. • Compare numbers.
Operations and Algebraic Thinking	• Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
Number and Operations in Base Ten	• Work with numbers 11-19 to gain foundations for place value.
Measurement and Data	• Describe and compare measurable attributes. • Classify objects and count the number of objects in each category
Geometry	1. Identify and describe shapes. 2. Analyze, compare, create, and compose shapes.

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Counting and Cardinality K.CC

Know number names and the count sequence.

1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

Count to tell the number of objects.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.
   a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
   b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
   c. Understand that each successive number name refers to a quantity that is one larger.
5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle; or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compare numbers.

6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.[1]
7. Compare two numbers between 1 and 10 presented as written numerals.

Operations and Algebraic Thinking K.OA

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings,[2] sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
5. Fluently add and subtract within 5.

Number and Operations in Base Ten K.NBT

Work with numbers 11-19 to gain foundations for place value.

1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement and Data K.MD

Describe and compare measurable attributes.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*

Classify objects and count the number of objects in each category.

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.[3]

[1] Include groups with up to ten objects.
[2] Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

Identify and describe shapes (such as squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Analyze, compare, create, and compose shapes.

4. Analyze and compare a variety of two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes.

[2] Limit category counts to be less than or equal to 10.

Mathematics | Grade 1

In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

(1) Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., "making tens") to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

(2) Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

(3) Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.[4]

(4) Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

Grade Level Overview

Operations and Algebraic Thinking
- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten
- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data
- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

Geometry
- Reason with shapes and their attributes.

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

[4] Students should apply the principle of transitivity of measurement to make indirect comparisons, but they need not use this technical term.

Operations and Algebraic Thinking 1.OA

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.[5]
2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, *e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.*

Understand and apply properties of operations and the relationship between addition and subtraction.

3. Apply properties of operations as strategies to add and subtract.[6] *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*
4. Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*

Add and subtract within 20.

5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

Work with addition and subtraction equations.

7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*
8. Determine the unknown number in a whole-number addition or subtraction equation. *For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.*

Number and Operations in Base Ten 1.NBT

Extend the counting sequence.

1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Understand place value.

2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
   a. 10 can be thought of as a bundle of ten ones — called a "ten."
   b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
   c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

Use place value understanding and properties of operations to add and subtract.

4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

[5] See Glossary, Table 1.
[6] Students need not use formal terms for these properties.

Measurement and Data 1.MD

Measure lengths indirectly and by iterating length units.

1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*

Tell and write time.

3. Tell and write time in hours and half-hours using analog and digital clocks.

Represent and interpret data.

4. Organize, represent, and interpret data with up to three 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.

Geometry 1.G

Reason with shapes and their attributes.

1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) for a wide variety of shapes; build and draw shapes to possess defining attributes.
2. Compose two-dimensional shapes (such as rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (such as cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.[7]
3. Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

[7] Students do not need to learn formal names such as "right rectangular prism."

Mathematics | Grade 2

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

(1) Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).

(2) Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

(3) Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

(4) Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Grade Level Overview

Operations and Algebraic Thinking
- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data
- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

Geometry
- Reason with shapes and their attributes.

Mathematical Practices
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking 2.OA

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[8]

Add and subtract within 20.

2. Fluently add and subtract within 20. By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for multiplication.

3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.
4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Number and Operations in Base Ten 2.NBT

Understand place value.

1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
   a. 100 can be thought of as a bundle of ten tens — called a "hundred."
   b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
2. Count within 1000; skip-count by 5s, 10s, and 100s.
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.

5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
8. Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.
9. Explain why addition and subtraction strategies work, using place value and the properties of operations.[9]

Measurement and Data 2.MD

Measure and estimate lengths in standard units.

1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
3. Estimate lengths using units of inches, feet, centimeters, and meters.
4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length.

[8] See Glossary, Table 1.
[9] Explanations may be supported by drawings or objects.

5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences on a number line diagram.

Work with time and money.

7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Represent and interpret data.

9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems[10] using information presented in a bar graph.

Geometry 2.G

Reason with shapes and their attributes.

1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.[11] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, *a third of*, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

[10] See Glossary, Table 1.
[11] Sizes are compared directly or visually, not compared by measuring.

Mathematics | Grade 3

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

(1) Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.

(2) Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole; for example, $1/2$ of the paint in a large bucket could be less paint than $1/3$ of the paint in a smaller bucket; but $1/3$ of a ribbon is longer than $1/5$ of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

(3) Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.

(4) Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Grade Level Overview

Operations and Algebraic Thinking	• Represent and solve problems involving multiplication and division. • Understand properties of multiplication and the relationship between multiplication and division. • Multiply and divide within 100. • Solve problems involving the four operations, and identify and explain patterns in arithmetic.
Number and Operations in Base Ten	• Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations—Fractions	• Develop understanding of fractions as numbers.
Measurement and Data	• Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. • Represent and interpret data. • Geometric measurement: understand concepts of area and relate area to multiplication and to addition. • Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Geometry	• Reason with shapes and their attributes.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking 3.OA

Represent and solve problems involving multiplication and division.

1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, , describe a context in which a total number of objects can be expressed as 5 × 7.*
2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a number of groups can be expressed as* 56 ÷ 8.
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[12]
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?.*

Understand properties of multiplication and the relationship between multiplication and division.

5. Apply properties of operations as strategies to multiply and divide.[13] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by multiplying 3 × 5 = 15 then multiplying 15 × 2 = 30, or by multiplying 5 × 2 = 10 then multiplying 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*
6. Understand division as an unknown-factor problem. *For example, divide 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*

Multiply and divide within 100.

7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By end of Grade 3, know from memory all products of one-digit numbers.

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity; assess the reasonableness of answers using mental computation and estimation strategies including rounding.[14]
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*

Number and Operations in Base Ten 3.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.[15]

1. Use place value understanding to round whole numbers to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

Number and Operations—Fractions[16] 3-NF

Develop understanding of fractions as numbers.

1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.

[12] See Glossary, Table 2.
[13] Students need not use formal terms for these properties.
[14] This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order.
[15] A range of algorithms may be used.
[16] Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, 8.

a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.

b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.

3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

a. Recognize and generate simple equivalent fractions (e.g., $1/2 = 2/4$, $4/6 = 2/3$); explain why the fractions are equivalent, e.g., by using a visual fraction model.

b. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.*

c. Compare two fractions with the same numerator or the same denominator, by reasoning about their size; recognize that valid comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Measurement and Data 3.MD

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

1. Tell and write time to the nearest minute and measure time intervals in minutes; solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (*l*).[17] Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.[18]

Represent and interpret data.

3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 1 pet, 5 pets, or 10 pets.*
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

5. Recognize area as an attribute of plane figures and understand concepts of area measurement.

a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.

b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.

6. Measure areas by counting unit squares, using square cm, square m, square in, square ft, and improvised units.
7. Relate area to the operations of multiplication and addition.

a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.

b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems; represent whole-number products as rectangular areas in mathematical reasoning.

c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$; use area models to represent the distributive property in mathematical reasoning.

d. Recognize area as additive; find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.

Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

8. Solve real-world and mathematical problems involving perimeters of polygons, such as finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different area or with the same area and different perimeter.

Geometry 3.G

[17] Excludes compound units such as cm^3 and finding the geometric volume of a container.

[18] Excludes multiplicative comparison problems (problems involving notions of "times as much"; see Glossary, Table 2).

Reason with shapes and their attributes.

1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals); recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part is $1/4$ of the area of the shape.*

Mathematics | Grade 4

In Grade 4, instructional time should focus on four critical areas: (1) developing understanding and fluency with whole number multiplication, and developing understanding of whole number division; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) continuing to develop understanding of area; and (4) understanding that geometric figures can be analyzed and classified based on their properties such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

(1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They use understandings of multiplication and division to develop fluency with multiplication and division of whole numbers. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

(2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

(3) Students develop their understanding of area. They understand and apply the area formula for rectangles and also find areas of shapes that can be decomposed into rectangles. They select appropriate units, strategies (e.g., decomposing shapes), and tools for solving problems that involve estimating and measuring area.

(4) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Grade Level Overview

Operations and Algebraic Thinking	• Use the four operations with whole numbers to solve problems. • Gain familiarity with factors and multiples. • Generate and analyze patterns.
Number and Operations in Base Ten	• Generalize place value understanding for multi-digit whole numbers. • Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations—Fractions	• Extend understanding of fraction equivalence and ordering. • Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. • Understand decimal notation for fractions, and compare decimal fractions.
Measurement and Data	• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. • Represent and interpret data. • Geometric measurement: understand concepts of angle and measure angles.
Geometry	• Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking 4.OA

Use the four operations with whole numbers to solve problems.

1. Interpret a multiplication equation as a comparison, e.g., interpret $5 \times 7 = 35$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.[19]
3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity; assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Gain familiarity with factors and multiples.

4. Find the factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.

Generate and analyze patterns.

5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example: Given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*

Number and Operations in Base Ten[20] 4.NBT

Generalize place value understanding for multi-digit whole numbers.

1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.*
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits, using >, =, and < symbols to record the results of comparisons.
3. Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.[21]

4. Add and subtract multi-digit whole numbers accurately and efficiently using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Number and Operations—Fractions[22] 4.NF

Extend understanding of fraction equivalence and ordering.

1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size; use this principle to recognize and generate equivalent fractions.
2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$; recognize that valid comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

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[19] See Glossary, Table 2.
[20] Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.
[21] A range of algorithms may be used.
[22] Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.
   a. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation (e.g., $3/8 = 1/8 + 1/8 + 1/8$ and $3/8 = 1/8 + 2/8$). Justify decompositions, e.g., by using a visual fraction model.
   b. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
   c. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
   a. Understand a fraction a/b as a multiple of $1/b$. *For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.*
   b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)*
   c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example: If each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*

Understand decimal notation for fractions, and compare decimal fractions.

5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.[23] *For example, express $3/10$ as $30/100$ and add $3/10 + 4/100 = 34/100$.*
6. Interpret a two-digit decimal as a fraction and use decimal notation for parts of wholes; round decimals to the nearest whole number by reasoning about their size. *For example, rewrite 1.62 as $1\ 62/100$; describe a length as 1.62 meters; locate 1.62 on a number line diagram and round 1.62 to 2.*
7. Compare two decimals to hundredths by reasoning about their size; recognize that valid comparisons rely on the two decimals referring to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.

Measurement and Data 4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; ℓ, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of smaller unit. Record measurement equivalents in a two-column table. *For example: Know that 1 ft is 12 times as long as 1 in; express the length of a 4 ft snake as 48 in; generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*
2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
3. Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*

Represent and interpret data.

4. Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Geometric measurement: understand concepts of angle and measure angles.

5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

[23] Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $1/360$ of a circle is called a "one-degree angle," and can be used to measure angles.

b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

6. Measure angles in whole-number degrees using a protractor; sketch angles of specified measure.
7. Recognize angle measure as additive; when an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry 4.G

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines; identify these in two-dimensional figures.
2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of specified size. Recognize right triangles as a category, and identify right triangles.
3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts; identify line-symmetric figures and draw lines of symmetry.

Mathematics | Grade 5

In Grade 5, instructional time should focus on four critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) developing fluency with whole number operations; (3) integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths; and (4) developing understanding of volume.

(1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop fluency with multi-digit addition, subtraction, and multiplication, and develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations.

(3) Students apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.

(4) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real-world and mathematical problems.

Grade Level Overview

Operations and Algebraic Thinking	• Write and interpret numerical expressions. • Analyze patterns and relationships.
Number and Operations in Base Ten	• Understand the place value system. • Perform operations with multi-digit whole numbers and with decimals to hundredths.
Number and Operations—Fractions	• Use equivalent fractions as a strategy to add and subtract fractions. • Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
Measurement and Data	• Convert like measurement units within a given measurement system. • Represent and interpret data. • Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
Geometry	• Graph points on the coordinate plane to solve real-world and mathematical problems. • Classify two-dimensional figures into categories based on their properties.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Operations and Algebraic Thinking 5.OA

Write and interpret numerical expressions.

1. Interpret grouping symbols in numerical expressions and evaluate expressions with grouping symbols.
2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$; recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.*

Analyze patterns and relationships.

3. Generate two numerical patterns using two given rules. Graph pairs of corresponding terms on a coordinate plane, and identify apparent relationships between corresponding terms. *For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

Number and Operations in Base Ten 5.NBT

Understand the place value system.

1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.
2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use positive integer exponents to denote powers of 10.
3. Read, write, and compare decimals to thousandths.
   a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
   b. Compare two decimals to thousandths based on meanings of the digits, using >, =, and < symbols to record the results of comparisons.
4. Use place value understanding to round decimals to any place.

Perform operations with multi-digit whole numbers and with decimals to hundredths.

5. Fluently add, subtract, and multiply multi-digit whole numbers using the standard algorithm for each operation.
6. Find quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division; express the quotient as a fraction or mixed number. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
7. Add, subtract, multiply, and divide decimals of one or two digits, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Number and Operations—Fractions 5-NF

Use equivalent fractions as a strategy to add and subtract fractions.

1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)*
2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result $2/5 + 1/2 = 3/7$ by observing that $3/7 < 1/2$.*

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

3. Interpret a fraction as the result of dividing the numerator by the denominator ($a/b = a \div b$); solve word problems involving division of whole numbers leading to fractional answers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3 and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*

4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
   a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show* $(2/3) \times 4 = 8/3$, *and create a story context for this equation; do the same with* $(2/3) \times (4/5) = 8/15$. (*In general,* $(a/b) \times (c/d) = ac/bd$.)
   b. Find the area of a rectangle with fractional side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths; multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
5. Interpret multiplication as scaling (resizing), including by:
   a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
   b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.
6. Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[24]
   a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for* $(1/3) \div 4$ *and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that* $(1/3) \div 4 = 1/12$ *because* $(1/12) \times 4 = 1/3$.
   b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for* $4 \div (1/5)$ *and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that* $4 \div (1/5) = 20$ *because* $20 \times (1/5) = 4$.
   c. Solve real-world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, How much chocolate will each person get if 3 people share* $1/2$ *lb of chocolate equally? How many* $1/3$*-cup servings are in 2 cups of raisins?*

Measurement and Data 5.MD

Convert like measurement units within a given measurement system.

1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step real-world problems.

Represent and interpret data.

2. Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
   a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
   b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.
4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
5. Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.
   a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent three-fold whole-number products as volumes, e.g., to represent the associative property of multiplication.

[24] Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

b. Apply the formulas $V = \ell\, w\, h$ and $V = b\, h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems;

c. Recognize volume as additive; find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems.

Geometry 5.G

Graph points on the coordinate plane to solve real-world and mathematical problems.

1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
2. Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Classify two-dimensional figures into categories based on their properties.

3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*
4. Classify two-dimensional figures in a hierarchy based on properties.

Mathematics | Grade 6

In Grade 6, instructional time should focus on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions; (3) developing understanding of and using formulas to determine areas of two-dimensional shapes and distinguishing between volume and surface area of three-dimensional shapes; and (4) writing, interpreting, and using expressions and equations.

(1) Students use reasoning about multiplication and division of quantities to solve ratio and rate problems. By viewing equivalent ratios and rates as deriving from, and extending, pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students extend multiplication and division to ratios and rates. Thus students expand the scope of problems for which they can use multiplication and division to solve problems, and they build on their understanding of fractions to understand ratios. Students solve a wide variety of problems involving ratios and rates.

(2) Students use the meaning of fractions, the meanings of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. Students are able to use these operations to solve problems.

(3) Students reason about relationships among shapes to determine area, surface area, and volume. They find areas of right triangles, other triangles, and special quadrilaterals by decomposing these shapes, rearranging or removing pieces, and relating the shapes to rectangles. Using these methods, students discuss, develop, and justify formulas for areas of triangles and parallelograms. Students find areas of polygons and surface areas of prisms and pyramids by decomposition into pieces whose area they can determine. They reason about right rectangular prisms with rational sides to extend the formula for its volume to rational side lengths. They prepare for work on scale drawings and constructions in Grade 8 by drawing polygons in the coordinate plane.

(4) Students understand the use of variables in mathematical expressions. They write expressions and equations that correspond to given situations, evaluate expressions, and use expressions and formulas to solve problems. Students understand that expressions in different forms can be equivalent, and they use the properties of operations to rewrite expressions in equivalent forms. Students know that the solutions of an equation are the values of the variables that make the equation true. Students use properties of operations and the idea of maintaining the equality of both sides of an equation to solve simple one-step equations. Students construct and analyze tables, such as tables of quantities that are in equivalent ratios, and they use equations (such as $3x = y$) to describe relationships between quantities.

Students in Grade 6 develop their ability to think statistically. Students recognize that a typical data distribution does not have a definite center, and so different ways to measure center yield different values. The median measures center in the sense that it is roughly the middle value. The mean measures center in the sense that it is the value that each data point would take on if the total of the data values were redistributed fairly, and also in the sense that it is a balance point. Students learn to describe and summarize distributions of data, identifying clusters, peaks, gaps, and symmetry, considering the context in which the data was collected.

Grade Level Overview

Ratios and Proportional Relationships	• Understand ratio concepts and use ratio reasoning to solve problems.
The Number System	• Apply and extend previous understandings of multiplication and division to divide fractions by fractions. • Apply and extend previous understandings of numbers to the system of rational numbers.
Expressions and Equations	• Apply and extend previous understandings of arithmetic to algebraic expressions. • Reason about and solve one-variable equations and inequalities. • Represent and analyze quantitative relationships between dependent and independent variables.
Geometry	• Solve real-world and mathematical problems involving area, surface area, and volume.
Statistics and Probability	• Develop understanding of statistical variability. • Summarize and describe distributions.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Ratios and Proportional Relationships 6.RP

Understand ratio concepts and use ratio reasoning to solve problems.

1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."*
2. Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. *For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid $75 for 15 paperbacks, which is a rate of $5 per paperback."* [1]
3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
   a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
   b. Solve unit rate problems including unit pricing and constant speed. *For example, If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?*
   c. Find a percentage of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole given a part and the percentage.
   d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

The Number System 6.NS

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.). How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$-cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?*
2. Fluently divide multi-digit numbers using the standard algorithm for each operation.

Apply and extend previous understandings of numbers to the system of rational numbers.

3. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
4. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate planes familiar from previous grades to represent negative numbers and their distance from 0.
   a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
   b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
   c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
5. Understand the ordering of rational numbers.
   a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.*
   b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write $-3\,^{\circ}C > -7\,^{\circ}C$ to express the fact that $-3\,^{\circ}C$ is warmer than $-7\,^{\circ}C$.*
6. Understand absolute value and its relationship to the order of rational numbers.

[1] Expectations for unit rates in this grade are limited to non-complex fractions.

a. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. *For example, for an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars.*

b. Distinguish comparisons of absolute value from statements of order. *For example, recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars.*

7. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane, including using coordinates and absolute value reasoning to find distances between points with the same first coordinate or the same second coordinate.

Expressions and Equations 6.EE

Apply and extend previous understandings of arithmetic to algebraic expressions.

1. Evaluate numerical expressions involving whole-number exponents.
2. Write, read, and evaluate expressions in which letters stand for numbers.
   a. Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as $5 - y$.*
   b. Identify parts of an expression using mathematical language (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression $2 (8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.*
   c. Evaluate expressions by substituting values for their variables, including when using formulas in real-world problems. Perform arithmetic operations (including those involving whole-number exponents) in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.*
3. Apply the properties of operations as strategies to generate equivalent expressions. *For example, apply the distributive property to the expression $3 (2 + x)$ to produce the equivalent expression $6 + 3x$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.*
4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). *For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.*

Reason about and solve one-variable equations and inequalities.

5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
6. Use variables to stand for numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can be used in cases where a number is unknown, or where, for the purpose at hand, it can be any number in a specified set.
7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.
8. Write a statement of inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities graphically on a number line diagram.

Represent and analyze quantitative relationships between dependent and independent variables.

9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.*

Geometry 6.G

Solve real-world and mathematical problems involving area, surface area, and volume.

1. Find area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the

prism. Apply the formulas $V = \ell\, w\, h$ and $V = b\, h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Statistics and Probability 6.SP

Develop understanding of statistical variability.

1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*
2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its overall shape, center and spread.
3. Recognize that a measure of center for a numerical data set summarizes all of its values using a single number, while a measure of variation describes how its values vary using a single number.

Summarize and describe distributions.

4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
5. Summarize numerical data sets in relation to their context, such as by:
    a. Reporting the number of observations.
    b. Describing the nature of the attribute of investigation, including how it was measured and its units of measurement.
    c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered.
    d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered.

Mathematics | Grade 7

In Grade 7, instructional time should focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and solving linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

(1) Students extend their understanding of ratios and develop understanding of proportionality to solve single- and multi-step problems. Students use their understanding of ratios and proportionality to solve a wide variety of percent problems, including those involving discounts, interest, taxes, tips, and percent increase or decrease. Students solve problems about scale drawings by relating corresponding lengths between the objects or by using the fact that relationships of lengths within an object are preserved in similar objects. Students graph proportional relationships and understand the unit rate informally as a measure of the steepness of the related line, called the slope. They distinguish proportional relationships from other relationships.

(2) Students develop a unified understanding of number, recognizing fractions, decimals, and percents as different representations of rational numbers. Students extend addition, subtraction, multiplication, and division and their properties to all rational numbers, including integers and numbers represented by complex fractions and negative fractions. By applying the properties of operations, and by viewing negative numbers in terms of everyday contexts (e.g., amounts owed or temperatures below zero), students explain why the rules for adding, subtracting, multiplying, and dividing with negative numbers make sense. They use the arithmetic of rational numbers as they formulate and solve linear equations in one variable and use these equations to solve problems.

(3) Students continue their work with area from Grade 6, solving problems involving the area and circumference of a circle and surface area of three-dimensional objects. In preparation for work on congruence and similarity in Grade 8 they reason about relationships among two-dimensional figures using scale drawings and informal geometric constructions, and they gain familiarity with the relationships between angles formed by intersecting lines. Students work with three-dimensional figures, relating them to two-dimensional figures by taking slices. They solve real-world and mathematical problems involving area, surface area, and volume of two- and three-dimensional objects made up from triangles, quadrilaterals, polygons, cubes and right prisms.

(4) Students build on their previous work with single data distributions to compare two data distributions and address questions about differences between populations. They begin informal work with random sampling to generate data sets and learn about the importance of representative samples for drawing inferences.

Grade Level Overview

Ratios and Proportional Relationships	• Analyze proportional relationships and use them to solve real-world and mathematical problems.
The Number System	• Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
Expressions and Equations	• Use properties of operations to generate equivalent expressions. • Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Geometry	• Draw, construct and describe geometrical figures and describe the relationships between them. • Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
Statistics and Probability	• Use random sampling to draw inferences about a population • Draw informal comparative inferences about two populations. • Investigate chance processes and develop, use, and evaluate probability models.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Ratios and Proportional Relationships 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

1. Compute unit rates associated with ratios of nonnegative rational numbers, including ratios of lengths, areas and other quantities measured in like or different units. *For example, If a person walks ½ mile in each ¼ hour, compute the unit rate as the complex fraction ½ / ¼ miles per hour, equivalently 2 miles per hour.*
2. Recognize and represent proportional relationships between covarying quantities.
   a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
   b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
   c. Represent proportional relationships by equations. *For example, total cost, t, is proportional to the number, n, purchased at a constant price, p; this relationship can be expressed as $t = pn$.*
   d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.
3. Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*

The Number System 7.NS

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
   a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*
   b. Understand $p + q$ as the number located a distance $|q|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.
   c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
   d. Apply properties of operations as strategies to add and subtract rational numbers.
2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
   a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
   b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p/q is a rational number, then $-(p/q) = (-p)/q = p/(-q)$. Interpret products of rational numbers by describing real-world contexts.
   c. Apply properties of operations as strategies to multiply and divide rational numbers.
   d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.
3. Solve real-world and mathematical problems involving the four operations with rational numbers.[2]

Expressions and Equations 7.EE

Use properties of operations to generate equivalent expressions.

1. Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.*

[2] Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

2. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
3. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."*

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

4. Use numbers expressed in the form of a single digit times a whole-number power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. *For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.*
5. Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations as strategies for calculating with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional $1/10$ of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar $9\ 3/4$ inches long in the center of a door that is $27\ 1/2$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*
6. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
    a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare the algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?*
    b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example, As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.*

Geometry 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.

1. Solve problems involving scale drawings of geometric figures in the coordinate plane, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
2. 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, ambiguously defined or nonexistent.
3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

4. Know the formulas for the area and circumference of a circle and solve problems; give an informal derivation of the relationship between the circumference and area of a circle.
5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.
6. Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

Statistics and Probability 7.SP

Use random sampling to draw inferences about a population.

1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.
2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

Draw informal comparative inferences about two populations

3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean average deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*
4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*

Investigate chance processes and develop, use, and evaluate probability models.

5. Understand that the probability of a chance event is a number between 0 and 1 expressing the likelihood of that event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around ½ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*
7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
    a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*
    b. Develop a possibly non-uniform probability model by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*
8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
    a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.
    b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes for which the event occurs.
    c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: if 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*

Mathematics | Grade 8

In Grade 8, instructional time should focus on three critical areas: (1) solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

(1) Students use linear equations and systems of linear equations to represent, analyze, and solve a variety of problems. Students recognize proportions ($y / x = m$ or $y = mx$) as a special case of linear equations, $y = mx + b$, understanding that the constant of proportionality (m) is the slope and the graphs are lines through the origin. They understand that the slope (m) of a line is a constant rate of change, so that if the input or x-coordinate changes by an amount A, the output or y-coordinate changes by the amount $m \cdot A$. Students also formulate and solve linear equations in one variable and use these equations to solve problems. Students also use a linear equation to describe the association between two quantities in a data set (such as arm span vs. height for students in a classroom). At this grade, fitting the model, and assessing its fit to the data are done informally. Interpreting the model in the context of the data requires students to express a relationship between the two quantities in question.

Students strategically choose and efficiently implement procedures to solve linear equations in one variable, understanding that when they use the properties of equality and the concept of logical equivalence, they maintain the solutions of the original equation. Students solve systems of two linear equations in two variables and relate the systems to pairs of lines in the plane; these intersect, are parallel, or are the same line. Students use linear equations, systems of linear equations, linear functions, and their understanding of slope of a line to analyze situations and solve problems.

(2) Students grasp the concept of a function as a rule that assigns to each element of its domain exactly one element of its range. They use function notation and understand that functions describe situations where one quantity determines another. They can translate among verbal, tabular, graphical, and algebraic representations of functions (noting that tabular and graphical representations are usually only partial representations), and they describe how aspects of the function are reflected in the different representations.

(3) Students use ideas about distance and angles, how they behave under translations, rotations, reflections, and dilations, and ideas about congruence and similarity to describe and analyze two-dimensional figures and to solve problems. Students prove that the angles in a triangle add up to a straight line, and that various configurations of lines give rise to similar triangles because of the angles created when a transversal cuts parallel lines. Students understand the statement of the Pythagorean Theorem and its converse, and can explain why the Pythagorean Theorem is valid, for example, by decomposing a square in two different ways. They apply the Pythagorean Theorem to find distances between points on the coordinate plane, to find lengths, and to analyze polygons. Students complete their work on volume by solving problems involving cones, cylinders, and spheres.

Grade Level Overview

The Number System	• Know that there are numbers that are not rational, and approximate them by rational numbers.
Expressions and Equations	• Work with radicals and integer exponents. • Understand the connections between proportional relationships, lines, and linear equations. • Analyze and solve linear equations and pairs of simultaneous linear equations.
Functions	• Define, evaluate, and compare functions. • Use functions to model relationships between quantities.
Geometry	• Understand congruence and similarity using physical models, transparencies, or geometry software. • Understand and apply the Pythagorean Theorem. • Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
Statistics and Probability	• Investigate patterns of association in bivariate data.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

The Number System 8.NS

Know that there are numbers that are not rational, and approximate them by rational numbers.

1. Understand informally that every number has a decimal expansion; the rational numbers are those with decimal expansions that terminate in 0s or eventually repeat. Know that other numbers are called irrational.
2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.*

Expressions and Equations 8.EE

Work with radicals and integer exponents.

1. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.
2. Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

Understand the connections between proportional relationships, lines, and linear equations.

3. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*
4. Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

Analyze and solve linear equations and pairs of simultaneous linear equations.

5. Solve linear equations in one variable.
   a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).
   b. Solve linear equations with rational number coefficients, including equations that require expanding expressions using the distributive property and collecting like terms.
6. Analyze and solve pairs of simultaneous linear equations.
   a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
   b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.*
   c. Solve real-world and mathematical problems leading to two linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*

Functions 8.F

Define, evaluate, and compare functions.

1. Understand that a function from one set (called the domain) to another set (called the range) is a rule that assigns to each element of the domain (an input) exactly one element of the range (the corresponding output). The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.[3]
2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*

[3] Function notation is not required in Grade 8.

3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. *For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.*

Use functions to model relationships between quantities.

4. 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. 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.
5. Describe qualitatively the functional relationship between two quantities by reading a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Geometry 8.G

Understand congruence and similarity using physical models, transparencies, or geometry software.

1. Verify experimentally the properties of rotations, reflections, and translations:
   a. Lines are taken to lines, and line segments to line segments of the same length.
   b. Angles are taken to angles of the same measure.
   c. Parallel lines are taken to parallel lines.
2. Understand that a plane figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
3. Describe the effect of dilations, translations, rotations and reflections on figures using coordinates.
4. Understand that a plane figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar figures, describe a sequence that exhibits the similarity between them.
5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, and about the angles created when parallel lines are cut by a transversal. *For example, arrange three copies of the same triangle so that the three angles appear to form a line, and give an argument in terms of transversals why this is so.*

Understand and apply the Pythagorean Theorem.

6. Explain a proof of the Pythagorean Theorem and its converse.
7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.

9. Know the formulas for the volume of cones, cylinders and spheres and solve real-world and mathematical problems.

Statistics and Probability 8.SP

Investigate patterns of association in bivariate data.

1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.
2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.
3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*
4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*

Mathematics Standards for High School

Where is the College and Career Readiness line drawn?

The high school standards specify the mathematics that all students should study in order to be college and career ready. Additional mathematics that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics is indicated by (+), as in this example:

> (+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers).

Standards with a (+) symbol are beyond the college and career readiness threshold, but may appear in courses intended for all students. Any standard without a (+) symbol is intended to be in the common mathematics curriculum for all college and career ready students.

How are the high school standards organized?

The high school standards are listed in conceptual categories:

- Number and Quantity
- Algebra
- Functions
- Modeling
- Geometry
- Statistics and Probability.

Conceptual categories portray a coherent view of core high school mathematics; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus.

Modeling standards

Modeling is best interpreted not as a collection of isolated topics but in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (*).

Numbers and Number Systems. During the years from kindergarten to eighth grade, students must repeatedly extend their conception of number. At first, "number" means "counting number": 1, 2, 3.... Soon after that, 0 is used to represent "none" and the whole numbers are formed by the counting numbers together with zero. The next extension is fractions. At first, fractions are barely numbers and tied strongly to pictorial representations. Yet by the time students understand division of fractions, they have a strong concept of fractions as numbers and have connected them, via their decimal representations, with the base-ten system used to represent the whole numbers. During middle school, fractions are augmented by negative fractions to form the rational numbers. In Grade 8, students extend this system once more, augmenting the rational numbers with the irrational numbers to form the real numbers. In high school, students will be exposed to yet another extension of number, when the real numbers are augmented by the imaginary numbers to form the complex numbers.

This ascent through number systems makes it fair to ask: what does the word *number* mean that it can mean all of these things? One possible answer is that a number is something that can be used to do mathematics: calculate, solve equations, or represent measurements.

With each extension of number, the meanings of addition, subtraction, multiplication, and division are extended. In each new number system—integers, rational numbers, real numbers, and complex numbers—the four operations stay the same in two important ways: They have the commutative, associative, and distributive properties and their new meanings are consistent with their previous meanings. For example, multiplication by a whole number can be interpreted as repeated addition of the multiplicand in extensions of the whole numbers.

Extending the properties of whole-number exponents leads to new and productive notation. For example, properties of whole-number exponents suggest that $(5^{1/3})^3$ should be $5^{(1/3)\cdot 3} = 5^1 = 5$ and that $5^{1/3}$ should be the cube root of 5.

Calculators can provide ways for students to become better acquainted with these new number systems and their notation. They can be used to generate data for numerical experiments, to help understand the workings of matrix, vector, and complex number algebra, and to experiment with non-integer exponents.

Quantities. In their work in measurement up through Grade 8, students primarily measure commonly used attributes such as length, area, and volume. In high school, students encounter a wider variety of units in modeling, e.g., acceleration, currency conversions, derived quantities such as person-hours and heating degree days, social science rates such as per-capita income, and rates in everyday life such as points scored per game or batting averages. They also encounter novel situations in which they themselves must conceive the attributes of interest. For example, to find a good measure of overall highway safety, they might propose measures such as fatalities per year, fatalities per year per driver, or fatalities per vehicle-mile traveled. Such a conceptual process might be called quantification. Quantification is important for science, as when surface area suddenly "stands out" as an important variable in evaporation. Quantification is also important for companies, which must conceptualize relevant attributes and create or choose suitable measures for them.

The Real Number System Quantities The Complex Number System Vector and Matrix Quantities	• Extend the properties of exponents to rational exponents • Classify numbers as rational or irrational • Reason quantitatively and use units to solve problems • Perform arithmetic operations with complex numbers • Represent complex numbers and their operations on the complex plane • Use complex numbers in polynomial identities and equations • Represent and model with vector quantities • Perform operations on vectors • Perform operations on matrices and use matrices in applications		1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Mathematical Practices

The Real Number System N-RN

Extend the properties of exponents to rational exponents

1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. *For example, we define* $5^{1/3}$ *to be the cube root of* 5 *because we want* $(5^{1/3})^3 = 5^{(1/3)3}$ *to hold, so* $(5^{1/3})^3$ *must equal* 5.
2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.

Use properties of rational and irrational numbers

3. Explain why sums and products of rational numbers are rational, that the sum of a rational number and an irrational number is irrational, and that the product of a nonzero rational number and an irrational number is irrational.

Quantities* N-Q

Reason quantitatively and use units to solve problems

1. Compare measurements of two quantities of the same type (e.g., two lengths or two weights) expressed in different units to decide which quantity is larger.
2. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
3. Define appropriate quantities for the purpose of descriptive modeling.
4. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

The Complex Number System N-CN

Perform arithmetic operations with complex numbers

1. Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.
2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.
3. (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers.

Represent complex numbers and their operations on the complex plane

4. (+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number.
5. (+) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. *For example,* $(1 - \sqrt{3}i)^3 = 8$ *because* $(1 - \sqrt{3}i)$ *has modulus* 2 *and argument* 120°.
6. (+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.

Use complex numbers in polynomial identities and equations

7. Solve quadratic equations with real coefficients that have complex solutions.
8. (+) Extend polynomial identities to the complex numbers. *For example, rewrite* $x^2 + 4$ *as* $(x + 2i)(x - 2i)$.
9. (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.

(+) Vector and Matrix Quantities N-VM

Represent and model with vector quantities.

1. Understand that vector quantities have both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., $\mathbf{v}$, $|\mathbf{v}|$, $||\mathbf{v}||$, v).
2. Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.
3. Solve problems involving velocity and other quantities that can be represented by vectors.★

Perform operations on vectors.

4. Add and subtract vectors.
   a. Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes.
   b. Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum.
   c. Understand that vector subtraction $\mathbf{v} - \mathbf{w}$ is defined as $\mathbf{v} + (-\mathbf{w})$, where $-\mathbf{w}$ is the additive inverse of $\mathbf{w}$, with the same magnitude as $\mathbf{w}$ and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise.
5. Multiply a vector $\mathbf{v}$ by a scalar.
   a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as $c(v_x, v_y) = (cv_x, cv_y)$.
   b. Compute the magnitude of a scalar multiple $c\mathbf{v}$ using $||c\mathbf{v}|| = |c|v$.
   c. Understand that when $|c|v \neq 0$, the direction of $c\mathbf{v}$ is either along $\mathbf{v}$ (for $c > 0$) or against $\mathbf{v}$ (for $c < 0$).

Perform operations on matrices and use matrices in applications.★

6. Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.
7. Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled.
8. Add, subtract, and multiply matrices of appropriate dimensions.
9. Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.
10. Understand that 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 square matrix is nonzero if and only if the matrix has a multiplicative inverse.
11. Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Understand a matrix as a transformation of vectors.
12. Understand a 2×2 matrix as a transformation of the plane, and interpret the absolute value of the determinant in terms of area.

Expressions. An expression is a record of a computation with numbers and symbols that represent numbers, arithmetic operations, exponentiation, and, at more advanced levels, the operation of evaluating a function. Conventions about the use of parentheses and the order of operations assure that each expression is unambiguous. Creating an expression that describes a computation involving a general quantity requires the ability to express the computation in general terms, abstracting from specific instances.

Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning. For example, $p + 0.05p$ can be interpreted as the addition of a 5% tax to a price p. Rewriting $p + 0.05p$ as $1.05p$ shows that adding a tax is the same as multiplying the price by a constant factor.

Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation. At times, an expression is the result of applying operations to simpler expressions. For example, $p + 0.05p$ is the sum of the simpler expressions p and $0.05p$. Viewing an expression as the result of operation on simpler expressions can sometimes clarify its underlying structure.

A spreadsheet or a computer algebra system can be used to experiment with algebraic expressions, perform complicated algebraic manipulations, and understand how algebraic manipulations behave.

Equations and inequalities. An equation is a statement of equality between two expressions, often viewed as a question asking for which values of the variables the expressions on either side are in fact equal. These values are the solutions to the equation. An identity is true for all numbers; identities are often developed by rewriting an expression in an equivalent form.

The solutions of an equation in one variable form a set of numbers; the solutions of an equation in two variables form a set of ordered pairs of numbers, which can be plotted in the coordinate plane. Two or more equations and/or inequalities form a system. A solution for such a system must satisfy every equation and inequality in the system.

An equation can often be solved by successively deducing from it one or more simpler equations. For example, one can add the same constant to both sides without changing the solutions, but squaring both sides might lead to extraneous solutions. Strategic competence in solving includes looking ahead for productive manipulations and anticipating the nature and number of solutions.

Some equations have no solutions in a given number system, but have a solution in a larger system. For example, the solution of $x + 1 = 0$ is an integer, not a whole number; the solution of $2x + 1 = 0$ is a rational number, not an integer; the solutions of $x^2 - 2 = 0$ are real numbers, not rational numbers; and the solutions of $x^2 + 2 = 0$ are complex numbers, not real numbers.

The same solution techniques used to solve equations can be used to rearrange formulas. For example, the formula for the area of a trapezoid, $A = ((b_1+b_2)/2)h$, can be solved for h using the same deductive process.

Inequalities can be solved by reasoning about the properties of inequality. Many, but not all, of the properties of equality continue to hold for inequalities and can be useful in solving them.

Connections to Functions and Modeling. Expressions can define functions, and equivalent expressions define the same function. Asking when two functions have the same value for the same input leads to an equation; graphing the two functions allows for finding approximate solutions of the equation. Converting a verbal description to an equation, inequality, or system of these is an essential skill in modeling.

Seeing Structure in Expressions	• Interpret the structure of expressions • Write expressions in equivalent forms to solve problems		1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Mathematical Practices
Arithmetic with Polynomials and Rational Functions	• Perform arithmetic operations on polynomials • Understand the relationship between zeros and factors of polynomials • Use polynomial identities to solve problems • Rewrite and graph rational functions			
Creating Equations	• Create equations that describe numbers or relationships			
Reasoning with Equations and Inequalities	• Understand solving equations as a process of reasoning and explain the reasoning • Solve equations and inequalities in one variable • Solve systems of equations • Represent and solve equations and inequalities graphically			

Seeing Structure in Expressions A-SSE

Interpret the structure of expressions

1. Interpret expressions that represent a quantity in terms of its context.★
   a. Interpret parts of an expression, such as terms, factors, and coefficients.
   b. Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret* $P(1+r)^n$ *as the product of P and a factor not depending on P.*
2. Use the structure of an expression to identify ways to rewrite it. *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* $(x^2 - y^2)(x^2 + y^2)$.

Write expressions in equivalent forms to solve problems

3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.★
   a. Factor a quadratic expression to reveal the zeros of the function it defines.
   b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.
   c. Use the properties of exponents to transform expressions for exponential functions. *For example the expression* 1.15^t *can be rewritten as* $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ *to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.*
4. Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. *For example, calculate mortgage payments.*★

Arithmetic with Polynomials and Rational Expressions A-APR

Perform arithmetic operations on polynomials

1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

Understand the relationship between zeros and factors of polynomials

2. Understand the Remainder Theorem: For a polynomial $p(x)$ and a number a, the remainder on division by $x - a$ is $p(a)$, so $p(a) = 0$ if and only if $(x - a)$ is a factor of $p(x)$.
3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

Use polynomial identities to solve problems

4. Prove polynomial identities and use them to describe numerical relationships. *For example, the polynomial identity* $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ *can be used to generate Pythagorean triples.*
5. (+) Understand that the Binomial Theorem gives the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle. The Binomial Theorem can be proved by mathematical induction or by a combinatorial argument.

Rewrite rational expressions

6. Rewrite simple rational expressions in different forms; write $a(x)/b(x)$ in the form $q(x) + r(x)/b(x)$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system.
7. (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.

Creating Equations* A-CED

Create equations that describe numbers or relationships

1. Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*
2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
3. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.*
4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law* $V = IR$ *to highlight resistance* R.

Reasoning with Equations and Inequalities A-REI

Understand solving equations as a process of reasoning and explain the reasoning

1. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
2. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.

Solve equations and inequalities in one variable

3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. Graph the solution set of an inequality on a number line.
4. Solve quadratic equations in one variable.
   a. Understand that the method of completing the square transforms any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. This leads to the quadratic formula.
   b. Solve by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.

Solve systems of equations

5. Understand that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.
6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.
7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. *For example, find the points of intersection between the line* $y = -3x$ *and the circle* $x^2 + y^2 = 3$.
8. (+) Represent a system of linear equations as a single matrix equation in a vector variable.

9. (+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater).

Represent and solve equations and inequalities graphically

10. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a straight line).
11. Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.*
12. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

Functions describe situations where one quantity determines another. For example, the return on $10,000 invested at an annualized percentage rate of 4.25% is a function of the length of time the money is invested. Because we continually make theories about dependencies between quantities in nature and society, functions are important tools in the construction of mathematical models.

In school mathematics, functions usually have numerical inputs and outputs and are often defined by an algebraic expression. For example, the time in hours it takes for a car to drive 100 miles is a function of the car's speed in miles per hour, v; the rule $T(v) = 100/v$ expresses this relationship algebraically and defines a function whose name is T.

The set of inputs to a function is called its domain. We often infer the domain to be all inputs for which the expression defining a function has a value, or for which the function makes sense in a given context.

A function can be described in various ways, such as by a graph (e.g., the trace of a seismograph); by a verbal rule, as in, "I'll give you a state, you give me the capital city;" by an algebraic expression like $f(x) = a + bx$; or by a recursive rule. The graph of a function is often a useful way of visualizing the relationship of the function models, and manipulating a mathematical expression for a function can throw light on the function's properties.

Functions presented as expressions can model many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate. Linear functions with a constant term of zero describe proportional relationships.

A graphing utility or a computer algebra system can be used to experiment with properties of these functions and their graphs and to build computational models of functions, including recursively defined functions.

Connections to Expressions, Equations, Modeling, and Coordinates. Determining an output value for a particular input involves evaluating an expression; finding inputs that yield a given output involves solving an equation. Questions about when two functions have the same value for the same input lead to equations, whose solutions can be visualized from the intersection of their graphs. Because functions describe relationships between quantities, they are frequently used in modeling. Sometimes functions are defined by a recursive process, which can be displayed effectively using a spreadsheet or other technology.

Interpreting Functions Building Functions Linear, Quadratic, and Exponential Models Trigonometric Functions	• Understand the concept of a function and use function notation • Interpret functions that arise in applications in terms of the context • Analyze functions using different representations • Build a function that models a relationship between two quantities • Build new functions from existing functions • Construct and compare linear and exponential models and solve problems • Interpret expressions for functions in terms of the situation they model • Extend the domain of trigonometric functions using the unit circle • Model periodic phenomena with trigonometric functions • Prove and apply trigonometric identities		1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Mathematical Practices

Interpreting Functions F-IF

Understand the concept of a function and use function notation

1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.
2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
3. Understand that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. *For example, the Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.*

Interpret functions that arise in applications in terms of the context

4. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*★
5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.*★
6. 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.★

Analyze functions using different representations

7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.★
   a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
   b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
   c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.
   d. (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.
   e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
   a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.
   b. Use the properties of exponents to interpret expressions for exponential functions. *For example, identify percent rate of change in functions such as* $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and classify them as representing exponential growth or decay.*
9. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.*

Building Functions F-BF

Build a function that models a relationship between two quantities

1. Write a function that describes a relationship between two quantities.★
   a. Determine an explicit expression, a recursive process, or steps for calculation from a context.
   b. Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.*
   c. (+) Compose functions. *For example, if* $f(t)$ *is the height of a falling body after* t *seconds,* $f(t - 12)$ *is the height of the same body dropped 12 seconds later.*
2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.★

Build new functions from existing functions

3. Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $kf(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.*
4. Find inverse functions.
   a. Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. *For example,* $f(x) = 2x^3$ *or* $f(x) = (x+1)/(x-1)$ *for* $x \neq 1$.
   b. (+) Verify by composition that one function is the inverse of another.
   c. (+) Read values of an inverse function from a graph or a table, given that the function has an inverse.
   d. (+) Produce an invertible function from a non-invertible function by restricting the domain.

Linear, Quadratic, and Exponential Models* F-LQE

Construct and compare linear, quadratic, and exponential models and solve problems

1. Distinguish between situations that can be modeled with linear functions and with exponential functions.
   a. Understand that linear functions grow by equal differences over equal intervals; exponential functions grow by equal factors over equal intervals.
   b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.
   c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.
2. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.
4. For exponential models, express as a logarithm the solution to $a\,b^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.

Interpret expressions for functions in terms of the situation they model

5. Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.

Trigonometric Functions F-TF

Extend the domain of trigonometric functions using the unit circle

1. Understand that the radian measure of an angle is the length of the arc on the unit circle subtended by the angle.
2. Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.
3. (+) Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.
4. (+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.

Model periodic phenomena with trigonometric functions

5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.★
6. (+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed.
7. (+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.★

Prove and apply trigonometric identities

8. Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to calculate trigonometric ratios.
9. (+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.

Mathematics | High School—Modeling

Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social, and everyday situations can be modeled using mathematical and statistical methods. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data.

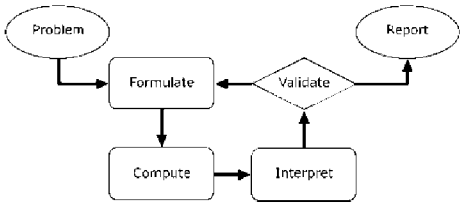
A model can be very simple, such as writing total cost as a product of unit price and number bought, or using a geometric shape to describe a physical object like a coin. Even such simple models involve making choices. It is up to us whether to model a coin as a three-dimensional cylinder, or whether a two-dimensional disk works well enough for our purposes. Other situations—modeling a delivery route, a production schedule, or a comparison of loan amortizations—need more elaborate models that use other tools from the mathematical sciences. Real-world situations are not organized and labeled for analysis; formulating tractable models, representing such models, and analyzing them is appropriately a creative process. Like every such process, this depends on acquired expertise as well as creativity.

Some examples of such situations might include:

- Estimating how much water and food is needed for emergency relief in a devastated city of 3 million people, and how it might be distributed.
- Planning a table tennis tournament for 7 players at a club with 4 tables, where each player plays against each other player.
- Designing the layout of the stalls in a school fair so as to raise as much money as possible.
- Analyzing stopping distance for a car.
- Modeling savings account balance, bacterial colony growth, or investment growth.
- Critical path analysis, e.g., applied to turnaround of an aircraft at an airport.
- Risk situations, such as extreme sports, pandemics, and terrorism.
- Relating population statistics to individual predictions.

In situations like these, the models devised depend 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 that we can create and analyze is also constrained by the limitations of our mathematical, statistical, and technical skills, and our ability to recognize significant variables and relationships among them. Diagrams of various kinds, spreadsheets and other technology, 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 or statistical structure can sometimes model seemingly different situations. Models can also shed light on the mathematical structures themselves, for example, as when a model of bacterial growth makes more vivid the explosive growth of the exponential function.



The basic modeling cycle is summarized in the diagram. It involves (1) identifying variables in the situation and selecting those that represent essential features, (2) formulating a model by creating and selecting geometric, graphical, tabular, algebraic, or statistical representations that describe relationships between the variables, (3) analyzing and performing operations on these relationships to draw conclusions, (4) interpreting the results of the mathematics in terms of the original situation, (5) validating the conclusions by comparing them with the situation, and then either improving the model or, if it is acceptable, (6) reporting on the conclusions and the reasoning behind them. Choices, assumptions, and approximations are present throughout this cycle.

In descriptive modeling, a model simply describes the phenomena or summarizes them in a compact form. Graphs of observations are a familiar descriptive model—for example, graphs of global temperature and atmospheric CO_2 over time.

Analytic modeling seeks to explain data on the basis of deeper theoretical ideas, albeit with parameters that are empirically based; for example, exponential growth of bacterial colonies (until cut-off mechanisms such as pollution or starvation intervene) follows from a constant reproduction rate. Functions are an important tool for analyzing such problems.

Graphing utilities, spreadsheets, computer algebra systems, and dynamic geometry software are powerful tools that can be used to model purely mathematical phenomena (e.g., the behavior of polynomials) as well as physical phenomena.

Modeling Standards

Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol (⋆).

An understanding of the attributes and relationships of geometric objects can be applied in diverse contexts—interpreting a schematic drawing, estimating the amount of wood needed to frame a sloping roof, rendering computer graphics, or designing a sewing pattern for the most efficient use of material.

Although there are many types of geometry, school mathematics is devoted primarily to plane Euclidean geometry, studied both synthetically (without coordinates) and analytically (with coordinates). Euclidean geometry is characterized most importantly by the Parallel Postulate, that through a point not on a given line there is exactly one parallel line. (Spherical geometry, in contrast, has no parallel lines.)

During high school, students begin to formalize their geometry experiences from elementary and middle school, using more precise definitions and developing careful proofs. Later in college some students develop Euclidean and other geometries carefully from a small set of axioms.

The concepts of congruence, similarity, and symmetry can be understood from the perspective of geometric transformation. Fundamental are the rigid motions: translations, rotations, reflections, and combinations of these, all of which are here assumed to preserve distance and angles (and therefore shapes generally). Reflections and rotations each explain a particular type of symmetry, and the symmetries of an object offer insight into its attributes—as when the reflective symmetry of an isosceles triangle assures that its base angles are congruent.

In the approach taken here, two geometric figures are defined to be congruent if there is a sequence of rigid motions that carries one onto the other. This is the principle of superposition. For triangles, congruence means the equality of all corresponding pairs of sides and all corresponding pairs of angles. During Grade 8, through experiences with geometric constructions and drawing triangles from given conditions, some students notice ways to specify enough measures in a triangle to ensure that all triangles drawn with those measures are congruent. Once these triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures.

Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, and lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.

The definitions of sine, cosine, and tangent for acute angles are founded on right triangles and similarity, and, with the Pythagorean Theorem, are fundamental in many real-world and theoretical situations. The Pythagorean Theorem is generalized to non-right triangles by the Law of Cosines. Together, the Laws of Sines and Cosines embody the triangle congruence criteria for the cases where three pieces of information suffice 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.

Analytic geometry connects algebra and geometry, resulting in powerful methods of analysis and problem solving. Just as the number line associates numbers with locations in one dimension, a pair of perpendicular axes associates pairs of numbers with locations in two dimensions. This correspondence between numerical coordinates and geometric points allows methods from algebra to be applied to geometry and vice versa. The solution set of an equation becomes a geometric curve, making visualization a tool for doing and understanding algebra. Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof. Geometric transformations of the graphs of equations correspond to algebraic changes in their equations.

Dynamic geometry environments provide students with experimental and modeling tools that allow them to investigate geometric phenomena in much the same way as computer algebra systems allow them to experiment with algebraic phenomena.

Connections to Equations. The correspondence between numerical coordinates and geometric points allows methods from algebra to be applied to geometry and vice versa. The solution set of an equation becomes a geometric curve, making visualization a tool for doing and understanding algebra. Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.

Congruence Similarity, Right Triangles, and Trigonometry Circles Expressing Geometric Properties with Equations Geometric Measurement and Dimension Modeling with Geometry	• Experiment with transformations in the plane • Understand congruence in terms of rigid motions • Prove geometric theorems • Make geometric constructions • Understand similarity in terms of similarity transformations • Prove theorems involving similarity • Define trigonometric ratios and solve problems involving right triangles • Apply trigonometry to general triangles • Understand and apply theorems about circles • Find arc lengths and areas of sectors of circles • Translate between the geometric description and the equation for a conic section • Use coordinates to prove simple geometric theorems algebraically • Explain volume formulas and use them to solve problems • Visualize relationships between two-dimensional and three-dimensional objects • Apply geometric concepts in modeling situations		1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Mathematical Practices

Congruence G-CO

Experiment with transformations in the plane

1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
2. Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).
3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.

Understand congruence in terms of rigid motions

6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

Prove geometric theorems

9. Prove theorems about lines and angles. *Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.*
10. Prove theorems about triangles. *Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.*
11. Prove theorems about parallelograms. *Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.*

Make geometric constructions

12. 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.*
13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

Similarity, Right Triangles, and Trigonometry G-SRT

Understand similarity in terms of similarity transformations

1. Verify experimentally the properties of dilations:
   a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.
   b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.
2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.

Prove theorems involving similarity

4. Prove theorems about triangles using similarity transformations. *Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.*
5. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

Define trigonometric ratios and solve problems involving right triangles

6. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
7. Explain and use the relationship between the sine and cosine of complementary angles.
8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.★

(+) Apply trigonometry to general triangles

9. Derive the formula $A = \frac{1}{2}\, ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
10. Prove the Laws of Sines and Cosines and use them to solve problems.
11. Understand and apply 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).

Circles G-C

Understand and apply theorems about circles

1. Prove that all circles are similar.

2. Identify and describe relationships among inscribed 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.*
3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.
4. (+) Construct a tangent line from a point outside a given circle to the circle.

Find arc lengths and areas of sectors of circles

5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.

Expressing Geometric Properties with Equations G-GPE

Translate between the geometric description and the equation for a conic section

1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.
2. Derive the equation of a parabola given a focus and directrix.
3. (+) Derive the equations of ellipses and hyperbolas given two foci for the ellipse, and two directrices of a hyperbola.

Use coordinates to prove simple geometric theorems algebraically

4. Use coordinates to prove simple geometric theorems algebraically. *For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, $\sqrt{3}$) lies on the circle centered at the origin and containing the point (0, 2).*
5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
6. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.*

Geometric Measurement and Dimension G-GMD

Explain volume formulas and use them to solve problems

1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. *Use dissection arguments, Cavalieri's principle, and informal limit arguments.*
2. (+) Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.
3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.*

Visualize relationships between two-dimensional and three-dimensional objects

4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

Modeling with Geometry G-MG

Apply geometric concepts in modeling situations

1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).*
2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).*
3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).*

Mathematics | High School—Statistics and Probability*

Decisions or predictions are often based on data—numbers in context. These decisions or predictions would be easy if the data always sent a clear message, but the message is often obscured by variability. Statistics provides tools for describing variability in data and for making informed decisions that take it into account.

Data are gathered, displayed, summarized, examined, and interpreted to discover patterns and deviations from patterns. Quantitative data can be described in terms of key characteristics: measures of shape, center, and spread. The shape of a data distribution might be described as symmetric, skewed, flat, or bell shaped, and it might be summarized by a statistic measuring center (such as mean or median) and a statistic measuring spread (such as standard deviation or interquartile range). Different distributions can be compared numerically using these statistics or compared visually using plots. Knowledge of center and spread are not enough to describe a distribution. Which statistics to compare, which plots to use, and what the results of a comparison might mean, depend on the question to be investigated and the real-life actions to be taken.

Randomization has two important uses in drawing statistical conclusions. First, collecting data from a random sample of a population makes it possible to draw valid conclusions about the whole population, taking variability into account. Second, randomly assigning individuals to different treatments allows a fair comparison of the effectiveness of those treatments. A statistically significant outcome is one that is unlikely to be due to chance alone, and this can be evaluated only under the condition of randomness. The conditions under which data are collected are important in drawing conclusions from the data; in critically reviewing uses of statistics in public media and other reports, it is important to consider the study design, how the data were gathered, and the analyses employed as well as the data summaries and the conclusions drawn.

Random processes can be described mathematically by using a probability model: a list or description of the possible outcomes (the sample space), each of which is assigned a probability. In situations such as flipping a coin, rolling a number cube, or drawing a card, it might be reasonable to assume various outcomes are equally likely. In a probability model, sample points represent outcomes and combine to make up events; probabilities of events can be computed by applying the Addition and Multiplication Rules. Interpreting these probabilities relies on an understanding of independence and conditional probability, which can be approached through the analysis of two-way tables.

Technology plays an important role in statistics and probability by making it possible to generate plots, regression functions, and correlation coefficients, and to simulate many possible outcomes in a short amount of time.

Connections to Functions and Modeling. Functions may be used to describe data; if the data suggest a linear relationship, the relationship can be modeled with a regression line, and its strength and direction can be expressed through a correlation coefficient.

Interpreting Categorical and Quantitative Data	• Summarize, represent, and interpret data on a single count or measurement variable • Summarize, represent, and interpret data on two categorical and quantitative variables • Interpret linear models		1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Mathematical Practices
Making Inferences and Justifying Conclusions	• Understand and evaluate random processes underlying statistical experiments • Make inferences and justify conclusions from sample surveys, experiments and observational studies			
Conditional Probability and the Rules of Probability	• Use the concepts of independence and conditional probability to interpret data • Use the rules of probability to compute probabilities of compound events in a uniform probability model			
Using Probability to Make Decisions	• Calculate expected values and use them to solve problems • Use probability to evaluate outcomes of decisions			

Interpreting Categorical and Quantitative Data S-ID

Summarize, represent, and interpret data on a single count or measurement variable

1. Represent data with plots on the real number line (dot plots, histograms, and box plots).
2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
4. Use the mean and standard deviation of a data set to fit it to a normal distribution 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.

Summarize, represent, and interpret data on two categorical and quantitative variables

5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.
6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.
   a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear and exponential models.*
   b. Informally assess the fit of a function by plotting and analyzing residuals.
   c. Fit a linear function for scatter plots that suggest a linear association.

Interpret linear models

7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
9. Distinguish between correlation and causation.

Making Inferences and Justifying Conclusions S-IC

Understand and evaluate random processes underlying statistical experiments

1. Understand that statistics allows inferences to be made about population parameters based on a random sample from that population.
2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. *For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?*

Make inferences and justify conclusions from sample surveys, experiments, and observational studies

3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.
4. Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.
5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.
6. Evaluate reports based on data.

Conditional Probability and the Rules of Probability S-CP

Understand independence and conditional probability and use them to interpret data

1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").
2. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.
3. Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.
4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. *For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.*
5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. *For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.*

Use the rules of probability to compute probabilities of compound events in a uniform probability model

6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.
7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.
8. (+) Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B) = P(A)P(B|A) = P(B)P(A|B)$, and interpret the answer in terms of the model.
9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems.

(+) Using Probability to Make Decisions S-MD

Calculate expected values and use them to solve problems

1. Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.
2. Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.
3. Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. *For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.*
4. Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. *For example, find a current data distribution on the number of TV sets per household in the*

United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?

Use probability to evaluate outcomes of decisions

5. Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.
   a. Find the expected payoff for a game of chance. *For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant.*
   b. Evaluate and compare strategies on the basis of expected values. *For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.*
6. Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).
7. Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).

Postscript: A Note on High School Courses

The high school standards in this document do not specify how content should be organized into a sequence of high school courses.

However, it is expected that model course sequences based on these standards will become available in both a traditional sequence (Algebra 1, Geometry, and Algebra 2) as well as an integrated sequence (Integrated 1, Integrated 2, Integrated 3).

Glossary

Addition and subtraction within 5, 10, 20, 100, or 1000. Addition or subtraction of two whole numbers with whole number answers, and with sum or minuend in the range 0-5, 0-10, 0-20, or 0-100, respectively. Example: $8 + 2 = 10$ is an addition within 10, $14 - 5 = 9$ is a subtraction within 20, and $55 - 18 = 37$ is a subtraction within 100.

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 $3/4 + (-3/4) = (-3/4) + 3/4 = 0$.

Associative property of addition. See Table 3 in this Glossary.

Associative property of multiplication. See Table 3 in this Glossary.

Bivariate data. Pairs of linked numerical observations. Example: a list of heights and weights for each player on a football team.

Box plot. A method of visually displaying a distribution of data values by using the median, quartiles, and extremes of the data set. A box shows the middle 50% of the data.[1]

Commutative property. See Table 3 in this Glossary.

Complex fraction. A fraction A/B where A and/or B are fractions (B nonzero).

Computation algorithm. A set of predefined steps applicable to a class of problems that gives the correct result in every case when the steps are carried out correctly. See also: *computation strategy*.

Computation strategy. Purposeful manipulations that may be chosen for specific problems, may not have a fixed order, and may be aimed at converting one problem into another. See also: *computation algorithm*.

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

Counting on. A strategy for finding the number of objects in a group without having to count every member of the group. For example, if a stack of books is known to have 8 books and 3 more books are added to the top, it is not necessary to count the stack all over again; one can find the total by *counting on*—pointing to the top book and saying "eight," following this with "nine, ten, eleven. There are eleven books now."

Dot plot. *See line plot.*

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.

Expanded form. A multidigit number is expressed in expanded form when it is written as a sum of single-digit multiples of powers of ten. For example, $643 = 600 + 40 + 3$.

Expected value. For a random variable, the weighted average of its possible values, with weights given by their respective probabilities.

First quartile. For a data set with median M, the first quartile is the median of the data values less than M. Example: For the data set {1, 3, 6, 7, 10, 12, 14, 15, 22, 120}, the first quartile is 6.[2] *See also* median, third quartile, interquartile range.

Fraction. A number expressible in the form a/b where a is a whole number and b is a positive whole number. (The word *fraction* in these standards always refers to a nonnegative number.) *See also* rational number.

Identity property of 0. See Table 3 in this Glossary.

Independently combined probability models. Two probability models are said to be combined independently if the probability of each ordered pair in the combined model equals the product of the original probabilities of the two individual outcomes in the ordered pair.

Integer. A number expressible in the form a or $-a$ for some whole number a.

Interquartile Range. A measure of variation in a set of numerical data, the interquartile range is the distance between the first and third quartiles of the data set. Example: For the data set {1, 3, 6, 7, 10, 12, 14, 15, 22, 120}, the interquartile range is $15 - 6 = 9$. *See also* first quartile, third quartile.

Line plot. A method of visually displaying a distribution of data values where each data value is shown as a dot or mark above a number line. Also known as a dot plot.[3]

Mean. A measure of center in a set of numerical data, computed by adding the values in a list and then dividing by the number of values in the list.[4] Example: For the data set {1, 3, 6, 7, 10, 12, 14, 15, 22, 120}, the mean is 21.

Mean absolute deviation. A measure of variation in a set of numerical data, computed by adding the distances between each data value and the mean, then dividing by the number of data values. Example: For the data set {2, 3, 6, 7, 10, 12, 14, 15, 22, 120}, the mean absolute deviation is 20.

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[1] Adapted from Wisconsin Department of Public Instruction, http://dpi.wi.gov/standards/mathglos.html, accessed March 2, 2010.

[2] Many different methods for computing quartiles are in use. The method defined here is sometimes called the Moore and McCabe method. See Langford, E., "Quartiles in Elementary Statistics," *Journal of Statistics Education* Volume 14, Number 3 (2006),

[3] Adapted from Wisconsin Department of Public Instruction, *op. cit.*

[4] To be more precise, this defines the *arithmetic mean*.

Median. A measure of center in a set of numerical data. The median of a list of values is 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. Example: For the data set {2, 3, 6, 7, 10, 12, 14, 15, 22, 90}, the median is 11.

Midline. In the graph of a trigonometric function, the horizontal line half-way between its maximum and minimum values.

Multiplication and division within 100. Multiplication or division of two whole numbers with whole number answers, and with product or dividend in the range 0-100. Example: $72 \div 8 = 9$.

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 $3/4 \times 4/3 = 4/3 \times 3/4 = 1$.

Number line diagram. A diagram of the number line used to represent numbers and support reasoning about them. In a number line diagram for measurement quantities, the interval from 0 to 1 on the diagram represents the unit of measure for the quantity.

Percent rate of change. A rate of change expressed as a percent. Example: if a population grows from 50 to 55 in a year, it grows by 5/50 = 10% per year.

Probability distribution. The set of possible values of a random variable with a probability assigned to each.

Properties of operations. See Table 3 in this Glossary.

Properties of equality. See Table 4 in this Glossary.

Properties of inequality. See Table 5 in this Glossary.

Properties of operations. See Table 3 in this Glossary.

Probability. A number between 0 and 1 used to quantify likelihood for processes that have uncertain outcomes (such as tossing a coin, selecting a person at random from a group of people, tossing a ball at a target, testing for a medical condition).

Probability model. A probability model is used to assign probabilities to outcomes of a chance process by examining the nature of the process. The set of all outcomes is called the sample space, and their probabilities sum to 1. See also *uniform probability model*.

Random variable. An assignment of a numerical value to each outcome in a sample space.

Rational expression. A quotient of two polynomials with non-zero denomiator.

Rational number. A number expressible in the form a/b or $-a/b$ for some fraction a/b. The rational numbers include the integers.

Rectilinear figure. A polygon all angles of which are right angles.

Rigid motion. A transformation of points in space consisting of a sequence of one or more translations, reflections, and/or rotations. Rigid motions are here assumed to preserve distances and angle measures.

Repeating decimal. The decimal form of a rational number. See *terminating decimal*.

Sample space. In a probability model for a random process, a list of the individual outcomes that are to be considered.

Scatter plot. A graph in the coordinate plane representing a set of bivariate data. For example, the heights and weights of a group of people could be displayed on a scatter plot.[5]

Similarity transformation. A rigid motion followed by a dilation.

Tape diagram. A drawing that looks like a segment of tape, used to illustrate number relationships. Also known as a strip diagram, bar model, fraction strip, or length model.

Terminating decimal. A decimal is called terminating if its repeating digit is 0.

Third quartile. For a data set with median M, the third quartile is the median of the data values greater than M. Example: For the data set {2, 3, 6, 7, 10, 12, 14, 15, 22, 120}, the third quartile is 15. *See also* median, first quartile, interquartile range.

Transitivity principle for indirect measurement. If the length of object A is greater than the length of object B, and the length of object B is greater than the length of object C, then the length of object A is greater than the length of object C. This principle applies to measurement of other quantities as well.

Uniform probability model. A probability model which assigns equal probability to all outcomes. See also *probability model*.

Vector. A quantity with magnitude and direction in the plane or in space, defined by an ordered pair or triple of real numbers.

Visual fraction model. A tape diagram, number line diagram, or area model.

Whole numbers. The numbers 0, 1, 2, 3, ….

[5] Adapted from Wisconsin Department of Public Instruction, *op. cit*.

TABLE 1. Common addition and subtraction situations.[6]

	Result Unknown	Change Unknown	Start Unknown
Add to	Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? 2 + 3 = ?	Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two? 2 + ? = 5	Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? ? + 3 = 5
Take from	Five apples were on the table. I ate two apples. How many apples are on the table now? 5 2 = ?	Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? 5 ? = 3	Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? ? 2 = 3

	Total Unknown	Addend Unknown	Both Addends Unknown[7]
Put Together/ Take Apart[8]	Three red apples and two green apples are on the table. How many apples are on the table? 3 + 2 = ?	Five apples are on the table. Three are red and the rest are green. How many apples are green? 3 + ? = 5, 5 3 = ?	Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? 5 = 0 + 5, 5 = 5 + 0 5 = 1 + 4, 5 = 4 + 1 5 = 2 + 3, 5 = 3 + 2

	Difference Unknown	Bigger Unknown	Smaller Unknown
Compare[9]	("How many more?" version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? ("How many fewer?" version): Lucy has two apples. Julie has five apples. How many fewer apples does Lucy have than Julie? 2 + ? = 5, 5 2 = ?	(Version with "more"): Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have? (Version with "fewer"): Lucy has 3 fewer apples than Julie. Lucy has two apples. How many apples does Julie have? 2 + 3 = ?, 3 + 2 = ?	(Version with "more"): Julie has three more apples than Lucy. Julie has five apples. How many apples does Lucy have? (Version with "fewer"): Lucy has 3 fewer apples than Julie. Julie has five apples. How many apples does Lucy have? 5 3 = ?, ? + 3 = 5

[6] Adapted from Box 2-4 of National Research Council (2009, op. cit., pp. 32, 33).

[7] These *take apart* situations can be used to show all the decompositions of a given number. The associated equations, which have the total on the left of the equal sign, help children understand that the = sign does not always mean *makes* or *results in* but always does mean *is the same number as*.

[8] Either addend can be unknown, so there are three variations of these problem situations. Both Addends Unknown is a productive extension of this basic situation especially for small numbers less than or equal to 10.

[9] For the Bigger Unknown or Smaller Unknown situations, one version directs the correct operation (the version using *more* for the bigger unknown and using *less* for the smaller unknown). The other versions are more difficult.

TABLE 2. Common multiplication and division situations.[10]

	Unknown Product	**Group Size Unknown** ("How many in each group?" Division)	**Number of Groups Unknown** ("How many groups?" Division)
	3 × 6 = ?	**3 × ? = 18 and 18 ÷ 3 = ?**	**? × 6 = 18 and 18 ÷ 6 = ?**
Equal Groups	There are 3 bags with 6 plums in each bag. How many plums are there in all? *Measurement example.* You need 3 lengths of string, each 6 inches long. How much string will you need altogether?	If 18 plums are shared equally into 3 bags, then how many plums will be in each bag? *Measurement example.* You have 18 inches of string, which you will cut into 3 equal pieces. How long will each piece of string be?	If 18 plums are to be packed 6 to a bag, then how many bags are needed? *Measurement example.* You have 18 inches of string, which you will cut into pieces that are 6 inches long. How many pieces of string will you have?
Arrays,[11] Area[12]	There are 3 rows of apples with 6 apples in each row. How many apples are there? *Area example.* What is the area of a 3 cm by 6 cm rectangle?	If 18 apples are arranged into 3 equal rows, how many apples will be in each row? *Area example.* A rectangle has area 18 square centimeters. If one side is 3 cm long, how long is a side next to it?	If 18 apples are arranged into equal rows of 6 apples, how many rows will there be? *Area example.* A rectangle has area 18 square centimeters. If one side is 6 cm long, how long is a side next to it?
Compare	A blue hat costs $6. A red hat costs 3 times as much as the blue hat. How much does the red hat cost? *Measurement example.* A rubber band is 6 cm long. How long will the rubber band be when it is stretched to be 3 times as long?	A red hat costs $18 and that is 3 times as much as a blue hat costs. How much does a blue hat cost? *Measurement example.* A rubber band is stretched to be 18 cm long and that is 3 times as long as it was at first. How long was the rubber band at first?	A red hat costs $18 and a blue hat costs $6. How many times as much does the red hat cost as the blue hat? *Measurement example.* A rubber band was 6 cm long at first. Now it is stretched to be 18 cm long. How many times as long is the rubber band now as it was at first?
General	$a \times b = ?$	$a \times ? = p$ and $p \div a = ?$	$? \times b = p$ and $p \div b = ?$

[10] The first examples in each cell are examples of discrete things. These are easier for students and should be given before the measurement examples.
[11] The language in the array examples shows the easiest form of array problems. A harder form is to use the terms rows and columns: The apples in the grocery window are in 3 rows and 6 columns. How many apples are in there? Both forms are valuable.
[12] Area involves arrays of squares that have been pushed together so that there are no gaps or overlaps, so array problems include these especially important measurement situations.

TABLE 3. The properties of operations. Here a, b and c stand for arbitrary numbers in a given number system. The properties of operations apply to the rational number system, the real number system, and the complex number system.

Associative property of addition	$(a + b) + c = a + (b + c)$
Commutative property of addition	$a + b = b + a$
Additive identity property of 0	$a + 0 = 0 + a = a$
Existence of additive inverses	For every a there exists $-a$ so that $a + (-a) = (-a) + a = 0$.
Associative property of multiplication	$(a \times b) \times c = a \times (b \times c)$
Commutative property of multiplication	$a \times b = b \times a$
Multiplicative identity property of 1	$a \times 1 = 1 \times a = a$
Existence of multiplicative inverses	For every $a \neq 0$ there exists $1/a$ so that $a \times 1/a = 1/a \times a = 1$.
Distributive property of multiplication over addition	$a \times (b + c) = a \times b + a \times c$

TABLE 4. The properties of equality. Here a, b and c stand for arbitrary numbers in the rational, real, or complex number systems.

Reflexive property of equality	$a = a$
Symmetric property of equality	If $a = b$, then $b = a$.
Transitive property of equality	If $a = b$ and $b = c$, then $a = c$.
Addition property of equality	If $a = b$, then $a + c = b + c$.
Subtraction property of equality	If $a = b$, then $a - c = b - c$.
Multiplication property of equality	If $a = b$, then $a \times c = b \times c$.
Division property of equality	If $a = b$ and $c \neq 0$, then $a \div c = b \div c$.
Substitution property of equality	If $a = b$, then b may be substituted for a in any expression containing a.

TABLE 5. The properties of inequality. Here a, b and c stand for arbitrary numbers in the rational or real number systems.

Exactly one of the following is true: $a < b$, $a = b$, $a > b$.
If $a > b$ and $b > c$ then $a > c$.
If $a > b$, then $b < a$.
If $a > b$, then $-a < -b$.
If $a > b$, then $a \pm c > b \pm c$.
If $a > b$ and $c > 0$, then $a \times c > b \times c$.
If $a > b$ and $c < 0$, then $a \times c < b \times c$.
If $a > b$ and $c > 0$, then $a \div c > b \div c$.
If $a > b$ and $c < 0$, then $a \div c < b \div c$.

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Common Core State Standards Initiative
Standards-Setting Criteria

The following criteria guided the standards development workgroups in setting the draft college and career readiness standards.

Preamble: The Common Core State Standards define the rigorous skills and knowledge in English Language Arts and Mathematics that need to be effectively taught and learned for students to be ready to succeed academically in credit-bearing, college-entry courses and in workforce training programs. These standards have been developed to be:

- 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 applications of knowledge through higher-order skills, so that all students are prepared for the 21st century;
- Internationally benchmarked, so that all students are prepared for succeeding in our global economy and society; and
- Research and evidence-based.

The standards intend to set forward thinking goals for student performance based in evidence about what is required for success. The standards developed will set the stage for US education not just beyond next year, but for the next decade, and they must ensure ***all*** American students are prepared for the global economic workplace. Furthermore, the standards created will not lower the bar but raise it for all students; as such, we cannot narrow the college-ready focus of the standards to just preparation of students for college algebra and English composition and therefore will seek to ensure all students are prepared for all entry-level, credit-bearing, academic college courses in English, mathematics, the sciences, the social sciences, and the humanities. The objective is for all students to enter these classes ready for success (defined for these purposes as a C or better).

Goal: The standards as a whole must be essential, rigorous, clear and specific, coherent, and internationally benchmarked.

Essential: The standards must be reasonable in scope in defining the knowledge and skills students should have to be ready to succeed in entry-level, credit-bearing, academic college courses and in workforce training programs.

Workforce training programs pertain to careers that:
1) Offer competitive, livable salaries above the poverty line
2) Offer opportunities for career advancement
3) Are in a growing or sustainable industry

College refers to two- and four-year postsecondary schools

Entry-level, credit-bearing, academic college courses (e.g. English, mathematics, sciences, social sciences, humanities)

Rigorous: The standards will include high-level cognitive demands by asking students to demonstrate deep conceptual understanding through the application of content knowledge and skills to new situations.

High-level cognitive demand includes reasoning, justification, synthesis, analysis, and problem-solving.

Clear and Specific: The standards should provide sufficient guidance and clarity so that they are teachable, learnable, and measurable. The standards will also be clear and understandable to the general public.

Quality standards are precise and provide sufficient detail to convey the level of performance expected without being overly prescriptive. (the "what" not the "how"). The standards should maintain a relatively consistent level of grain size.

Teachable and learnable: Provide sufficient guidance for the design of curricula and instructional materials. The standards must be reasonable in scope, instructionally manageable, and promote depth of understanding.

The standards will not prescribe *how* they are taught and learned but will allow teachers flexibility to teach and students to learn in various instructionally relevant contexts.

Measureable: Student attainment of the standards should be observable and verifiable and the standards can be used to develop broader assessment frameworks

Coherent: The standards should convey a unified vision of the big ideas and supporting concepts within a discipline and reflect a progression of learning that is meaningful and appropriate.

Grade-by-grade standards: The standards will have limited repetition across the grades or grade spans to help educators align instruction to the standards.

Internationally benchmarked: The standards will be informed by the content, rigor, and organization of standards of high-performing countries so that all students are prepared for succeeding in our global economy and society.

News Release

09/01/2009

Fifty-One States And Territories Join Common Core State Standards Initiative

NGA Center, CCSSO Convene State-led Process to Develop Common English-language arts and Mathematics Standards

Contact: Jodi Omear, 202-624-5346
Office of Communications

WASHINGTON—The National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) today released 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**.

In the twenty-six years since the release of *A Nation at Risk,* states have made great strides in increasing the academic rigor of education standards. Yet, America's children still remain behind other nations in terms of academic achievement and preparedness to succeed.

By signing on to the common core state standards initiative, governors and state commissioners of education across the country are committing to joining a state-led process to develop a common core of state standards in English language arts and mathematics for grades K-12. These standards will be research and evidence-based, internationally benchmarked, aligned with college and work expectations and include rigorous content and skills.

"To maintain America's competitive edge, we need all of our students to be prepared and ready to compete with students from around the world," said **NGA Vice Chair Vermont Gov. Jim Douglas**. "Common standards that allow us to internationally benchmark our students' performance with other top countries have the potential to bring about a real and meaningful transformation of our education system to the benefit of all Americans."

"As state school chiefs, we have been discussing and building momentum for state-led, voluntary common standards that are both rigorous and internationally benchmarked for the past two years," stated **CCSSO President and Arkansas Commissioner of Education Ken James**. "The broad level of commitment we have received from states across the nation for this unprecedented effort is both gratifying and exciting. It also clearly illustrates that this is an idea whose time has arrived."

The Common Core State Standards Initiative is being jointly led by the NGA Center and CCSSO in partnership with Achieve, Inc; ACT and the College Board. It builds directly on recent efforts of leading organizations and states that have focused on developing college- and career-ready

standards and ensures that these standards can be internationally benchmarked to top-performing countries around the world. The goal is to have a common core of state standards that states can voluntarily adopt. States may choose to include additional standards beyond the common core as long as the common core represents at least 85 percent of the state's standards in English language arts and mathematics.

"Measuring our students against international benchmarks is an important step," said **Virginia Gov. Timothy Kaine**. "Today, we live in a world without borders. It not only matters how Virginia students compare to those in surrounding states – it matters how we compete with countries across the world."

"Only when we agree about what all high school graduates need to be successful will we be able to tackle the most significant challenge ahead of us: transforming instruction for every child," said **CCSSO President-Elect and Maine Education Commissioner Sue Gendron**. "Common standards will provide educators clarity and direction about what all children need to succeed in college and the workplace and allow states to more readily share best practices that dramatically improve teaching and learning. Our graduates and frankly, the future of our economy, cannot wait any longer for our educational practices to give equal opportunity for success to every student."

The NGA Center and CCSSO are coordinating the process to develop these standards and have created an expert validation committee to provide an independent review of the common core state standards, as well as the grade-by-grade standards. This committee will be composed of nationally and internationally recognized and trusted education experts who are neutral to – and independent of – the process. The college- and career-ready standards are expected to be completed in September 2009. The grade-by-grade standards work is expected to be completed in January 2010.

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Founded in 1908, the National Governors Association (NGA) is the collective voice of the nation's governors and one of Washington, D.C.'s most respected public policy organizations. Its members are the governors of the 50 states, three territories and two commonwealths. NGA provides governors and their senior staff members with services that range from representing states on Capitol Hill and before the Administration on key federal issues to developing and implementing innovative solutions to public policy challenges through the NGA Center for Best Practices. For more information, visit www.nga.org.

The Council of Chief State School Officers (CCSSO) is a nonpartisan, nationwide, nonprofit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five U.S. extra-state jurisdictions. CCSSO provides leadership, advocacy, and technical assistance on major educational issues. The Council seeks member consensus on major educational issues and expresses their views to civic and professional organizations, federal agencies, Congress, and the public. www.ccsso.org.

APPENDIX 12

53A-1-401. Powers of State Board of Education -- Adoption of rules -- Enforcement.

(1) (a) The State Board of Education has general control and supervision of the state's public education system.

(b) "General control and supervision" as used in Article X, Sec. 3, of the Utah Constitution means directed to the whole system.

(2) The board may not govern, manage, or operate school districts, institutions, and programs, unless granted that authority by statute.

(3) The board may adopt rules and policies in accordance with its responsibilities under the constitution and state laws, and may interrupt disbursements of state aid to any district which fails to comply with rules adopted in accordance with this Subsection (3).

(4) (a) The board may sell any interest it holds in real property upon a finding by the board that the property interest is surplus.

(b) The board may use the money it receives from a sale under Subsection (4)(a) for capital improvements, equipment, or materials, but not for personnel or ongoing costs.

(c) If the property interest under Subsection (4)(a) was held for the benefit of an agency or institution administered by the board, the money may only be used for purposes related to the agency or institution.

(d) The board shall advise the Legislature of any sale under Subsection (4)(a) and related matters during the next following session of the Legislature.

(5) The board shall develop policies and procedures related to federal educational programs in accordance with Title 53A, Chapter 1, Part 9, Implementing Federal Programs Act.

Appendix 13

Rule R277-700. The Elementary and Secondary School Core Curriculum.

As in effect on September 1, 2009

Table of Contents

R277-700-1. Definitions.

A. "Accredited" means evaluated and approved under the Standards for Accreditation of the Northwest Association of Schools and Colleges or the accreditation standards of the Board, available from the USOE Accreditation Specialist.

B. "Applied courses" means public school courses or classes that apply the concepts of Core subjects. Courses may be offered through Career and Technical Education or other areas of the curriculum.

C. "Basic skills course" means a subject which requires mastery of specific functions, including skills that prepare students for the future, and was identified as a course to be assessed under Section 53A-1-602.

D. "Board" means the Utah State Board of Education.

E. "Career and Technical Education(CTE)" means organized educational programs or courses which directly or indirectly prepare students for employment, or for additional preparation leading to employment, in occupations, where entry requirements generally do not require a baccalaureate or advanced degree.

F. "Core Curriculum content standard" means a broad statement of what students enrolled in public schools are expected to know and be able to do at specific grade levels or following completion of identified courses.

G. "Core Curriculum criterion-referenced test (CRTs)" means a test to measure performance against a specific standard. The meaning of the scores is not tied to the performance of other students.

H. "Core Curriculum objective" means a focused description of what students enrolled in public schools are expected to know and do at the completion of instruction.

I. "Core subjects" means courses for which there is a declared set of Core curriculum objectives as approved by the Board.

J. "Demonstrated competence" means subject mastery as determined by school district standards and review. School district review may include such methods and documentation as: tests, interviews, peer evaluations, writing samples, reports or portfolios.
K. "Elementary school" for purposes of this rule means grades K-6 in whatever kind of school the grade levels exist.
L. "High school" for purposes of this rule means grades 9-12 in whatever kind of school the grade levels exist.
M. "Individualized Education Program (IEP)" means a written statement for a student with a disability that is developed, reviewed, and revised in accordance with the Utah Special Education Rules and Part B of the Individuals with Disabilities Education Act (IDEA).
N. "Life Skills document" means a companion document to the Core curriculum that describes the knowledge, skills, and dispositions essential for all students; the life skills training helps students transfer academic learning into a comprehensive education.
O. "Middle school" for purposes of this rule means grades 7-8 in whatever kind of school the grade levels exist.
P. "Norm-referenced test" means a test where the scores are based on comparisons with a nationally representative group of students in the same grade. The meaning of the scores is tied specifically to student performance relative to the performance of the students in the norm group under very specific testing conditions.
Q. "SEOP" means student education occupation plan. An SEOP shall include:
(1) a student's education occupation plans (grades 7-12) including job placement when appropriate;
(2) all Board and local board graduation requirements;
(3) evidence of parent, student, and school representative involvement annually;
(4) attainment of approved workplace skill competencies; and
(5) identification of post secondary goals and approved sequence of courses.
R. "State Core Curriculum (Core Curriculum)" means those standards of learning that are essential for all Utah students, as well as the ideas, concepts, and skills that provide a foundation on which subsequent learning may be built, as established by the Board.
S. "Supplemental courses" means public school courses that provide students with the skills to succeed in Core subject areas.
T. "USOE" means the Utah State Office of Education.
U. "Utah Basic Skills Competency Test (UBSCT)" means a test to be administered to Utah students beginning in the tenth grade to include, at a minimum, components on English, language arts, reading and mathematics. Utah students shall satisfy the requirements of the UBSCT in addition to school or district graduation requirements prior to receiving a basic high school diploma unless exempted consistent with Section 53A-1-603(5) and R277-705-11.

R277-700-2. Authority and Purpose.

A. This rule is authorized by Article X, Section 3 of the Utah Constitution, which places general control and supervision of the public schools under the Board; Section 53A-1-402(1)(b) and (c) which directs the Board to make rules regarding competency levels, graduation requirements, curriculum, and instruction requirements; Section 53A-1- 402.6 which directs the Board to establish a Core Curriculum in consultation with local boards and superintendents and directs local boards to

design local programs to help students master the Core Curriculum; and Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities.
B. The purpose of this rule is to specify the minimum Core Curriculum requirements for the public schools, to give directions to local boards and school districts about providing the Core Curriculum for the benefit of students, and to establish responsibility for mastery of Core Curriculum requirements.

R277-700-3. Core Curriculum Standards and Objectives.

A. The Board establishes minimum course description standards and objectives for each course in the required general core, which is commonly referred to as the Core Curriculum.
B. Course descriptions for required and elective courses shall be developed cooperatively by school districts and the USOE with opportunity for public and parental participation in the development process.
C. The descriptions shall contain mastery criteria for the courses, shall stress mastery of the course material and Core objectives, standards and life skills consistent with the Core Curriculum and Life Skills document. Mastery shall be stressed rather than completion of predetermined time allotments for courses.
D. Implementation of the Core Curriculum and student assessment procedures are the responsibility of local boards of education consistent with state law.
E. This rule shall apply to students in the 2007-2008 graduating class.

R277-700-4. Elementary Education Requirements.

A. The Board shall establish a Core Curriculum for elementary schools, grades K-6.
B. Elementary School Education Core Curriculum Content Area Requirements:
(1) Grades K-2:
(a) Reading/Language Arts;
(b) Mathematics;
(c) Integrated Curriculum.
(2) Grades 3-6:
(a) Reading/Language Arts;
(b) Mathematics;
(c) Science;
(d) Social Studies;
(e) Arts:
(i) Visual Arts;
(ii) Music;
(iii) Dance;
(iv) Theatre.
(f) Health Education;
(g) Physical Education;
(h) Educational Technology;
(i) Library Media.
C. It is the responsibility of the local boards of education to provide access to the Core Curriculum to all students.
D. Student mastery of the general Core Curriculum is the responsibility of local boards of education.

E. Informal assessment should occur on a regular basis to ensure continual student progress.
F. Board-approved CRT's shall be used to assess student mastery of the following:
(1) reading;
(2) language arts;
(3) mathematics;
(4) science in elementary grades 4-6; and
(5) effectiveness of written expression in grade 6.
G. Norm-referenced tests shall be given to all elementary students in grades 3 and 5.
H. Provision for remediation for all elementary students who do not achieve mastery is the responsibility of local boards of education.

R277-700-5. Middle School Education Requirements.

A. The Board shall establish a Core Curriculum for middle school education.
B. Students in grades 7-8 shall earn a minimum of 12 units of credit to be properly prepared for instruction in grades 9-12.
C. Local boards may require additional units of credit.
D. Grades 7-8 Core Curriculum Requirements and units of credit:
(1) General Core (10.5 units of credit):
(a) Language Arts (2.0 units of credit);
(b) Mathematics (2.0 units of credit);
(c) Science (1.5 units of credit);
(d) Social Studies (1.5 units of credit);
(e) The Arts (1.0 units of credit):
(i) Visual Arts;
(ii) Music;
(iii) Dance;
(iv) Theatre.
(f) Physical Education (1.0 units of credit);
(g) Health Education (0.5 units of credit);
(h) Career and Technical Education, Life, and Careers (1.0 units of credit);
(i) Educational Technology (credit optional);
(j) Library Media (integrated into subject areas).
E. Board-approved CRT's shall be used to assess student mastery of the following:
(1) reading;
(2) language arts;
(3) mathematics; and
(4) science in grades 7 and 8.
F. Norm-referenced tests shall be given to all middle school students in grade 8.

R277-700-6. High School Requirements (Effective for Students Graduating Through the 2009-2010 School Year).

A. The Board shall establish a Core Curriculum for students in grades 9-12.
B. Students in grades 9-12 shall earn a minimum of 15 Board-specified units of credit through course completion or through competency assessment consistent with R277-705.
C. Grades 9-12 Core Curriculum as specified:

(1) Language Arts (3.0 units of credit);
(2) Mathematics (2.0 units of credit):
(a) minimally, Elementary Algebra or Applied Mathematics I; and
(b) Geometry or Applied Mathematics II; or
(c) any Advanced Mathematics courses in sequence beyond (a) and (b);
(d) high school mathematics credit may not be earned for courses in sequence below (a).
(3) Science (2.0 units of credit from two of the four science areas):
(a) Earth Systems Science (1.0 units of credit);
(b) Biological Science (1.0 units of credit);
(c) Chemistry (1.0 units of credit);
(d) Physics (1.0 units of credit).
(4) Social Studies (2.5 units of credit):
(a) Geography for Life (0.5 units of credit);
(b) World Civilizations (0.5 units of credit);
(c) U.S. History (1.0 units of credit);
(d) U.S. Government and Citizenship (0.5 units of credit).
(5) The Arts (1.5 units of credit from any of the following performance areas):
(a) Visual Arts;
(b) Music;
(c) Dance;
(d) Theatre;
(6) Physical and Health Education (2.0 units of credit):
(a) Health (0.5 units of credit);
(b) Participation Skills (0.5 units of credit);
(c) Fitness for Life (0.5 units of credit);
(d) Individualized Lifetime Activities (0.5 units of credit) or team sport/athletic participation (maximum of 0.5 units of credit with school approval).
(7) Career and Technical Education (1.0 units of credit);
(a) Agriculture;
(b) Business;
(c) Family and Consumer Sciences;
(d) Health Science and Technology;
(e) Information Technology;
(f) Marketing;
(g) Technology and Engineering Education;
(h) Trade and Technical Education.
(8) Educational Technology:
(a) Computer Technology (0.5 units of credit for the class by this specific name only); or
(b) successful completion of Board-approved competency examination (credit may be awarded at the discretion of the school or school district).
(9) General Financial Literacy (0.5 units of credit).
(10) Library Media Skills (integrated into the subject areas).
(11) Board-approved CRT's shall be used to assess student mastery of the following subjects:
(a) reading;

(b) language arts through grade 11;
(c) mathematics as defined under R277-700-7C(2);
(d) science as defined under R277-700-7C(3); and
(e) effectiveness of written expression in grade 9.
D. Local boards shall require students to earn a minimum of 24 units of credit in grades 9-12 for high school graduation.
(1) If a local board requires students to register for more than 24 units in grades 9-12, one-third of those credits above 24 shall be in one or more of the academic areas of math, language arts, world languages, science, or social studies, as determined by the local board.
(2) Local boards may require students to earn credits for graduation that exceed minimum Board requirements.
E. Students with disabilities served by special education programs may have changes made to graduation requirements through individual IEPs to meet unique educational needs. A student's IEP shall document the nature and extent of modifications, substitutions or exemptions made to accommodate a student with disabilities.

R277-700-7. High School Requirements (Effective for Graduating Students Beginning with the 2010-2011 School Year).

A. The Board shall establish a Core Curriculum for students in grades 9-12.
B. Beginning with the graduating class of 2011, students in grades 9-12 shall earn a minimum of 18 Board-specified units of credit through course completion or through competency assessment consistent with R277-705.
C. Grades 9-12 Core Curriculum, as specified:
(1) Language Arts (4.0 units of credit):
(a) Ninth grade level (1.0 unit of credit);
(b) Tenth grade level (1.0 unit of credit);
(c) Eleventh grade level (1.0 unit of credit); and
(d) Applied or advanced language arts credit (1.0 unit of credit) from the list of courses, determined by the local board and approved by USOE, using the following criteria and consistent with the student's SEOP:
(i) courses are within the field/discipline of language arts with a significant portion of instruction aligned to language arts content, principles, knowledge, and skills; and
(ii) courses provide instruction that leads to student understanding of the nature and disposition of language arts; and
(iii) courses apply the fundamental concepts and skills of language arts; and
(iv) courses provide developmentally appropriate content; and
(v) courses develop skills in reading, writing, listening, speaking, and presentation;
(2) Mathematics (3.0 units of credit) met minimally through successful completion of three units of credit of mathematics including Elementary Algebra and Geometry; and mathematics in grades 9-12 selected from the Core courses or applied or supplemental courses from the list of courses determined by the local board and approved by USOE using the following criteria and consistent with the student's SEOP:
(i) courses are within the field/discipline of mathematics with a significant portion of instruction aligned to mathematics content, principles, knowledge, and skills; and

(ii) courses provide instruction that leads to student understanding of the nature and disposition of mathematics; and
(iii) courses apply the fundamental concepts and skills of mathematics; and
(iv) courses provide developmentally appropriate content; and
(v) courses include the five process skills of mathematics: problem solving, reasoning, communication, connections, and representation.
(3) Science (3.0 units of credit):
(a) at a minimum, two courses from the four science foundation areas:
(i) Earth Systems Science (1.0 units of credit);
(ii) Biological Science (1.0 units of credit);
(iii) Chemistry (1.0 units of credit);
(iv) Physics (1.0 units of credit); and
(b) one additional unit of credit from the foundation courses or the applied or advanced science list determined by the local board and approved by USOE using the following criteria and consistent with the student's SEOP:
(i) courses are within the field/discipline of science with a significant portion of instruction aligned to science content, principles, knowledge, and skills; and
(ii) courses provide instruction that leads to student understanding of the nature and disposition of science; and
(iii) courses apply the fundamental concepts and skills of science; and
(iv) courses provide developmentally appropriate content; and
(v) courses include the areas of physical, natural, or applied sciences; and
(vi) courses develop students' skills in scientific inquiry.
(4) Social Studies (2.5 units of credit):
(a) Geography for Life (0.5 units of credit);
(b) World Civilizations (0.5 units of credit);
(c) U.S. History (1.0 units of credit);
(d) U.S. Government and Citizenship (0.5 units of credit).
(5) The Arts (1.5 units of credit from any of the following performance areas):
(a) Visual Arts;
(b) Music;
(c) Dance;
(d) Theatre;
(6) Physical and Health Education (2.0 units of credit):
(a) Health (0.5 units of credit);
(b) Participation Skills (0.5 units of credit);
(c) Fitness for Life (0.5 units of credit);
(d) Individualized Lifetime Activities (0.5 units of credit) or team sport/athletic participation (maximum of 0.5 units of credit with school approval).
(7) Career and Technical Education (1.0 units of credit):
(a) Agriculture;
(b) Business;
(c) Family and Consumer Sciences;
(d) Health Science and Technology;

(e) Information Technology;
(f) Marketing;
(g) Technology and Engineering Education;
(h) Trade and Technical Education.
(8) Educational Technology (0.5 units of credit):
(a) Computer Technology (0.5 units of credit for the class by this specific name only); or
(b) successful completion of Board-approved competency examination (credit may be awarded at the discretion of the school or school district).
(9) General Financial Literacy (0.5 units of credit).
(10) Library Media Skills (integrated into the subject areas).
D. Board-approved CRT's shall be used to assess student mastery of the following subjects:
(1) reading;
(2) language arts through grade 11;
(3) mathematics as defined under R277-700-7C(2);
(4) science as defined under R277-700-7C(3); and
(5) effectiveness of written expression in grade 9.
E. Local boards shall require students to earn a minimum of 24 units of credit in grades 9-12 for high school graduation.
F. Local boards may require students to earn credits for graduation that exceed minimum Board requirements.
G. Elective courses offerings may be established and offered at the discretion of the local board.
H. Students with disabilities served by special education programs may have changes made to graduation requirements through individual IEPs to meet unique educational needs. A student's IEP shall document the nature and extent of modifications, substitutions or exemptions made to accommodate a student with disabilities.
I. The Board and USOE may review local boards' lists of approved courses for compliance with this rule.
J. Graduation requirements may be modified for individual students to achieve an appropriate route to student success when such modifications:
(1) are consistent with the student's IEP or SEOP or both;
(2) are maintained in the student's file and include the parent's/guardian's signature; and
(3) maintain the integrity and rigor expected for high school graduation, as determined by the Board.

R277-700-8. Student Mastery and Assessment of Core Curriculum Standards and Objectives.

A. Student mastery of the Core Curriculum at all levels is the responsibility of local boards of education.
B. Provisions for remediation of secondary students who do not achieve mastery is the responsibility of local boards of education under Section 53A-13-104.
C. Students who are found to be deficient in basic skills through U-PASS shall receive remedial assistance according to provisions of Section 53A-1-606(1).
D. If parents object to portions of courses or courses in their entirety under provisions of law (Section 53A-13-101.2) and rule (R277-105), students and parents shall be responsible for the mastery of Core objectives to the satisfaction of the school prior to promotion to the next course or grade level.

E. Students with Disabilities:
(1) All students with disabilities served by special education programs shall demonstrate mastery of the Core Curriculum.
(2) If a student's disabling condition precludes the successful demonstration of mastery, the student's IEP team, on a case-by-case basis, may provide accommodations for or modify the mastery demonstration to accommodate the student's disability.
F. Students may demonstrate competency to satisfy course requirements consistent with R277-705-3.
G. All Utah public school students shall participate in state-mandated assessments, as required by law unless specifically exempted consistent with R277-705-11.
H. Utah public school students shall participate in the Utah Basic Skills Competency Test, as defined under R277-700-1U unless specifically exempted consistent with R277-705-11.
I. School and school districts are ultimately responsible for and shall submit all required student assessments irrespective of allegations of intentional or unintentional violations of testing security or protocol.

Memorandum of Understanding

SMARTER Balanced Assessment Consortium

Race to the Top Fund Assessment Program: Comprehensive Assessment Systems Grant Application

CFDA Number: 84.395B

This Memorandum of Understanding ("MOU") is entered as of **May 26, 2010**, by and between the **SMARTER Balanced Assessment Consortium** (the "Consortium") and the **State of Utah**, which has elected to participate in the Consortium as (check one)

_____ An **Advisory** State (description in section e),

OR

__X__ A **Governing** State (description in section e),

pursuant to the Notice Inviting Applications for the Race to the Top Fund Assessment Program for the Comprehensive Assessment Systems Grant Application (Category A), henceforth referred to as the "Program," as published in the Federal Register on April 9, 2010 (75 FR 18171-18185.

The purpose of this MOU is to

(a) Describe the Consortium vision and principles,
(b) Detail the responsibilities of States in the Consortium,
(c) Detail the responsibilities of the Consortium,
(d) Describe the management of Consortium funds,
(e) Describe the governance structure and activities of States in the Consortium,
(f) Describe State entrance, exit, and status change,
(g) Describe a plan for identifying existing State barriers, and
(h) Bind each State in the Consortium to every statement and assurance made in the application through the following signature blocks:
    (i)(A) Advisory State Assurance
    OR
    (i)(B) Governing State Assurance
    AND
    (ii) State Procurement Officer

(a) Consortium Vision and Principles

The Consortium's priorities for a new generation assessment system are rooted in a concern for the valid, reliable, and fair assessment of the deep disciplinary understanding and higher-order thinking skills that are increasingly demanded by a knowledge-based economy. These priorities are also rooted in a belief that assessment must support ongoing improvements in instruction and learning, and must be useful for all members of the educational enterprise: students, parents, teachers, school administrators, members of the public, and policymakers.

The Consortium intends to build a flexible system of assessment based upon the Common Core Standards in English language arts and mathematics with the intent that all students across this Consortium of States will know their progress toward college and career readiness.

The Consortium recognizes the need for a system of formative, interim, and summative assessments—organized around the Common Core Standards—that support high-quality learning, the demands of accountability, and that balance concerns for innovative assessment with the need for a fiscally sustainable system that is feasible to implement. The efforts of the Consortium will be organized to accomplish these goals.

The comprehensive assessment system developed by the Consortium will include the following key elements and principles:

1. A Comprehensive Assessment System that will be grounded in a thoughtfully integrated learning system of standards, curriculum, assessment, instruction and teacher development that will inform decision-making by including formative strategies, interim assessments, and summative assessments.

2. The assessment system will measure the full range of the Common Core Standards including those that measure higher-order skills and will inform progress toward and acquisition of readiness for higher education and multiple work domains. The system will emphasize deep knowledge of core concepts within and across the disciplines, problem solving, analysis, synthesis, and critical thinking.

3. Teachers will be involved in the design, development, and scoring of assessment items and tasks. Teachers will participate in the alignment of the Common Core Standards and the identification of the standards in the local curriculum.

4. Technology will be used to enable adaptive technologies to better measure student abilities across the full spectrum of student performance and evaluate growth in learning; to support online simulation tasks that test higher-order abilities; to score the results; and to deliver the responses to trained scorers/teachers to access from an

electronic platform. Technology applications will be designed to maximize interoperability across user platforms, and will utilize open-source development to the greatest extent possible.

5. A sophisticated design will yield scores to support evaluations of student growth, as well as school, teacher, and principal effectiveness in an efficient manner.

6. On-demand and curriculum-embedded assessments will be incorporated over time to allow teachers to see where students are on multiple dimensions of learning and to strategically support their progress.

7. All components of the system will incorporate principles of Universal Design that seek to remove construct-irrelevant aspects of tasks that could increase barriers for non-native English speakers and students with other specific learning needs.

8. Optional components will allow States flexibility to meet their individual needs.

(b) Responsibilities of States in the Consortium

Each State agrees to the following element of the Consortium's Assessment System:

- Adopt the Common Core Standards, which are college- and career-ready standards, and to which the Consortium's assessment system will be aligned, no later than December 31, 2011.

Each State that is a member of the Consortium in 2014–2015 also agrees to the following:

- Adopt common achievement standards no later than the 2014–2015 school year,
- Fully implement statewide the Consortium summative assessment in grades 3-8 and high school for both mathematics and English language arts no later than the 2014–2015 school year,
- Adhere to the governance as outlined in this document,
- Agree to support the decisions of the Consortium,
- Agree to follow agreed-upon timelines,
- Be willing to participate in the decision-making process and, if a Governing State, final decision, and
- Identify and implement a plan to address barriers in State law, statute, regulation, or policy to implementing the proposed assessment system and to addressing any such barriers prior to full implementation of the summative assessment components of the system.

(c) Responsibilities of the Consortium

The Consortium will provide the following by the 2014-15 school year:

1. A comprehensively designed assessment system that includes a strategic use of a variety of item types and performance assessments of modest scope to assess the full range of the Common Core Standards with an emphasis on problem solving, analysis, synthesis, and critical thinking.

2. An assessment system that incorporates a required summative assessment with optional formative/benchmark components which provides accurate assessment of all students (as defined in the Federal notice) including students with disabilities, English learners, and low- and high-performing students.

3. Except as described above, a summative assessment that will be administered as a computer adaptive assessment and include a minimum of 1–2 performance assessments of modest scope.

4. Psychometrically sound scaling and equating procedures based on a combination of objectively scored items, constructed-response items, and a modest number of performance tasks of limited scope (e.g., no more than a few days to complete).

5. Reliable, valid, and fair scores for students and groups that can be used to evaluate student achievement and year-to-year growth; determine school/district/state effectiveness for Title I ESEA; and better understand the effectiveness and professional development needs of teachers and principals.

6. Achievement standards and achievement level descriptors that are internationally benchmarked.

7. Access for the State or its authorized delegate to a secure item and task bank that includes psychometric attributes required to score the assessment in a comparable manner with other State members, and access to other applications determined to be essential to the implementation of the system.

8. Online administration with limited support for paper-and-pencil administration through the end of the 2016–17 school year. States using the paper-and-pencil option will be responsible for any unique costs associated with the development and administration of the paper-and-pencil assessments.

9. Formative assessment tools and supports that are developed to support curricular goals, which include learning progressions, and that link evidence of student competencies to the summative system.

10. Professional development focused on curriculum and lesson development as well as scoring and examination of student work.

11. A representative governance structure that ensures a strong voice for State administrators, policymakers, school practitioners, and technical advisors to ensure an optimum balance of assessment quality, efficiency, costs, and time. The governance body will be responsible for implementing plans that are consistent with this MOU, but may make changes as necessary through a formal adoption process.

12. Through at least the 2013–14 school year, a Project Management Partner (PMP) that will manage the logistics and planning on behalf of the Consortium and that will monitor for the U.S. Department of Education the progress of deliverables of the proposal. The proposed PMP will be identified no later than August 4, 2010.

13. By September 1, 2014, a financial plan will be approved by the Governing States that will ensure the Consortium is efficient, effective, and sustainable. The plan will include as revenue at a minimum, State contributions, federal grants, and private donations and fees to non-State members as allowable by the U.S. Department of Education.

14. A consolidated data reporting system that enhances parent, student, teacher, principal, district, and State understanding of student progress toward college- and career-readiness.

15. Throughout the 2013–14 school year, access to an online test administration application, student constructed-response scoring application and secure test administration browsers that can be used by the Total State Membership to administer the assessment. The Consortium will procure resources necessary to develop and field test the system. However, States will be responsible for any hardware and vendor services necessary to implement the operational assessment. Based on a review of options and the finance plan, the Consortium may elect to jointly procure these services on behalf of the Total State Membership.

(d) Management of Consortium Funds

All financial activities will be governed by the laws and rules of the State of Washington, acting in the role of Lead Procurement State/Lead State, and in accordance with 34 CFR 80.36. Additionally, Washington is prepared to follow the guidelines for grant management associated with the American Recovery and Reinvestment Act (ARRA), and will be legally responsible for the use of grant funds and for ensuring that the project is carried out by the Consortium in accordance with Federal requirements. Washington has already established an ARRA Quarterly reporting system (also referred to as *1512 Reporting*).

Per Washington statute, the basis of how funding management actually transpires is dictated by the method of grant dollar allocation, whether upfront distribution or pay-out linked to actual reimbursables. Washington functions under the latter format, generating claims against grant funds based on qualifying reimbursables submitted on behalf of staff or clients, physical purchases, or contracted services. Washington's role as Lead Procurement State/Lead State for the Consortium is not viewed any differently, as monetary exchanges will be executed against appropriate and qualifying reimbursables aligned to expenditure arrangements (i.e., contracts) made with vendors or contractors operating under "personal service contracts," whether individuals, private companies, government agencies, or educational institutions.

Washington, like most States, is audited regularly by the federal government for the accountability of federal grant funds, and has for the past five years been without an audit finding. Even with the additional potential for review and scrutiny associated with ARRA funding, Washington has its fiscal monitoring and control systems in place to manage the Consortium needs.

- As part of a comprehensive system of fiscal management, Washington's accounting practices are stipulated in the State Administrative and Accounting Manual (SAAM) managed by the State's Office of Financial Management. The SAAM provides details and administrative procedures required of all Washington State agencies for the procurement of goods and services. As such, the State's educational agency is required to follow the SAAM; actions taken to manage the fiscal activities of the Consortium will, likewise, adhere to policies and procedures outlined in the SAAM.
- For information on the associated contracting rules that Washington will adhere to while serving as fiscal agent on behalf of the Consortium, refer to the Revised Code of Washington (RCW) 39.29 "Personal Service Contracts." Regulations and policies authorized by this RCW are established by the State's Office of Financial Management, and can be found in the SAAM.

(e) Governance Structure and Activities of States in the Consortium

As shown in the SMARTER Balanced Assessment Consortium governance structure, the Total State Membership of the Consortium includes Governing and Advisory States, with Washington serving in the role of Lead Procurement State/Lead State on behalf of the Consortium.

A **Governing** State is a State that:

- Has fully committed to this Consortium only and met the qualifications specified in this document,
- Is a member of only one Consortium applying for a grant in the Program,
- Has an active role in policy decision-making for the Consortium,
- Provides a representative to serve on the Steering Committee,
- Provides a representative(s) to serve on one or more Work Groups,
- Approves the Steering Committee Members and the Executive Committee Members,
- Participates in the final decision-making of the following:
    - Changes in Governance and other official documents,
    - Specific Design elements, and
    - Other issues that may arise.

An **Advisory** State is a State that:

- Has not fully committed to any Consortium but supports the work of this Consortium,
- Participates in all Consortium activities but does not have a vote unless the Steering Committee deems it beneficial to gather input on decisions or chooses to have the Total Membership vote on an issue,
- May contribute to policy, logistical, and implementation discussions that are necessary to fully operationalize the SMARTER Balanced Assessment System, and
- Is encouraged to participate in the Work Groups.

Organizational Structure

Steering Committee

The Steering Committee is comprised of one representative from each Governing State in the Consortium. Committee members may be a chief or his/her designee. Steering Committee Members must meet the following criteria:

- Be from a Governing State,
- Have prior experience in either the design or implementation of curriculum and/or assessment systems at the policy or implementation level, and
- Must have willingness to serve as the liaison between the Total State Membership and Working Groups.

Steering Committee Responsibilities

- Determine the broad picture of what the assessment system will look like,

- Receive regular reports from the Project Management Partner, the Policy Coordinator, and the Content Advisor,
- Determine the issues to be presented to the Governing and/or Advisory States,
- Oversee the expenditure of funds in collaboration with the Lead Procurement State/Lead State,
- Operationalize the plan to transition from the proposal governance to implementation governance, and
- Evaluate and recommend successful contract proposals for approval by the Lead Procurement State/Lead State.

Executive Committee

- The Executive Committee is made up of the Co-Chairs of the Executive Committee, a representative from the Lead Procurement State/Lead State, a representative from higher education and one representative each from four Governing States. The four Governing State representatives will be selected by the Steering Committee. The Higher Education representative will be selected by the Higher Education Advisory Group, as defined in the Consortium Governance document.
- For the first year, the Steering Committee will vote on four representatives, one each from four Governing States. The two representatives with the most votes will serve for three years and the two representatives with the second highest votes will serve for two years. This process will allow for the rotation of two new representatives each year. If an individual is unable to complete the full term of office, then the above process will occur to choose an individual to serve for the remainder of the term of office.

Executive Committee Responsibilities

- Oversee development of SMARTER Balanced Comprehensive Assessment System,
- Provide oversight of the Project Management Partner,
- Provide oversight of the Policy Coordinator,
- Provide oversight of the Lead Procurement State/Lead State,
- Work with project staff to develop agendas,
- Resolve issues,
- Determine what issues/decisions are presented to the Steering Committee, Advisory and/or Governing States for decisions/votes,
- Oversee the expenditure of funds, in collaboration with the Lead Procurement State/Lead State, and
- Receive and act on special and regular reports from the Project Management Partner, the Policy Coordinator, the Content Advisor, and the Lead Procurement State/Lead State.

Executive Committee Co-Chairs

- Two Co-chairs will be selected from the Steering Committee States. The two Co-chairs must be from two different states. Co-chairs will work closely with the Project Management Partner. Steering Committee members wishing to serve as Executive Committee Co-chairs will submit in writing to the Project Management Partner their willingness to serve. They will need to provide a document signed by their State Chief indicating State support for this role. The Project Management Partner will then prepare a ballot of interested individuals. Each Steering Committee member will vote on the two individuals they wish to serve as Co-chair. The individual with the most votes will serve as the new Co-chair.
- Each Co-chair will serve for two years on a rotating basis. For the first year, the Steering committee will vote on two individuals and the one individual with the most votes will serve a three-year term and the individual with the second highest number of votes will serve a two-year term.
- If an individual is unable to complete the full term of office, then the above process will occur to choose an individual to serve for the remainder of the term of office.

Executive Committee Co-Chair Responsibilities

- Set the Steering Committee agendas,
- Set the Executive Committee agenda,
- Lead the Executive Committee meetings,
- Lead the Steering Committee meetings,
- Oversee the work of the Executive Committee,
- Oversee the work of the Steering Committee,
- Coordinate with the Project Management Partner,
- Coordinate with Content Advisor,
- Coordinate with Policy coordinator,
- Coordinate with the Technical Advisory Committee (TAC), and
- Coordinate with Executive Committee to provide oversight to the Consortium.

Decision-making

Consensus will be the goal of all decisions. Major decisions that do not reach consensus will go to a simple majority vote. The Steering Committee will determine what issues will be referred to the Total State Membership. Each member of each group (Advisory/Governing States, Steering Committee, Executive Committee) will have one vote when votes are conducted within each group. If there is only a one to three vote difference, the issue will be re-examined to seek greater consensus. The Steering Committee will be responsible for preparing additional information as to the pros and cons of the issue to assist voting States in developing consensus and reaching a final decision. The Steering Committee may delegate this responsibility to the Executive Committee. The Executive Committee will decide which decisions or issues are votes to

be taken to the Steering Committee. The Steering Committee makes the decision to take issues to the full Membership for a vote.

The Steering Committee and the Governance/Finance work group will collaborate with each Work Group to determine the hierarchy of the decision-making by each group in the organizational structure.

Work Groups

The Work Groups are comprised of chiefs, assessment directors, assessment staff, curriculum specialists, professional development specialists, technical advisors and other specialists as needed from States. Participation on a workgroup will require varying amounts of time depending on the task. Individuals interested in participating on a Work Group should submit their request in writing to the Project Management Partner indicating their preferred subgroup. All Governing States are asked to commit to one or more Work Groups based on skills, expertise, and interest within the State to maximize contributions and distribute expertise and responsibilities efficiently and effectively. The Consortium has established the following Work Groups:

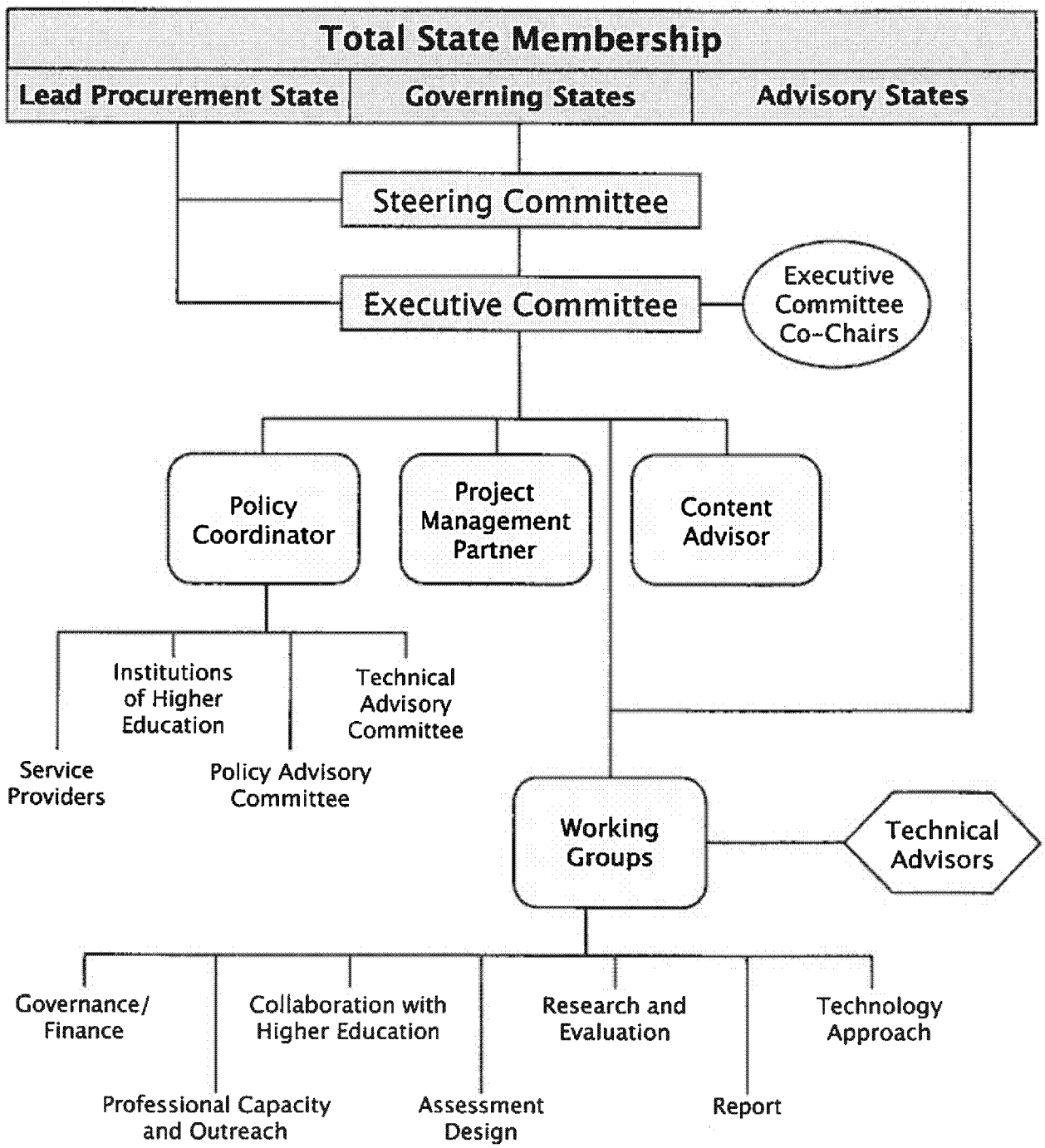
- Governance/Finance,
- Assessment Design,
- Research and Evaluation,
- Report,
- Technology Approach,
- Professional Capacity and Outreach, and
- Collaboration with Higher Education.

The Consortium will also support the work of the Work Groups through a Technical Advisory Committee (TAC). The Policy Coordinator in collaboration with the Steering Committee will create various groups as needed to advise the Steering Committee and the Total State Membership. Initial groups will include

- Institutions of Higher Education,
- Technical Advisory Committee,
- Policy Advisory Committee, and
- Service Providers.

An organizational chart showing the groups described above is provided on the next page.

SMARTER Balanced Assessment Consortium Organizational Structure



(f) State Entrance, Exit, and Status Change

This MOU shall become effective as of the date first written above upon signature by both the Consortium and the Lead Procurement State/Lead State (Washington) and remain in force until the conclusion of the Program, unless terminated earlier in writing by the Consortium as set forth below.

Entrance into Consortium
Entrance into the Smarter Balanced Assessment Consortium is assured when:

- The level of membership is declared and signatures are secured on the MOU from the State's Commissioner, State Superintendent, or Chief; Governor; and President/Chair of the State Board of Education (if the State has one);
- The signed MOU is submitted to the Consortium Grant Project Manager (until June 23) and then the Project Management Partner after August 4, 2010;
- The Advisory and Governing States agree to and adhere to the requirements of the governance;
- The State's Chief Procurement Officer has reviewed its applicable procurement rules and provided assurance that it may participate in and make procurements through the Consortium;
- The State is committed to implement a plan to identify any existing barriers in State law, statute, regulation, or policy to implementing the proposed assessment system and to addressing any such barriers prior to full implementation of the summative assessment components of the system; and
- The State agrees to support all decisions made prior to the State joining the Consortium.

After receipt of the grant award, any request for entrance into the Consortium must be approved by the Executive Committee. Upon approval, the Project Management Partner will then submit a change of membership to the USED for approval. A State may begin participating in the decision-making process after receipt of the MOU.

Exit from Consortium
Any State may leave the Consortium without cause, but must comply with the following exit process:

- A State requesting an exit from the Consortium must submit in writing their request and reasons for the exit request,
- The written explanation must include the statutory or policy reasons for the exit,
- The written request must be submitted to the Project Management Partner with the same signatures as required for the MOU,
- The Executive Committee will act upon the request within a week of the request, and
- Upon approval of the request, the Project Management Partner will then submit a change of membership to the USED for approval.

Changing Roles in the Consortium

A State desiring to change from an Advisory State to a Governing State or from a Governing State to an Advisory State may do so under the following conditions:

- A State requesting a role change in the Consortium must submit in writing their request and reasons for the request,
- The written request must be submitted to the Project Management Partner with the same signatures as required for the MOU, and
- The Executive Committee will act upon the request within a week of the request and submit to the USED for approval.

(g) Plan for Identifying Existing State Barriers

Each State agrees to identify existing barriers in State laws, statutes, regulations, or policies by noting the barrier and the plan to remove the barrier. Each State agrees to use the table below as a planning tool for identifying existing barriers. States may choose to include any known barriers in the table below at the time of signing this MOU.

Barrier	Issue/Risk of Issue (if known)	Statute, Regulation, or Policy	Governing Body with Authority to Remove Barrier	Approximate Date to Initiate Action	Target Date for Removal of Barrier	Comments
§ (b) State legislature must appropriate sufficient funds to implement common core standards.	Risk	Policy	Legislature	Next legislative session, January, 2011	End of legislative session, March, 2011	
§ (c)(13) State contributions--what are these expected to be? Certain costs may need prior legislative approval.	Risk	Policy	Legislature	Next legislative session, January, 2011	End of legislative session, March, 2011	

§ (d) According to Utah Code § 63G-6-104(2) "Except as provided in Section 63G-6-105, this chapter shall apply to every expenditure of public funds irrespective of their source, including federal assistance, by any state agency under any contract."						
§ (d) Only the legislature may authorize the state to make procurements outside the current statute (Utah Code Title 63G Chapter 6). The Chief Procurement Officer does not have that authority.						

[remainder of page intentionally left blank]

(h) Bind each State in the Consortium to every statement and assurance made in the application through the following signature blocks

(h)(i)(A) ADVISORY STATE SIGNATURE BLOCK for Race to the Top Fund Assessment Program Comprehensive Assessment Systems Grant Application Assurances. *(Required from all "Advisory States" in the Consortium.)* As an Advisory State in the SMARTER Balanced Assessment Consortium, I have read and understand the roles and responsibilities of Advisory States, and agree to be bound by the statements and assurances made in the application.	
State Name:	
Governor or Authorized Representative of the Governor (Printed Name):	Telephone:
Signature of Governor or Authorized Representative of the Governor:	Date:
Chief State School Officer (Printed Name):	Telephone:
Signature of the Chief State School Officer:	Date:
President of the State Board of Education, if applicable (Printed Name):	Telephone:
Signature of the President of the State Board of Education, if applicable:	Date:

(h)(i)(B) GOVERNING STATE SIGNATURE BLOCK for Race to the Top Fund Assessment Program Comprehensive Assessment Systems Grant Application Assurances

(Required from all "Governing States" in the Consortium.)

As a Governing State in the SMARTER Balanced Assessment Consortium, I have read and understand the roles and responsibilities of Governing States, and agree to be bound by the statements and assurances made in the application.

I further certify that as a Governing State I am fully committed to the application and will support its implementation.

State Name:
Utah

Governor or Authorized Representative of the Governor (Printed Name):
Governor Gary R. Herbert

Telephone:
(801) 538-1000

Signature of Governor or Authorized Representative of the Governor:

Date:
5/24/10

Chief State School Officer (Printed Name):
Superintendent Larry K. Shumway

Telephone:
(801) 538-7517

Signature of the Chief State School Officer:

Date:
5/20/10

President of the State Board of Education, if applicable (Printed Name):
Debra G. Roberts

Telephone:
(435) 438-5843

Signature of the President of the State Board of Education, if applicable:

Date:
5/20/10

(h)(ii) STATE PROCUREMENT OFFICER SIGNATURE BLOCK for Race to the Top Fund Assessment Program Comprehensive Assessment Systems Grant Application Assurances. *(Required from all States in the Consortium.)* I certify that I have reviewed the applicable procurement rules for my State and have determined that it may participate in and make procurements through the SMARTER Balanced Assessment Consortium with the exceptions noted in Section (g) ("Barriers" section) of the MOU.	
State Name: Utah	
State's chief procurement official (or designee), (Printed Name): Kent Beers	Telephone: (801) 538-3026
Signature of State's chief procurement official (or designee),: Kent D Beers	Date: 5/25/10

SMARTER Balance Consortium

Governance Structure

Proposal process only

This structure will be replaced by a long term governance structure when the proposal is accepted

Guiding Principle: State led/governed Consortium

Member States

The Member States is comprised of the chief/designee from each state in the consortium. The Member States will contribute to policy and logistical discussions and decisions that are necessary to create a compelling grant proposal.

Weekly conference calls will review issues and seek consensus for major decisions. Decisions/issues/concerns will be proposed and then consensus building will be achieved through E-mails and using the SMARTER website. This website will regularly post major issues, decisions and documents. Member States will have the responsibility to check the website each day for new information, issues, pending decisions etc. The SMARTER website will be maintained and monitored by the Project Manager. The website will easily highlight any new information that has been posted. Decision/issues will have a clear timeline for completed decisions.

Major decisions that do not reach consensus will go to a simple majority vote. Each state will have one vote and equal authority/participation. If there is only a one - three vote difference, the issue will be re-examined to seek greater consensus. The Steering Committee will prepare additional information as to the pros and cons of the issue to assist states in developing consensus around the issue. When the issue comes for the second vote, the simple majority vote will be final.

A Commitment Document will be E-mailed to all states requiring the signature of the State Chief that must be returned to Tony Alpert. States will participate in all decisions made after the signed document is received. The commitment document will include a commitment to support any decisions made prior to the Consortium receipt of the document.

The Member States will approve and/or make final decisions in the following key areas:

1. Steering Committee Members
2. Policy Coordinator
3. Statement of Common Purpose

4. Different levels of state participation
5. Theory of Action
6. Specific design elements
7. Final proposal

Governing State

A Governing State is a state that:

1. Is a member of only one consortium applying for a grant in the competition category
2. Has an active role in policy decision-making for the consortium
3. Is committed to using the assessment system or program developed by the consortium

States must indicate on their Commitment Document if they want to be a Governing State.

Steering Committee

The Steering Committee is comprised of one representative from 12 – 15 states in the consortium. Committee members may be a chief or their designee, or a representative from higher education. Committee members will be selected so as to represent each region of the United States as well as small and large states. Committee members must have assessment expertise as evidenced by previous experience in either design or implementation of state assessment systems. Selection will be made to provide a balance of representation from both policy and implementation roles. The Steering Committee will serve as the liaison between the Working Group and the Member States.

States interested in participating on the Steering Committee must so indicate on their Commitment Document. No later than April 20th, the current Coordinating Committee of Seven States (Oregon, Washington, Idaho, Utah, Nebraska, Wisconsin & Missouri) will collaborate with all of the states to propose which states will be on the Steering Committee. This Steering Committee Proposal will be sent to the Member States for their approval. The Steering Committee members must commit to devoting substantial time (approximately 10 hours per week) to the development of the grant proposal. Steering Committee responsibilities will include the following:

- Determine the broad picture of what the assessment system will look like.
- Direct the work of the Proposal Design Team as necessary to create a compelling grant proposal
- Receive regular reports from the Project Manager
- Determine the issues to be presented to the Member States
- Oversee the expenditure of funds during the proposal process
- Develop a plan to transition from the proposal governance to implementation governance

- Determine the Fiscal Agent for the Implementation

Proposal Design Team

The Proposal Design Team is comprised of state assessment directors/designee and selected technical advisors that will ensure the proposal is strategic, efficient, comprehensive and consistent with best practices. The Project Manager will provide leadership to the Proposal Design Team. A high priority for this group continues to be the focus on a state led consortium with the state voice having the highest priority. Participation on the Proposal Design Team will require a significant amount of time (20 hours each week) during the proposal period. The Proposal Design Team will:

- Determine the topics of the final working groups
- Determine the membership of each group.
- Direct and participate in the work of the Work Groups.

The Steering Committee in consultation with the Project Manager will determine the participants on the Proposal Design Team. *Individuals interested in participating on the Proposal Design Team should so indicate on the Commitment Document*

Work Groups

The Workgroups are comprised of chiefs/assessment directors/assessment staff/technical advisors. Participation on a workgroup will require varying amounts of time depending on the task. *Individuals interested in participating on a Workgroup should so indicate on the Commitment Document indicating their preferred subgroup.*

- Item Specifications/Item Quality Control, Writing/constructed response scoring/validity
- Psychometrics, Reliability, Achievement Standards Setting, Reporting
- Universal Design, Test Administration, Accommodations, Special Populations
- Technical Specifications/ Requirements
- Communications and Documentation
- External validation, Research and Innovations
- Professional Development and Capacity Building (IT and Human)
- Formative and Benchmark Assessments

Level of State Participation

During the next three months as the consortium develops the proposal, states may choose between various levels of participation. All states must be a member state and then may show interest in any single or combination of the following:

1. Governing State
2. Steering Committee

3. Proposal Design Team
4. Work Group(s)

During the next three months the Steering Committee will determine the different levels of participation options available to states for assessment implementation.

Individual Roles

Project Manager

Provides leadership to the Proposal Design Team, regularly reports to the Steering Committee, Is responsible to maintain the website and keep it updated for use as the communication tool for documents and issues.

Grant Writer

Works with the Proposal Design Team in writing the grant.

Policy Coordinator

Provides bridge for Governors, Chiefs and interested organizations such as NEA, AFT, NASB, NASSP, etc.

Technical Advice and Consultation

Will be secured for the Work Groups, the Project Design Team, and a review of the final proposal. Technical advisors will be compensated.

Consortium TAC

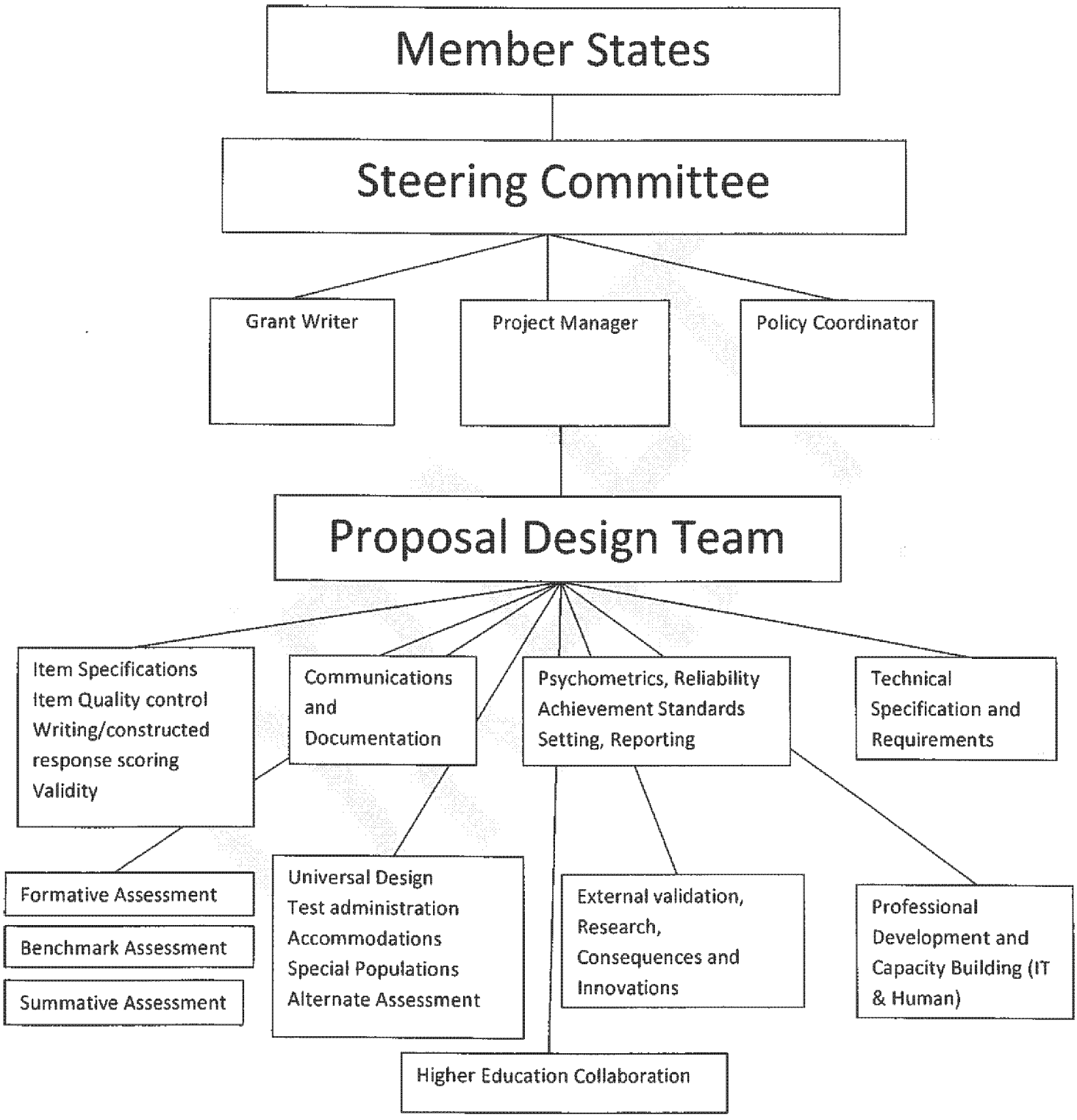
A TAC for the proposal process will be secured. States will be encouraged to involve their state TACS in reviewing the work of the proposal process and the final proposal.

Advisory Groups

The consortium will create as needed various groups to advise the Steering Committee and the member states. Initial groups will include:

- Institutions of Higher Education
- Technical Advisory Committee
- Policy Advisory Committee

Note: Due to the short timelines for completing the consortium proposal, the current Coordinating Committee of Seven States (Oregon, Washington, Idaho, Utah, Nebraska, Wisconsin & Missouri) will select the Project Manager and Grant Writer.


Member States
Steering Committee
Grant Writer
Project Manager
Policy Coordinator
Proposal Design Team
Item Specifications
Item Quality control
Writing/constructed response scoring
Validity
Communications and Documentation
Psychometrics, Reliability
Achievement Standards Setting, Reporting
Technical Specification and Requirements
Formative Assessment
Benchmark Assessment
Summative Assessment
Universal Design
Test administration
Accommodations
Special Populations
Alternate Assessment
External validation, Research, Consequences and Innovations
Professional Development and Capacity Building (IT & Human)
Higher Education Collaboration

APPENDIX C - *Current Status of Utah's Longitudinal Data System*

SLDS Requirements	Current Status	New Outcomes/Improvements to be Accomplished with 2010 ARRA SLDS funding
Capabilities		
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 21st 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).	**Completed:** Utah is providing its P-12 statewide student identifier (SSID) to all postsecondary institutions that require a high school transcript. **Continuing development:** The Utah eTranscript and Record Exchange (UTREx), funded by Utah's 2007 SLDS grant, will allow for more transcript data and automation in this process. **Future development:** If awarded, 2010 ARRA SLDS grant funds will improve this capability.	Utah will be able to track student progress and outcomes from preschool into the workforce. A shared P-12, postsecondary, and workforce services longitudinal data system, the Utah Data Alliance Data Share (UDADS), if funded by a 2010 SLDS grant, will collect, store and make available individual data necessary to research and answer these and many other questions about the success of programs for students at all levels of their education and employment preparation. Primary matching across the data will be done using the Utah P-12 Statewide Student Identifier (SSID) for P-12 and postsecondary, and social security number (SSN) for workforce to postsecondary. Since the postsecondary warehouse has the SSID and the SSN, this will allow for indirect matching of P-12 data to workforce data. In cases where an individual goes directly to the workforce after K-12 attribute based probabilistic matching will be employed.
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 levels and types of data.	**Continuing development:** The current SLDS data elements have been mapped to the SIF specification and SIF agents available for many of Utah student information systems (SISs). This development is being supported by the 2007 SLDS grant. Data exchanged between local education agencies (LEAs) will meet SIF content/objects specifications, fulfilling requirements for standard, format, definitions, and connectivity, and allow interagency and interstate data exchange. **Future development:** If awarded, 2010 ARRA SLDS grant funds will improve this capability.	Funding permitting, the UDADS will be developed, populated and put into use. The UDADS will collect and import data from the partner agencies in the formats most appropriate for that data. P-12 data can be collected via SIF agents and postsecondary via Postsecondary Electronic Standards Council (PESC) files. Workforce services and armed forces data can be collected in various formats and via data specific XML schemas wherever possible. Once in the UDADS, partners will share the data as described in data dictionaries and data views. Data can be exported through various means including, but not limited to standard business intelligence formats and other formats such as Microsoft Excel and SIF.
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 responsible for providing instruction in various subjects.	**Completed.** This work uses ongoing state funding. Since 2002, Utah has been able to match student participation in courses and potentially in assessments with responsible teachers through 1) a statewide teacher ID, 2) Comprehensive Administration of Credentials for Teachers in Utah Schools or CACTUS and 3) USOE's student level Data Clearinghouse. The USOE Data Clearinghouse is a hierarchical, multi-record file that all LEAs submit to the USOE on October 1, December 1, and at the end of the school year. It contains the complete educational year-to-data history of each student in the reporting school.	These will be included in the data USOE will provide to UDADS and will be used for answering numerous policy, program and practice questions posed by the SLDS grant, RttT grants and other future areas of study.
4. The system must enable the matching of teachers with information about their certification and teacher preparation programs, including the institutions at which teachers received their training.	**Completed.** This work has ongoing state funding. Since 2002 Utah has maintained individual, comprehensive, longitudinal records of all its teachers including their preparation programs, training, preparation institutions and in-service work. Such data are regularly shared between USOE and the preparation institutions. All historical records are available for qualified educators (individual teachers, principals etc.) through a Web portal.	These will be included in the data provided by the USOE to UDADS. They will be used for answering numerous policy, program and practice questions required by the SLDS and RttT grants and yet to be identified questions.
5. The system must enable data to be easily generated for continuous improvement and decision-making, including timely	**Completed:** For all K-12 statewide assessments, the USOE publishes results at the school and LEA level for all to use. The USOE supplies each LEA with complete detailed records for each student's historical	Although Utah's longitudinal data system provides data to the LEA, school and classroom levels about student performance, the P-12 SLDS needs to collect and manage more comprehensive data about the settings, types and methods of instruction. This is needed to

reporting to parents, teachers, and school leaders about the achievement of their students.	performance on all statewide assessments. At the LEA level, these results are matched with other student, and teacher data to be made available to educators and parents. The current USOE P-12 Data Warehouse also delivers aggregate performance data for anyone via Web-accessible files. **Continuing development:** Funded by the 2007 SLDS grant, additional work is being completed to automate the exchange of these data. In future years Utah's CBT system will deliver near real-time test results making use of pre-equated tests. **Future development:** If awarded, 2010 ARRA SLDS grant funds will improve this capability.	fulfill Utah's goal of continuous improvement of instruction. Better data about instruction will require significant modifications to local P-12 systems as well as the USOE statewide P-12 data warehouse. This outcome/improvement also complements Utah's Race to the Top (RttT) application that seeks to expand the use of data at the school and classroom levels. Utah's RttT application includes plans to integrate the state supported SIS with the state supported online assessment systems and test item pool. In addition there are plans for more comprehensive professional development at the school and classroom levels.
6. The system must ensure the quality and integrity of data contained in the system.	**Completed:** The USOE continues to develop its data auditing capabilities. In May of 2009 the USOE hired two fulltime data auditor/analysts with 2007 grant funds. Built-in USOE clearinghouse (vertical student level data collections) and assessment file edits along with validation reports require the SEA and LEA to collaborate to make sure the clearinghouse and assessment data are accurate. In addition, the USOE sponsors semi-annual data conferences for all LEAs, conducts weekly data steward/data warehouse meetings for SEA staff and monthly data meetings for LEAs. The USOE also has a Data Governance and Policy Board made up of director level staff and above. See Element #5. **Continuing development**: The 2007 SLDS grant will help fund improvements in all auditing areas. **Future development:** If awarded, 2010 ARRA SLDS grant funds will also improve this capability.	Databases and the processes surrounding those databases in the P-12 and postsecondary ranges will be designed to ensure data quality. Data integrity is an especially important component of data quality. Integrity will be enforced in the proposed data warehouse to be shared by P-12, postsecondary and workforce services, and there will be expanded audits at the LEA, SEA and postsecondary levels. Data merged from the various sources/providers (P-12, postsecondary, workforce) will need to adhere to strict security and matching rules.
7. The system must provide the State with the ability to meet reporting requirements of the Department, especially reporting progress on the metrics established for the State Fiscal Stabilization Fund and the reporting requirements included in the *EDFacts* data collection and reporting system.	**Continuing development**: Utah is currently using 2007 SLDS funds to automate at least some of its EDFacts data collection, maintenance and reporting. EDFacts disciplinary data elements have been mapped to SIF under the current 2007 SLDS grant, are being added to the USOE clearinghouse specification. **Future development:** If awarded, 2010 ARRA SLDS grant funds will will improve this capability.	Although addressed in other section of this application, these include the elements and capability to track student from K-12 into postsecondary. With those data, one can determine the outcomes of students' postsecondary experiences and how well they were prepared for the postsecondary environment. Four areas of improvement related to SFSF requirements are 1) the ability to accurately determine which K-12 student entered postsecondary institutions 2) whether or not they finished a program, 3) how long they were enrolled and 4) if their K-12 preparation work prepared them for postsecondary work. Utah also needs to report on the performance evaluations of K-12 principals and teachers. In addition, Utah will use 2010 ARRA SLDS funds to continue to automate and improve the accuracy and timeliness of its EDFacts reporting, specifically in for disciplinary incident, delinquent and neglected data.

Data Elements		
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)	**Completed:** In 2005 USOE implemented an SSID system, which the Utah eTranscript and Record Exchange (UTREx) will use for more real-time data exchanges. Currently, SSID's are managed via batch/manual processes. **Continuing development:** The UTREx system, currently Continuing development with 2007 SLDS funds, will more fully automate the SSID retrieval and assignment processes.	Work done under The AARA SLDS grant will improve the current SSID system by providing a real-time, integrated process for the retrieval of the SSID by the LEA's student information systems (SISs). The assignment of SSIDs to the P-12 students will become more automated and integrated with student information systems and pre-school systems.

	Future development: If awarded, 2010 ARRA SLDS grant funds will further automate the SSID processes.	
2. Student-level enrollment, demographic, and program participation information	**Completed:** The USOE has been collecting these data at the SEA level for each student since 2002 in batch submissions throughout the school year. Likewise, these data have been available at the Utah System of Higher Education's (USHE) data warehouse for postsecondary students. **Continuing development**: These data will be submitted or passed to the USOE, between LEAs and to postsecondary in a more real-time manner through work funded by the 2007 SLDS grant and the UTREx system. All data elements have been identified and mapped to SIF for those LEAs wishing to take advantage of SIF.	These existing data from the P-12 and postsecondary institutions will be integrated into the Utah Data Alliance Data Store (UDADS) as part of the 2010 ARRA SLDS project, if funded, along with workforce data. Such data can be made available to analysts and researchers to answer many anticipated and unanticipated policy, practice and program questions via the UDADS and personnel hired through the 2010 ARRA SLDS grant. Some of these questions may emerge from RttT funded work. Additional detailed elements (e.g. instructional settings, instructional methods, affective indicators, disciplinary incidents) will also be added to the K-12 LEA and SEA data.
3. Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs	**Completed:** The USOE has been collecting these data at the SEA level for each student since 2002 in batch submissions throughout the school year. The Utah System of Higher Education (USHE) and the Utah College of Applied Technology (UCAT) have been collecting similar data about students in their respective systems. **Continuing development**: These data will be submitted or passed to the USOE, between LEAs and to postsecondary in a more real-time manner through work funded by the 2007 SLDS grant and the UTREx system. All data elements have been identified and mapped to SIF for those LEAs wishing to take advantage of SIF. If awarded, 2010 ARRA SLDS grant funds will further develop or improve this element.	These existing data from the P-12 and postsecondary will be integrated into the UDADS along with workforce data. Such data can be made available to analysts/researchers to answer many anticipated and unanticipated policy, practice and program questions via the UDADS and personnel potentially hired through the 2010 ARRA SLDS grant. Some of these questions may emerge from RttT funded work.
4. The capacity to communicate with higher education data systems	**Completed:** The P-12 SSID is included in all Utah K-12 transcripts. The admitting postsecondary institutions enter this ID into their SIS along with other high school data about the student. **Continuing development**: Within the 2007 SLDS Grant work eTranscripts are being created and electronically transmitted to the postsecondary for automated input into their SIS thus increasing the speed, accuracy and comprehensiveness of the data. **Future development:** If awarded, 2010 ARRA SLDS grant funds will further automate the communication processes.	With the UDADS's development, all data about a student from Utah's P-12 and postsecondary institutions will be matched and combined into a de-identified single set of records for each student. Work will also be done to integrate workforce data with postsecondary and K-12 data. Work also needs to be completed in order to include private postsecondary and possibly private K-12 schools . Some of these questions may emerge from RttT funded work.
5. A State data audit system assessing data quality, validity, and reliability	**Completed:** At the LEAs Utah has had independent auditors review and report on critical LEA data such as enrollment counts that affect state funding formulas. **Continuing development:** With 2007 SLDS funds the USOE in April of 2009 hired two fulltime data auditors/analysts. They have been reviewing data policies and procedures at the SEA and in general what is done at the LEA to report raw data. Utah has also hired a new data quality manager. See Capability #6. **Future development:** If awarded, 2010 ARRA SLDS grant funds will further improve the auditing system.	Although data quality audits are being done at the K-12 level, as those data become integrated with both postsecondary and workforce data, additional auditing will be instituted to ensure the quality of those combined datasets and any raw data collections at all levels. Some of these questions may emerge from RttT funded work.
6. Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary	**Completed:** Utah began collecting the necessary student level assessment and school data for computing AYP and Utah Performance Assessment System for Students (U-PASS) in 2001-2002. Since that time the process, procedures and data quality have	Individual student proficiency and assessment records will be combined with student P-12, postsecondary and workforce data within UDADS. Such data can be made available to analysts/researchers to answer

and Secondary Education Act of 1965	undergone continuous improvement. **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow the use of these data in conjunction with postsecondary student and workforce data.	many anticipated and unanticipated policy, practice and program questions via the UDADS and personnel hired through the ARRA SLDS grant, if awarded. Some of these questions may emerge from RttT funded work.
7. Information on students not tested, by grade and subject	**Completed:** Utah began collecting these data in 2001-2002. After 2002 they became very important for accurate computation of AYP and U-PASS **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow the use of these data in conjunction with postsecondary student and workforce data.	These data will be combined with data from USHE, UCAT and workforce services databases. Such data can be made available to analysts and researchers to answer many anticipated and unanticipated policy, practice and program questions via the UDADS and new personnel. Some of these questions may emerge from RttT funded work.
8. A teacher identifier system with the ability to match teachers to student**s**	**Completed:** Utah has had this ability since the state funded such data projects beginning in 2001-2002. Utah has been able to match student participation in courses and assessments with teachers through 1) a statewide teacher ID, 2) the Comprehensive Administration of Credentials for Teachers in Utah Schools or CACTUS and 3) Utah's student level data warehouse. **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow the use of these data in conjunction with postsecondary student and workforce data.	Individual teacher data will be combined with student P-12, postsecondary and workforce data in UDADS. Such data can be made available to analysts and researchers to answer many anticipated and unanticipated policy, practice and program questions via the UDADS and new personnel. Some of these questions may emerge from RttT funded work.
9. Student-level transcript information, including information on courses completed and grades earned	**Completed:** With state funding, the USOE developed and fully deployed clearinghouse system in 2002 that collects all of these data for a USOE P-12 longitudinal warehouse. These data are collected at all grade levels. **Continuing development**: As part of the 2007 ARRA SLDS work eTranscripts are being created and electronically transmitted to the postsecondary institutions for input into their SISs, thus increasing the speed, accuracy and comprehensiveness of those data. **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow the use of these data in conjunction with postsecondary student and workforce data.	Individual teacher data will be combined with student P-12, postsecondary and workforce data in UDADS. Such data can be made available to analysts and researchers to answer many anticipated and unanticipated policy, practice and program questions via the UDADS and new personnel. Some of these questions may emerge from RttT funded work.
10. Student-level college readiness test scores	**Completed:** The USOE Data warehouse stores individual data about tests taken by some Utah high school students. These include the ACT, AP and the SAT (in aggregate by school). **Continuing development:** The state of Utah is funding a pilot program to have every student take and record the score of the ACT, PLAN and Explore assessments. The plan is to have these become a standard battery of college readiness predictors for all students. **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow the use of these new data in conjunction with postsecondary student and workforce data.	All the current individual readiness scores available will be imported into the UDADS and combined with other K-12, postsecondary and workforce data at the student level. In the future, these will include the new battery of readiness predictors.
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	**Completed:** The USOE, USHE and UCAT have matched and used student data across the K-12 and postsecondary ranges. These are particularly valuable datasets for Utah's concurrent enrollment programs. However, such matching work is ongoing due to incomplete and inconsistent data for some postsecondary students. **Future development:** If awarded, 2010 ARRA SLDS grant funds will greatly improve the quality of these data and the completeness of the matching processes.	As based on ARRA assurance C (11), most of these data (e.g. grades, scores, exits, transfers, dropouts, completions) are included in the existing USOE, USHE and UCAT databases but they have not been fully integrated into one common dataset. They will be assuming the 2010 ARRA SLDS grant application is funded. Likewise, other data such as college readiness scores, behavior indicators, and teacher information will be added to the P-12 system and UDADS.

APPENDIX C - *Current Status of Utah's Longitudinal Data System*

12. Data that provide other information determined necessary to address alignment and adequate preparation for success in postsecondary education	**Completed:** The P-12 USOE Data Warehouse currently has complete information about the courses taken by each student, the standardized assessment for the courses, the student's scores on those assessment, and the teacher(s) of the class. The USHE and UCAT data warehouses have similar information about student courses and success or failure in postsecondary education. In addition, students in some LEAs take the ACUPLACER assessment to address their readiness for concurrent Enrollment classes. **Future development:** If awarded, 2010 ARRA SLDS grant funds will allow for the matching and combining of these data.	Under the 2010 ARRA SLDS grant work these data will be matched student by student within the UDADS to allow for much more extensive and reliable analysis and research into questions about alignment of curriculum and preparation for postsecondary education. If awarded, the grant will also allow for the definition, collection, management and use of more information about instructional settings and methods.

Utah Application for 2009 USED-IES-NCES-SLDS Grant Program
Utah Data Alliance (UDA)

Utah has a well-established history of strong student longitudinal data systems in the K-12 range of public education. Utah public education systems fulfill, in part or completely, most of the seven capabilities and twelve elements that the statewide longitudinal data system (SLDS) request for application prescribes. The objectives and outcomes of this Utah Data Alliance (UDA) project can be summarized as the fulfillment of the entire set of SLDS requirements. Some of these requirements must be completed while others need improvements-- most notably in the availability of data for decision-making.

The fulfillment of these requirements brings several state agencies together, first to share their de-identified data, and then to coordinate analyses and research using those data. This work allows the partner agencies to answer questions about their policies, programs and practices. The questions include, but are not limited to, those asked by the American Recovery and Reinvestment Act (ARRA), Institute of Educational Sciences (IES), SLDS grants program; the ARRA, Race to the Top (RttT); and the State Fiscal Stabilization Fund (SFSF) assurances.

The Utah Education Network (UEN) will build and manage the Utah Data Alliance Data Share (UDADS) to maintain these data, while the other agencies provide and consume needed data from UDADS. The Utah Education Policy Center (UEPC) also plays a key role in the project. The UEPC provides overall data and research coordination functions while pursuing its own and contracted research projects using the UDADS.

This application describes the development and delivery of numerous tangible outcomes (e.g. human resources, tools, databases, organizational and management structures, and processes) that complete all seven capabilities and twelve elements prescribed by the grant request for applications. These tangible or enabling outcomes provide the capacity to achieve answers to multiple categories of education and workforce policy, practice and program questions. The application describes those questions the UDA partners will address with the resources provided by the UDA. The enabling outcomes include:

1) **Human resources are the major component of the project -** Numerous positions and roles are needed. Business and systems analysts will define the needed systems, processes and procedures. IT specialists working with the analysts will build the data warehouse. Trainers will ready the data analysts and researchers so they can effectively use the data. Moreover, those data analysts, statisticians and researchers will answer the policy, practice and program questions.

2) **UDADS -** UDADS is the project's primary technical and enabling outcome. It will be constructed and updated through scheduled import of data from partner agencies. UDADS will transform, clean and load the data and integrate them into an accessible and timely data store for the analysts, statisticians and researchers.

3) **Project management and data governance -** Management of UDA's data, processes and procedures is vital not only in the initial development phases of the project, but in the following years as the teams in the partner agencies work on individual research questions and collaborate on shared outcomes. During the initial period, this work will take the form of project management. As the UDADS becomes operational, management roles will shift towards data governance and the coordination of data access and research. The UDA will emphasize sound data management and governance practice throughout the project.

4) **Training and staff development -** Those using the data need to understand the semantics and the structure of the data as well as the business intelligence tools used to work with those data. Training and staff development must be ongoing throughout the project.

Appendix 17

53A-1-402. Board to establish minimum standards for public schools.

(1) The State Board of Education shall establish rules and minimum standards for the public schools that are consistent with this title, including rules and minimum standards governing the following:

(a) (i) the qualification and certification of educators and ancillary personnel who provide direct student services;

(ii) required school administrative and supervisory services; and

(iii) the evaluation of instructional personnel;

Appendix 18

R277-503-3. USOE Licensing Eligibility.

A. Traditional college/university license - A license applicant shall have completed an approved college/university teacher preparation program, been recommended for licensing, and shall have satisfied all other requirements for educator licensing required by law; or

B. Alternative Licensing Route

(1) A license applicant shall have a bachelors degree or higher from an accredited higher education institution in an area related to the position he seeks; and

(2) A license applicant shall have skills, talents or abilities, as evaluated by the employing entity, making the applicant appropriate for a licensed teaching position and eligible to participate in an ARL program.

(3) While beginning an alternative licensing program, an applicant shall be approved for employment under a letter of authorization for a maximum of one school year and may be employed under an ARL license for an additional two years. An ARL program may not exceed three school years. ARL candidates who receive ARL licensure status may be designated highly qualified under R277-520-1G.

C. All license applicants seeking a Level 1 Utah educator license or an area of concentration or an endorsement in an NCLB core academic subject area after March 3, 2007 shall submit passing score(s) on a rigorous Board- designated content test, where tests are available, prior to the issuance of a renewable license or endorsement.

(1) Early childhood (K-3) and elementary majors (1-8) are required to submit a passing score from a rigorous Board-designated content test.

(2) Secondary teachers are required to submit passing scores on a rigorous Board-designated content test(s), where test(s) are available, for each endorsement NCLB core academic area to be posted on the license.

(3) An applicant shall submit electronic or original documentation of USOE-designated passing score(s).

D. Any educator seeking a Utah Level 1 license who submits a score below the final Utah state passing score on the test designated in R277-503-3C shall be issued a nonrenewable conditional Level 1 license. If the educator fails to submit a passing score on a rigorous Board-designated content test during the three-year duration of the conditional Level 1 license, the educator's license or endorsement shall lapse on the educator's renewal date.

E. The credentials and documentation of experience of applicants for Level 2 and 3 professional educator licenses shall be evaluated by the USOE to determine the appropriate license level.

APPENDIX 19

R277. Education, Administration.
R277-503. Licensing Routes.
R277-503-1. Definitions.

A. "Alternative Routes to Licensure (ARL) advisors" mean a USOE specialist with specific professional development and educator licensing expertise, and a USOE-designated curriculum specialist.

B. "Board" means the Utah State Board of Education.

C. "Competency-based" means a teacher training approach structured for an individual to master and demonstrate content and teaching skills and knowledge at the individual's own pace and sometimes in alternative settings.

D. "Educational Testing Service (ETS)" is a worldwide educational testing and measurement organization.

E. "Endorsement" means a qualification based on content area mastery obtained through a higher education major or minor or through a state-approved endorsement program.

F. "Letter of authorization" means a formal approval given to an individual such as an out-of-state candidate or a first year ARL candidate who is employed by a school district/charter school in a position requiring a professional educator license who has not completed the requirements for an ARL license or a Level 1, 2, or 3 license or who has not completed necessary endorsement requirements. A teacher working under a letter of authorization cannot be designated highly qualified under R277-520-1G.

G. "Level 1 license" means a Utah professional educator license issued upon completion of an approved preparation program or an alternative preparation program, or pursuant to an agreement under the NASDTEC Interstate Contract, to applicants who have also met all ancillary requirements established by law or rule.

H. "Level 2 license" means a Utah professional educator license issued after satisfaction of all requirements for a Level 1 license and:

(1) requirements established by law or rule;

(2) three years of successful education experience within a five-year period; and

(3) satisfaction of requirements under R277-522 for teachers employed after January 1, 2003.

I. "Level 3 license" means a Utah professional educator license issued to an educator who holds a current Utah Level 2 license and has also received National Board Certification or a doctorate in education or in a field related to a content area in a unit of the public education system or an accredited private school.

J. "National Association of State Directors of Teacher Education and Certification (NASDTEC)" is an educator information clearinghouse that maintains an interstate reciprocity agreement and database for its members regarding educators whose licenses have been suspended or revoked.

K. "National Council for Accreditation of Teacher Education (NCATE)" is a nationally recognized organization which accredits the education units providing baccalaureate and graduate degree programs for the preparation of teachers and other professional personnel for elementary and secondary schools.

L. "NCLB core academic subject" means English, reading or language arts, mathematics,

science, foreign languages, civics and government, economics, arts, history, and geography.

M. "Pedagogical knowledge" means practices and strategies of teaching, classroom management, preparation and planning that go beyond an educator's content knowledge of an academic discipline.

N. "Praxis II - Principles of Learning and Teaching" is a standards-based test provided by ETS and designed to assess a beginning teacher's pedagogical knowledge. This test is used by many states as part of their teacher licensing process. Colleges and universities may use this test as an exit exam from teacher education programs. All Utah Level 1 license holders employed or reemployed after January 1, 2003 shall pass this test prior to the issuance of a Level 2 professional educator license consistent with R277-522-1H(3).

O. "Regional accreditation" means formal approval of a school that has met standards considered to be essential for the operation of a quality school program by the following organizations:

(1) Middle States Commission on Higher Education;

(2) New England Association of Schools and Colleges;

(3) North Central Association Commission on Accreditation and School Improvement;

(4) Northwest Commission on Colleges and Universities;

(5) Southern Association of Colleges and Schools; and

(6) Western Association of Schools and colleges: Senior College Commission.

P. "Restricted endorsement" means a qualification based on content area knowledge obtained through a USOE-approved program of study or test and shall be available only to teachers in necessarily existent small school settings and teachers in youth in custody programs.

Q. "State-approved Endorsement Plan (SAEP)" means a plan in place developed between the USOE and a licensed educator to direct the completion of endorsement requirements by the educator.

R. "Teacher Education Accreditation Council (TEAC)" is a nationally recognized organization which provides accreditation of professional teacher education programs in institutions offering baccalaureate and graduate degrees for the preparation of K-12 teachers.

S. "USOE" means the Utah State Office of Education.

R277-503-2. Authority and Purpose.

A. This rule is authorized by Article X, Section 3 of the Utah Constitution, which places general control and supervision of the public schools under the Board, Section 53A-1-402(1)(a) which directs the Board to establish rules and minimum standards for the qualification and licensing of educators and ancillary personnel who provide direct student services, and Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities.

B. The purpose of this rule is to provide minimum eligibility requirements for applicants for teacher licenses and to provide explanation and criteria of various teacher licensing routes. The rule also provides criteria and procedures for licensed teachers to earn endorsements and the requirement for all applicants for licenses to have and pass criminal background checks.

R277-503-3. USOE Licensing Eligibility.

A. Traditional college/university license - A license applicant shall have completed an

approved college/university teacher preparation program, been recommended for licensing, and shall have satisfied all other requirements for educator licensing required by law; or

B. Alternative Licensing Route

(1) A license applicant shall have a bachelors degree or higher from an accredited higher education institution in an area related to the position he seeks; and

(2) A license applicant shall have skills, talents or abilities, as evaluated by the employing entity, making the applicant appropriate for a licensed teaching position and eligible to participate in an ARL program.

(3) While beginning an alternative licensing program, an applicant shall be approved for employment under a letter of authorization for a maximum of one school year and may be employed under an ARL license for an additional two years. An ARL program may not exceed three school years. ARL candidates who receive ARL licensure status may be designated highly qualified under R277-520-1G.

C. All license applicants seeking a Level 1 Utah educator license or an area of concentration or an endorsement in an NCLB core academic subject area after March 3, 2007 shall submit passing score(s) on a rigorous Board-designated content test, where tests are available, prior to the issuance of a renewable license or endorsement.

(1) Early childhood (K-3) and elementary majors (1-8) are required to submit a passing score from a rigorous Board-designated content test.

(2) Secondary teachers are required to submit passing scores on a rigorous Board-designated content test(s), where test(s) are available, for each endorsement NCLB core academic area to be posted on the license.

(3) An applicant shall submit electronic or original documentation of USOE-designated passing score(s).

D. Any educator seeking a Utah Level 1 license who submits a score below the final Utah state passing score on the test designated in R277-503-3C shall be issued a nonrenewable conditional Level 1 license. If the educator fails to submit a passing score on a rigorous Board-designated content test during the three-year duration of the conditional Level 1 license, the educator's license or endorsement shall lapse on the educator's renewal date.

E. The credentials and documentation of experience of applicants for Level 2 and 3 professional educator licenses shall be evaluated by the USOE to determine the appropriate license level.

R277-503-4. Licensing Routes.

Applicants who seek Utah licenses shall successfully complete accredited programs or legislatively mandated programs consistent with this rule.

A. Institution of higher education teacher preparation programs shall be:

(1) Nationally accredited by:

(a) NCATE; or

(b) TEAC; or

(2) Regionally accredited competency-based teacher preparation programs as provided under R277-503-1N.

B. USOE Alternative Routes to Licensure (ARL)

(1) To be eligible to begin the ARL program, an applicant for an elementary or early

childhood school position shall have a bachelors degree and at least 27 semester hours of applicable content courses distributed among elementary curriculum areas. Elementary curriculum areas are provided under R277-700-4. To proceed from temporary license status, an ARL applicant shall submit a score on the ETS Praxis II Elementary Education Content Knowledge Examination (0014) to be used as a diagnostic tool and as part of the development of a professional plan and the issuance of the ARL license.

(2) To be eligible to begin the ARL program, applicants for secondary school positions shall hold a degree major or major equivalent directly related to the assignment. To proceed from temporary license status an ARL license applicant shall submit a score on identified ETS Praxis II Applicable Content Knowledge test(s) where available to be used as a diagnostic tool and as part of the development of a professional plan and the issuance of the ARL license.

(3) Licensing by Agreement

(a) An individual employed by a school district shall satisfy the minimum requirements of R277-503-3 as a teacher with appropriate skills, training or ability for an identified licensed teaching position in the district.

(b) An applicant shall obtain an ARL application for licensing from the USOE or USOE web site.

(c) After evaluation of candidate transcript(s), and rigorous Board-designated content test score, the USOE ARL advisors and the candidate shall determine the specific content knowledge and pedagogical knowledge required of the license applicant to satisfy the requirements for licensing.

(d) The USOE ARL advisors may identify institution of higher education courses, district inservice classes, Board-approved training, or Board-approved competency tests to prepare or indicate content, content-specific, and developmentally-appropriate pedagogical knowledge required for licensing.

(e) An applicant who has been employed as a full-time instructional paraeducator may offer that experience in lieu of one or more pedagogy courses as follows:

(1) The applicant has had at least three years of paraeducator experience;

(2) The applicant's experience has been successful based on documentation from the school/school district; and

(3) The USOE has approved the applicant's experience in lieu of pedagogy course(s).

(f) The employing school district shall assign a trained mentor to work with the applicant for licensing by agreement.

(g) The school district shall supervise and assess the license applicant's classroom performance during a minimum one school year full-time employment experience. The district may request assistance from a institution of higher education or the USOE in the monitoring and assessment.

(h) The school district shall assess the license applicant's disposition as a teacher following a minimum one school year full-time teaching experience. The district may request assistance in this assessment; and

(i) The USOE ARL advisors shall annually review and evaluate the license applicant following training, assessments or course work, and the full-time teaching experience and evaluation by the school district.

(j) Consistent with evidence and documentation received, the USOE ARL advisor may

recommend the license applicant to the Board for a Level 1 educator license.

(4) USOE Licensing by Competency

(a) A school district employs an individual as a teacher with appropriate skills, training or ability for an identified licensed teaching position in the district who satisfies the minimum requirements of R277-503-3.

(b) An employing school district, in consultation with the applicant and the USOE, shall identify Board-approved content knowledge and pedagogical knowledge examinations. The applicant shall pass designated examinations demonstrating the applicant's adequate preparation and readiness for licensing.

(c) The employing school district shall assign a trained mentor to work with the applicant for licensing by competency.

(d) The school district shall monitor and assess the license applicant's classroom performance during a minimum one-year full-time teaching experience.

(e) The school district shall assess the license applicant's disposition for teaching following a minimum one-year full-time teaching experience.

(f) The school district may request assistance in the monitoring or assessment of a license applicant's classroom performance or disposition for teaching.

(g) Following the one-year training period, the school district and USOE shall verify all aspects of preparation (content knowledge, pedagogical knowledge, classroom performance skills, and disposition for teaching) to the USOE.

(h) If all evidence/documentation is complete, the USOE shall recommend the applicant for a Level 1 educator license.

(5) USOE ARL candidates under R277-503-4B(3) and (4) may teach under a letter of authorization for a maximum of one year. The letter of authorization shall expire after the first year on June 30 when the ARL candidate submits documentation of progress in the program, and the candidate shall be issued an ARL license.

(6) The ARL license may be extended annually for two subsequent school years with documentation of progress in the ARL program.

(7) Documentation shall include, specifically, a copy of the supervisor's successful end-of-year evaluation, copies of transcripts and test results or both showing completion of required coursework, verification of working with a trained mentor, and satisfaction of the full-time full year experience.

C. School district/charter school specific competency-based licenses:

(1) A local board/charter school board may apply to the Board for a school district/charter school specific license to fill a position in the school district/charter school. The application shall demonstrate that other licensing routes for the applicant are untenable or unreasonable.

(2) The employing school district/charter school shall request a school district/charter school specific license no later than 60 days after the date of the individual's first day of employment.

(3) The application for the school district/charter school specific license from the local board/charter school board for an individual to teach one or more core academic subjects shall provide documentation of:

(a) the individual's bachelors degree; and

(b) for a K-6 grade teacher, the satisfactory results of the rigorous state test including subject knowledge and teaching skills in the required core academic subjects under Section 53A-6-104.5(3)(ii) as approved by the Board; or

(c) for the teacher in grades 7-12, demonstration of a high level of competency in each of the core academic subjects in which the teacher teaches by completion of an academic major, a graduate degree, course work equivalent to an undergraduate academic major, advanced certification or credentialing, or results or scores of a rigorous state core academic subject test, similar to the test required under R277-503-3E, in each of the core academic subjects in which the teacher teaches.

(4) The application for the school district/charter school specific license from the local board/charter school board for non-core teachers in grades K-12 shall provide documentation of:

(a) a bachelors degree, associates degree or skill certification; and

(b) skills, talents or abilities specific to the teaching assignment, as determined by the local board/charter school board.

(5) Following receipt of documentation and consistent with Section 53A-6-104.5(2), the USOE shall approve a district/charter school specific competency-based license.

(6) If an individual with a district/charter school specific competency-based license leaves the district before the end of the employment period, the district shall notify the USOE Licensing Section regarding the end-of-employment date.

(7) The individual's district/charter school specific competency-based license shall be valid only in the district/charter school that originally requested the letter of authorization and for the individual originally employed under the letter of authorization or district/charter school specific competency-based license.

(8) The written copy of the district/charter school specific competency-based license shall prominently state the name of the school district/charter school followed by DISTRICT/CHARTER SCHOOL SPECIFIC COMPETENCY-BASED LICENSE.

(9) A school district/charter school may change the assignment of a school district/charter school specific competency-based license holder but notice to USOE shall be required and additional competency-based documentation may be required for the teacher to remain qualified or highly qualified.

(10) School district/charter school specific competency-based license holders are at-will employees consistent with Section 53A-8-106(5).

(11) If an individual holds a Utah license, the application shall be subject to additional USOE review based upon the following criteria:

(a) license level;

(b) current license status;

(c) area of concentration and endorsements on Utah license; and

(d) circumstances justifying the school district/charter school specific license.

(12) If the application is not approved based on a USOE review of the criteria provided in R277-503-4C(11), appropriate licensure procedures shall be recommended to the requesting district/charter school. The applicant may be required to renew an expired license, apply for an endorsement, pass appropriate Board approved tests consistent with R277-503-3C, obtain an additional area of concentration, apply to Alternative Route to Licensure, or satisfy other

reasonable standards.

R277-503-4. Licensing Routes.

Applicants who seek Utah licenses shall successfully complete accredited programs or legislatively mandated programs consistent with this rule.

A. Institution of higher education teacher preparation programs shall be:

(1) Nationally accredited by:

(a) NCATE; or

(b) TEAC; or

(2) Regionally accredited competency-based teacher preparation programs as provided under R277-503-1N.

B. USOE Alternative Routes to Licensure (ARL)

(1) To be eligible to begin the ARL program, an applicant for an elementary or early childhood school position shall have a bachelors degree and at least 27 semester hours of applicable content courses distributed among elementary curriculum areas. Elementary curriculum areas are provided under R277-700-4. To proceed from temporary license status, an ARL applicant shall submit a score on the ETS Praxis II Elementary Education Content Knowledge Examination (0014) to be used as a diagnostic tool and as part of the development of a professional plan and the issuance of the ARL license.

(2) To be eligible to begin the ARL program, applicants for secondary school positions shall hold a degree major or major equivalent directly related to the assignment. To proceed from temporary license status an ARL license applicant shall submit a score on identified ETS Praxis II Applicable Content Knowledge test(s) where available to be used as a diagnostic tool and as part of the development of a professional plan and the issuance of the ARL license.

(3) Licensing by Agreement

(a) An individual employed by a school district shall satisfy the minimum requirements of R277-503-3 as a teacher with appropriate skills, training or ability for an identified licensed teaching position in the district.

(b) An applicant shall obtain an ARL application for licensing from the USOE or USOE web site.

(c) After evaluation of candidate transcript(s), and rigorous Board-designated content test score, the USOE ARL advisors and the candidate shall determine the specific content knowledge and pedagogical knowledge required of the license applicant to satisfy the requirements for licensing.

(d) The USOE ARL advisors may identify institution of higher education courses, district inservice classes, Board-approved training, or Board-approved competency tests to prepare or indicate content, content-specific, and developmentally-appropriate pedagogical knowledge required for licensing.

(e) The employing school district shall assign a trained mentor to work with the applicant for licensing by agreement.

(f) The school district shall supervise and assess the license applicant's classroom performance during a minimum one school year full-time employment experience. The district may request assistance from a institution of higher education or the USOE in the monitoring and assessment.

(g) The school district shall assess the license applicant's disposition as a teacher following a minimum one school year full-time teaching experience. The district may request assistance in this assessment; and

(h) The USOE ARL advisors shall annually review and evaluate the license applicant following training, assessments or course work, and the full-time teaching experience and evaluation by the school district.

(i) Consistent with evidence and documentation received, the USOE ARL advisor may recommend the license applicant to the Board for a Level 1 educator license.

(4) USOE Licensing by Competency

(a) A school district employs an individual as a teacher with appropriate skills, training or ability for an identified licensed teaching position in the district who satisfies the minimum requirements of R277-503-3.

(b) An employing school district, in consultation with the applicant and the USOE, shall identify Board-approved content knowledge and pedagogical knowledge examinations. The applicant shall pass designated examinations demonstrating the applicant's adequate preparation and readiness for licensing.

(c) The employing school district shall assign a trained mentor to work with the applicant for licensing by competency.

(d) The school district shall monitor and assess the license applicant's classroom performance during a minimum one-year full-time teaching experience.

(e) The school district shall assess the license applicant's disposition for teaching following a minimum one-year full-time teaching experience.

(f) The school district may request assistance in the monitoring or assessment of a license applicant's classroom performance or disposition for teaching.

(g) Following the one-year training period, the school district and USOE shall verify all aspects of preparation (content knowledge, pedagogical knowledge, classroom performance skills, and disposition for teaching) to the USOE.

(h) If all evidence/documentation is complete, the USOE shall recommend the applicant for a Level 1 educator license.

(5) USOE ARL candidates under R277-503-4B(3) and (4) may teach under a letter of authorization for a maximum of one year. The letter of authorization shall expire after the first year on June 30 when the ARL candidate submits documentation of progress in the program, and the candidate shall be issued an ARL license.

(6) The ARL license may be extended annually for two subsequent school years with documentation of progress in the ARL program.

(7) Documentation shall include, specifically, a copy of the supervisor's successful end-of-year evaluation, copies of transcripts and test results or both showing completion of required coursework, verification of working with a trained mentor, and satisfaction of the full-time full year experience.

C. School district/charter school specific competency-based licenses:

(1) A local board/charter school board may apply to the Board for a letter of authorization to fill a position in the district.

(2) The employing school district/charter school shall request a letter of authorization no later than 60 days after the date of the individual's first day of employment.

(3) The application for the letter of authorization from the local board/charter school board for an individual to teach one or more core academic subjects shall provide documentation of:

(a) the individual's bachelors degree; and

(b) for a K-6 grade teacher, the satisfactory results of the rigorous state test including subject knowledge and teaching skills in the required core academic subjects under Section 53A-6-104.5(3)(ii) as approved by the Board; or

(c) for the teacher in grades 7-12, demonstration of a high level of competency in each of the core academic subjects in which the teacher teaches by completion of an academic major, a graduate degree, course work equivalent to an undergraduate academic major, advanced certification or credentialing, or results or scores of a rigorous state core academic subject test, similar to the test required under R277-503-3E, in each of the core academic subjects in which the teacher teaches.

(4) The application for the letter of authorization from the local board/charter school board for non-core teachers in grades K-12 shall provide documentation of:

(a) a bachelors degree, associates degree or skill certification; and

(b) skills, talents or abilities specific to the teaching assignment, as determined by the local board/charter school board.

(5) Following receipt of documentation and consistent with Section 53A-6-104.5(2), the USOE shall approve a district/charter school specific competency-based license.

(6) If an individual with a district/charter school specific competency-based license leaves the district before the end of the employment period, the district shall notify the USOE Licensing Section regarding the end-of-employment date.

(7) The individual's district/charter school specific competency-based license shall be valid only in the district/charter school that originally requested the letter of authorization and for the individual originally employed under the letter of authorization or district/charter school specific competency-based license.

(8) The written copy of the district/charter school specific competency-based license shall prominently state the name of the school district/charter school followed by DISTRICT/CHARTER SCHOOL SPECIFIC COMPETENCY-BASED LICENSE.

(9) A school district/charter school may change the assignment of a school district/charter school specific competency-based license holder but notice to USOE shall be required and additional competency-based documentation may be required for the teacher to remain qualified or highly qualified.

(10) School district/charter school specific competency-based license holders are at-will employees consistent with Section 53A-8-106(5).

R277-503-5. Endorsement Routes.

A. An applicant shall successfully complete one of the following for endorsement:

(1) a USOE-approved institution of higher education educator preparation program with endorsement(s); or

(2) assessment, approval and recommendation by a designated and subject-appropriate USOE specialist under a SAEP. The USOE shall be responsible for final recommendation and approval; or

(3) a USOE-approved Utah institution of higher education or Utah school district-sponsored endorsement program which includes content knowledge and content-specific pedagogical knowledge approved by the USOE. The university or school district shall be responsible for final review and recommendation. The USOE shall be responsible for final approval.

B. A restricted endorsement shall be available and limited to teachers in necessarily existent small schools as determined under R277-445, and teachers in youth in custody programs. Teacher qualifications shall include at least nine semester hours of USOE-approved university-level courses in each course taught by the teacher holding a restricted endorsement.

C. All provisions that directly affect the health and safety of students required for endorsements, such as prerequisites for drivers education teachers or coaches, shall apply to applicants seeking endorsements through all routes under this rule.

D. Prior to an individual taking courses, exams or seeking a recommendation in the ARL licensing program, the individual shall have school district/charter school and USOE authorization.

R277-503-6. Additional Provisions.

A. All programs or assessments used in applicant preparation shall meet national professional educator standards such as those developed by NCATE, TEAC or competency-based regional accreditation.

B. All educators licensed under this rule shall also:

(1) complete the background check required under Section 53A-6-401;

(2) satisfy the professional development requirements of R277-502; and

(3) be subject to all Utah licensing requirements and professional standards.

C. An applicant may satisfy the student teaching/clinical experience requirement for licensing through successful completion of either the licensing by agreement or by competency route.

KEY: teachers, alternative licensing
Date of Enactment or Last Substantive Amendment: June 23, 2009
Notice of Continuation March 29, 2007
Authorizing, and Implemented or Interpreted Law: Art X Sec 3; 53A-1-402(1)(a); 53A-1-401(3)

APPENDIX 20

53A-6-802. Paraeducator to Teacher Scholarship Program.

(1) The Paraeducator to Teacher Scholarship Program is created to award scholarships to paraeducators for education and training to become licensed teachers.

(2) The State Board of Education shall use money appropriated for the Paraeducator to Teacher Scholarship Program to award scholarships of up to $5,000 to paraeducators employed by school districts and charter schools who are pursuing an associate's degree or bachelor's degree program to become a licensed teacher.

(3) A paraeducator is eligible to receive a scholarship if:

(a) the paraeducator is employed by a school district or charter school;

(b) is admitted to, or has made an application to, an associate's degree program or bachelor's degree program that will prepare the paraeducator for teacher licensure; and

(c) the principal at the school where the paraeducator is employed has nominated the paraeducator for a scholarship.

(4) (a) The State Board of Education shall establish a committee to select scholarship recipients from nominations submitted by school principals.

(b) The committee shall include representatives of the State Board of Education, State Board of Regents, and the general public, excluding school district and charter school employees.

(c) (i) (A) A committee member who is not a government employee may not receive compensation or benefits for the member's service, but may receive per diem and expenses incurred in the performance of the member's official duties at the rates established by the Division of Finance under Sections 63A-3-106 and 63A-3-107.

(B) A member may decline to receive per diem and expenses for the member's service.

(ii) (A) A committee member who is a government employee member who does not receive salary, per diem, or expenses from the agency the member represents for the member's service may receive per diem and expenses incurred in the performance of the member's official duties at the rates established by the Division of Finance under Sections 63A-3-106 and 63A-3-107.

(B) A government employee member may decline to receive per diem and expenses for the member's service.

(d) The committee shall select scholarship recipients based on the following criteria:

(i) test scores, grades, or other evidence demonstrating the applicant's ability to successfully complete a teacher education program; and

(ii) the applicant's record of success as a paraeducator.

(5) The maximum scholarship amount is $5,000.

(6) Scholarship monies may only be used to pay for tuition costs:

(a) of:

(i) an associate's degree program that fulfills credit requirements for the first two years of a bachelor's degree program leading to teacher licensure; or

(ii) the first two years of a bachelor's degree program leading to teacher licensure; and

(b) at a higher education institution:

(i) located in Utah; and

(ii) accredited by the Northwest Commission on Colleges and Universities.

(7) A scholarship recipient must be continuously employed as a paraeducator by a school district or charter school while pursuing a degree using scholarship monies.

(8) The State Board of Education shall make rules in accordance with this section and Title 63G, Chapter 3, Utah Administrative Rulemaking Act, to administer the Paraeducator to Teacher Scholarship Program, including rules establishing:

(a) scholarship application procedures;

(b) the number of, and qualifications for, committee members who select scholarship recipients; and

(c) procedures for distributing scholarship monies.

Appendix 21

R277-502-6. Returning Educator Relicensure.

A. A previously licensed educator with an expired license may renew an expired license upon satisfaction of the following:

(1) Completion of criminal background check including review of any criminal offenses and approval by the Utah Professional Practices Advisory Commission;

(2) Employment by a school district/charter school;

(3) A professional development plan developed jointly by the school principal or charter school director and the returning educator that considers the following:

(a) previous successful public school teaching experience;

(b) formal educational preparation;

(c) period of time between last public teaching experience and the present;

(d) school goals for student achievement within the employing school and the educator's role in accomplishing those goals;

(e) returning educator's professional abilities, as determined by a formal discussion and observation process completed within the first 30 days of employment; and

(f) completion of additional necessary professional development for the educator, as determined jointly by the principal/school and educator.

(4) Filing of the professional development plan within 30 days of hire;

(5) Successful completion of required Board-approved exams for licensure;

(6) Satisfactory experience as determined by the school district/charter school with a trained mentor; and

(7) Submission to the USOE of the completed and signed Return to Original License Level Application, available on the USOE Educator Quality and Licensing website.

B. Returning educators who previously held a Level 2 or Level 3 license shall be issued a Level 1 license during the first year of employment. Upon completion of the requirements listed in R277-502-6A and a satisfactory school district/charter school evaluation, if available, the employing LEA may recommend reinstatement of licensure at a Level 2 or 3.

C. Returning educators who taught less than three consecutive years in a public or accredited private school shall complete the Early Years Enhancement requirements before moving from Level 1 to Level 2 licensure.

Appendix 22

53A-6-110. Administrative/supervisory letters of authorization.

(1) A local school board may request, and the State Board of Education may grant, a letter of authorization permitting a person with outstanding professional qualifications to serve in any position that requires a person to hold an administrative/supervisory license or certificate, including principal, assistant principal, associate principal, vice principal, assistant superintendent, administrative assistant, director, specialist, or other district position.

(2) The State Board of Education may grant a letter of authorization permitting a person with outstanding professional qualifications to serve in any position at the State Office of Education that requires a person to hold an administrative/supervisory license or certificate.

Enacted by Chapter 315, 2003 General Session

Appendix 23

R277-505-5. District-Specific and Charter School-Specific Administrator Standards.

A. A local school board may request a district-specific educator license and Administrative license area of concentration permitting a person with outstanding professional qualifications to serve in a position for which that license or area of concentration is required, including all areas listed in R277-505-4.

B. In order to receive an educator license in a district-specific Administrative license area of concentration, a district shall make a request using a USOE-approved form.

C. The candidate shall:

(1) hold a Bachelors degree from an accredited institution of higher education.

(2) have a record of documented, demonstrated success in a managerial role.

(3) take a USOE-approved school leadership test which shall be used to inform and guide continuing professional development; and

(4) complete a one-year supervised administrative experience under the supervision of a licensed and trained administrative mentor assigned by the employing school district or charter school. The candidate shall be issued a letter of authorization by the USOE during the year of supervision.

D. At the end of the supervised year, the employing district or charter school shall request that a district or charter school-specific Administrative license area of concentration be awarded by the USOE.

E. The district-specific Administrative license area of concentration shall be valid only in the employing district/charter school for the duration of the individual's employment.

F. The completed Administrative license area of concentration shall qualify the school district or charter school to receive professional staff costs.

G. The USOE may receive and investigate, or both, complaints about district-specific or charter school-specific administrators. Investigations shall be conducted by the Utah Professional Practices Advisory Commission and action may be taken consistent with Section 53A-6-405, Denial of license, and Section 53A-6-501, Disciplinary action against educator.

H. Individuals who receive district-specific or charter school-specific administrative license areas of concentration shall be subject to professional development requirements established by local boards or charter schools.

Appendix 24

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD ONE Creating and maintaining a positive classroom environment that promotes student learning	PERFORMANCE LEVEL: Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
1a. Create a physical environment that supports a culture for learning and engages all students.	• Addresses obvious safety and accessibility issues. • Has a static classroom arrangement.	• Provides classroom environment that is safe and accessible for most students. • Makes some adjustments to room arrangement to promote learning.	• Maintains a classroom environment that is safe and accessible for all students. • Arranges and adjusts the classroom to promote individual and group learning.	• Promotes a safe and accessible student-centered classroom. • Encourages students to promote individual learning through classroom arrangement.	Classroom Observations Records on Student Behavior Periodic Questionnaires to Students Comments from Colleagues
1b. Implement classroom procedures to enhance student learning.	• Develops a daily schedule, and establishes classroom procedures and routines.	• Encourages students to internalize classroom procedures and routines.	• Involves students in the development of classroom procedures and routines.	• Modifies procedures and routines to support students in becoming self-directed learners.	
1c. Manage student behavior.	• Articulates clear expectations for student behavior. • Responds inconsistently to student behavior.	• Encourages student behavior that aligns with expectations. • Intervenes when student behavior does not meet agreed-upon classroom standards.	• Establishes and consistently maintains expectations for behavior that reflect student developmental and personal needs. • Responds to student behavior to encourage self-reflection, adjustment, and positive behavior.	• Supports students as they establish expectations and develop responsibility for their own behavior. • Facilitates the classroom as students continue to monitor their own behavior.	
1d. Establish a civic classroom based on caring, responsibility, and respect for diversity.	• Builds caring, friendly rapport with most students. • Understands the need for student responsibility. • Recognizes some incidents of unfairness and disrespect.	• Begins building a caring classroom community. • Uses some strategies to develop student responsibility. • Models respectful relationships.	• Promotes a caring and friendly student community. • Establishes a learning community based on student responsibility. • Responds equitably to incidents of unfairness and disrespect.	• Fosters a caring classroom where students create a friendly learning community. • Models and promotes a student-driven, responsible learning community, socially and academically. • Empowers students to maintain a respectful learning community.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD ONE Creating and maintaining a positive classroom environment that promotes student learning	PERFORMANCE LEVEL Teacher-Centered ◄——————————► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
1e. Use instructional time effectively to enhance student learning.	• Uses pacing that reflects too much or too little time for learning activities, classroom business, and transitions. • Begins to develop smoother transitions.	• Applies strategies to pace and adjust instruction. • Utilizes transitions as a routine to increase instructional time.	• Paces instruction to review and reinforce student learning to ensure optimal student engagement. • Uses transitions to support engagement of all students.	• Presents, adjusts, and facilitates daily activities so all students have time for learning, are continually engaged, and have opportunities for reflection and assessment. • Integrates classroom procedures and smooth transitions to enhance student learning.	Classroom Observations Procedures Chart IEP or SEOP Records Records on Student Behavior

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD TWO Planning curriculum and designing instruction to enhance student learning	PERFORMANCE LEVEL Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
2a. Demonstrate knowledge of content.	• Demonstrates basic content knowledge and identifies key concepts.	• Communicates meaningful content knowledge to students.	• Incorporates extensive knowledge to expand student understanding, using multiple perspectives.	• Presents comprehensive content knowledge and understanding of key concepts, focusing on multiple perspectives within and across subject areas.	Classroom Observations Instructional Artifact Sheet Instructional Plan for a Unit or Single Lesson Examples of student work
2b. Demonstrate knowledge of age-appropriate pedagogy.	• Demonstrates basic understanding of developmental instructional needs.	• Plans for adjustment of instruction-based student developmental skills, backgrounds, and prior knowledge.	• Incorporates knowledge of student development into planning daily instruction.	• Uses a variety of age-appropriate, research-based teaching strategies in planning curriculum.	
2c. Design and articulate instruction aligned with Utah State Core Curriculum standards.	• Uses Utah State Core Curriculum standards and district standards to plan instruction.	• Aligns instructional goals with Utah State Core Curriculum standards and district standards, and communicates these goals to students.	• Integrates the Utah State Core Curriculum standards and district standards into the curriculum, focusing on student learning outcomes.	• Utilizes Utah State Core Curriculum standards in designing instruction that is highly relevant and reflects best teaching practices across the curriculum.	
2d. Select instructional goals based on student achievement data and knowledge of students.	• Uses basic assessment materials from district and state-provided teacher resources.	• Develops some strategies to use assessment tools to guide and monitor instructional goals.	• Uses a variety of assessment tools to guide and monitor instructional goals.	• Involves students in analysis of a wide variety of assessments to set relevant instructional goals and plan for student misconceptions.	
2e.Connect curriculum to student development and cultural background.	• Connects minimally to student development and cultural background.	• Adjusts lessons plans occasionally, recognizing individual student skills, backgrounds, and learning styles.	• Incorporates student backgrounds and learning styles in planning differentiated instruction.	• Integrates cultural backgrounds and learning styles to facilitate student involvement in planning instruction and assessment.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD TWO Planning curriculum and designing instruction to enhance student learning	PERFORMANCE LEVEL: Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
2f. Use appropriate resources to facilitate individual student learning.	• Recognizes the need to use additional resources such as media and technology.	• Develops skills to apply resources, media, and technology in planning instruction.	• Selects, creates, and uses a range of relevant resources to enrich learning.	• Facilitates student learning in using a wide range of media, technologies, and student-developed resources.	Classroom Observations Instructional Artifact Sheet Instructional Plan for a Unit or Single Lesson Examples of student work
2g. Integrate curricula across multiple content areas.	• Uses minimal integration with other content areas.	• Develops connections with other content areas.	• Coordinates standards within and across the curriculum.	• Facilitates student reflection and curriculum integration within and across the content areas.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD THREE Engaging and supporting all students in learning	PERFORMANCE LEVEL Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
3a. Communicate instruction clearly and accurately.	• Gives directions and establishes procedures for instruction.	• Gives directions and establishes procedures with some clarification for instruction.	• Gives clear, detailed directions and establishes effective procedures for instruction, checking for student understanding.	• Gives explicit directions and establishes detailed procedures for instruction, anticipating student misunderstanding.	Classroom Observation Instructional Artifact Sheet Videotape of class Examples of student work Instructional Plan for a Unit or Single Lesson
3b. Use research-based instructional strategies to enhance student learning of content.	• Uses provided instructional strategies to deliver learning.	• Includes research-based instructional strategies for learning.	• Engages students in research-based instructional strategies and best practices that are appropriate to enhance learning.	• Involves students in research-based instructional strategies that engage students in collaboration and critical thinking to expand content understanding.	
3c. Accommodate individual students' cultural, physical, emotional, social, and intellectual growth.	• Recognizes individual differences in students.	• Accommodates differences in student needs for instruction.	• Incorporates student differences into instruction.	• Involves students in incorporating and building upon individual student strengths and differences.	
3d. Reflect on teaching and learning.	• Recognizes effective instruction.	• Uses reflection to recognize the effectiveness of instruction, and makes suggestions for improvement.	• Uses reflection to accurately assess and adjust instruction to improve student learning.	• Makes a thoughtful and accurate assessment of instruction through reflection, and draws on an extensive repertoire of skills to promote student success.	
3e. Differentiate instruction to meet individual student learning needs.	• Follows lesson plans strictly, and is aware of student differences.	• Adapts lessons to further engage students.	• Adjusts lessons based on student needs, questions, and interests using various strategies.	• Uses an extensive repertoire of strategies to meet individual student needs.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD THREE Engaging and supporting all students in learning	PERFORMANCE LEVEL Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
3f. Incorporate understanding of the diversity of the school community into student learning.	• Acknowledges diversity of the school community.	• Connects the diversity of the school community to student learning.	• Integrates the diversity of the school community into student learning.	• Celebrates the diversity of the school community as an asset for student-driven learning.	Classroom Observation Instructional Artifact Sheet Videotape of class Examples of student work Instructional Plan for a Unit or Single Lesson
3g. Integrate the Utah Life Skills document into student learning.	• Has knowledge of the Utah Life Skills document.	• Presents ideas from the Utah Life Skills document in isolation.	• Integrates the Utah Life Skills document into student learning.	• Assists students in acquiring life skills.	
3h. Engage families as partners in student learning.	• Makes attempts to engage families in student learning.	• Involves families in student learning.	• Promotes and encourages family involvement in student learning.	• Utilizes student leadership in connecting families to student learning.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD FOUR Assessing and evaluating student learning	PERFOMANCE LEVEL Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
4a. Assess learning goals based on Utah State Core Curriculum standards.	• Demonstrates limited connections with the Utah State Core Curriculum standards when assessing student learning.	• Begins to develop and utilize assessments that are consistent with Utah State Core Curriculum standards and student learning.	• Demonstrates Utah State Core Curriculum standards on a consistent basis when assessing students.	• Aligns assessments based on Utah State Core Curriculum standards with instructional goals both in content and process.	Examples of student work Analysis of Student work Classroom Observation Achievement Data Assessment Plan for a Single Lesson or Unit Videotape of classroom
4b. Use multiple sources of formal and informal assessment to verify student learning.	• Uses limited formal and informal assessments to evaluate student learning.	• Implements regular use of formal and informal assessments that lack variety.	• Employs a variety of formal and informal assessments, and utilizes scoring rubrics to assist students in improving their performances.	• Embeds a wide range of assessments in instruction, including student self-assessment, and evaluates assessment tools for bias and sensitivity.	
4c. Maintain accurate records of student progress.	• Maintains information on student progress in a limited and marginally effective way.	• Maintains information on student progress in an effective manner, with some inconsistencies.	• Maintains information on student progress in an effective and accurate manner.	• Maintains and effectively uses accurate information that includes student input.	
4d. Use student achievement data to inform instruction.	• Uses limited student achievement data to inform instruction.	• Develops the knowledge and skill of using student achievement data to inform instruction.	• Reflects on student achievement data regularly to inform instruction and to diagnose learning needs and remedial strategies.	• Disaggregates student achievement data and student work to inform instruction to meet the needs of all students.	
4e. Communicate feedback on progress to students and parents/guardians.	• Provides accurate but general feedback to students. • Provides minimal feedback on student progress to parents/guardians.	• Gives students accurate feedback and specific examples of their strengths and weaknesses. • Communicates with parents/guardians on student progress frequently and consistently.	• Provides appropriate and accurate information to students in a relevant and timely manner from a variety of sources. • Communicates regularly with parents/guardians, and provides specific examples of student strengths and weaknesses.	• Collaborates with students to develop their own achievement plans based on multiple sources of feedback. • Communicates regularly with parents/guardian, and collaborates on developing improvement plans based on student achievement.	

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD FIVE Demonstrating professionalism to support student learning	PERFOMANCE LEVEL: Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
5a. Understand and act consistently with education laws.	ALL TEACHERS MUST MEET STANDARD. Utah Administrative Rule 686-103. Professional Practices and Conduct for Utah Educators • Understands and adheres to federal and state laws, State Board of Education Administrative rules, local board policies, and supervisory directives. • Exercises good judgment and prudence in the educator's personal life to avoid the impairment of the educator's professional effectiveness. • Respects the cultural values and standards of the school community.				Communication Log Professional Learning Records Reflective Journal/Portfolio Teacher Evaluations Community (Parent) Surveys Transcripts
5b. Demonstrate moral and ethical conduct as educators and role models for young people.	ALL TEACHERS MUST MEET STANDARD. Utah Administrative Rule 686-103. Professional Practices and Conduct for Utah Educators, including but not limited to the following: –Does not participate in criminal activity. –Does not participate in inappropriate sexual conduct. –Does not use school/district computers inconsistently with state law or district/school policies. –Follows appropriate instruction and protocols for standardized testing. –Does not harass students or colleagues. –Maintains student confidentiality. –Actively includes students in education programs without regard to race, color, creed, sex, national origin, marital status, political or religious beliefs, physical or mental conditions, family, social or cultural background, or sexual orientation. –Supervises students appropriately and consistently at school or school events according to district/school policy. –Maintains appropriate student-teacher relationships and boundaries with all students at all times, including not participating in personal or intimate relationships with students. –Maintains school-related financial records and accounts with accuracy and integrity, and consistently with school/district policy. –Does not exploit professional position for personal or financial gain.				
5c. Maintain professional demeanor and appearance.	• Follows school/district policy or supervisory directives on appropriate dress. • Models professional appearance appropriate to the educational activity. • Demonstrates positive behavior and good will within the school community.				

UTAH PROFESSIONAL TEACHER STANDARDS
CONTINUUM OF DEVELOPMENT

STANDARD FIVE Demonstrating professionalism to support student learning	PERFOMANCE LEVEL: Teacher-Centered ◄——► Student-Centered				LINES OF EVIDENCE (Portfolio)
	LEVEL 1		**LEVEL 2**		
	BASIC	EMERGING	PROFICIENT	MASTER	
5d. Establish professional goals, reflect on teaching, and pursue opportunities to grow professionally.	• Has few professional goals and reflects only on a few elements of teaching. • Attends required professional development activities.	• Uses teacher standards and reflection to develop a professional plan. • Accepts opportunities to grow professionally.	• Uses teacher standards and reflection to develop a professional vision. • Seeks opportunities for professional learning and growth.	• Communicates a professional vision, engaging in action research, problem solving, and reflection. • Collaborates with others in professional development for the purpose of improving student learning	Communication Log Professional Learning Records Reflective Journal/Portfolio Teacher Evaluations Community (Parent) Surveys Transcripts
5e. Contribute to the educational community, and demonstrate professional leadership.	• Maintains cordial relationships with colleagues. • Participates in school/district assignments, events, and projects as required.	• Supports and cooperates with colleagues in fulfilling the duties that the school requires. • Volunteers to participate in school/district assignments, events, and projects.	• Supports and builds collaborative relationships with colleagues to improve student learning. • Actively engages in making a substantial contribution to school/district assignments.	• Engages in professional dialogue with colleagues to inform instruction, and takes initiative in shared leadership within the school community. • Assumes a leadership role in school/district assignments, including mentoring new educators	
5f. Act as an advocate for students, consistent with professional standards and with respect for parents and families.	• Develops an awareness of student needs. • Begins to speak on behalf of students.	• Incorporates strategies that serve student needs. • Speaks on behalf of students as needs arise.	• Works within the context of a particular team or department to ensure that all students receive opportunities to succeed. • Shows concern for needs of students, and seeks resources to meet these needs.	• Makes considerable effort to ensure that all students, particularly those traditionally underserved, are well served, and challenges unfair processes and negative attitudes. • Becomes a strong voice for the education of students in the community and the state, and initiates opportunities for student advocacy.	

Utah Professional Teacher Standards

Promoting student learning and enhancing professional practice are the focuses of Utah Professional Teacher Standards. The standards define high quality teaching as the core of a successful education for all students. (Utah Professional Teacher Standards are based on INTASC standards, *Enhancing Professional Practice: A Framework for Teaching* by Charlotte Danielson, and the California Standards for the Teaching Profession.)

1 Creating and maintaining a positive classroom environment that promotes student learning

A. Create a physical environment that supports a culture for learning and engages all students.

B. Implement classroom procedures to enhance student learning.

C. Manage student behavior.

D. Establish a civic classroom based on caring, responsibility, and respect for diversity.

E. Use instructional time effectively to enhance student learning.

2 Planning curriculum and designing instruction to enhance student learning

A. Demonstrate knowledge of content.

B. Demonstrate knowledge of age-appropriate pedagogy.

C. Design and articulate instruction aligned with Utah Core Curriculum standards.

D. Select instructional goals based on student achievement data and knowledge of students.

E. Connect curricula to student development and cultural background.

F. Use appropriate resources to facilitate individual student learning.

G. Integrate curricula across multiple content areas.

3 Engaging and supporting all students in learning

A. Communicate instruction clearly and accurately.

B. Use research-based instructional strategies to enhance student learning of content.

C. Accomodate individual students' cultural, physical, emotional, social, and intellectual growth.

D. Reflect on teaching and learning.

E. Differentiate instruction to meet individual student learning needs.

F. Incorporate understanding of the diversity of the school community into student learning.

G. Integrate the Utah Life Skills document into student learning.

H. Engage families as partners in learning.

4 Assessing and evaluating student learning

A. Assess learning goals based on Utah Core Curriculum standards.

B. Use multiple sources of formal and informal assessment to verify student learning.

C. Maintain accurate records of student progress.

D. Use student achievement data to inform instruction.

E. Communicate feedback on learning progress to students and parents/guardians.

5 Demonstrating professionalism to support student learning

A. Understand and act consistently with education laws.

B. Demonstrate moral and ethical conduct as educators and role models for young people.

C. Maintain professional demeanor and appearance.

D. Establish professional goals, reflect on teaching, and pursue opportunities to grow professionally.

E. Contribute to the educational community and demonstrate professional leadership.

F. Act as an advocate for students, consistent with professional standards and with respect for parents and families.

Utah State Office of Education 250 East 500 South P.O. Box 144200 Salt Lake City, UT 84114-4200 Patti Harrington, Ed.D., State Superintendent of Public Instruction

vised 12/22/05

Appendix 25

ALTERNATIVE ROUTES TO LICENSURE

Statistical Report

January 1, 2008- December 31, 2008

(Three-year Comparison)

Applications taken Jan - Dec 2006	527	Applications taken Jan - Dec 2007	663	Applications taken Jan - Dec 2008	989
Applicants hired from Jan - Dec 2006	229	Applicants hired from Jan - Dec 2007	313	Applicants hired from Jan - Dec 2008	452
Participants completing ARL in 2006	108	Participants completing ARL in 2007	160	Participants completing ARL program in 2008	151

Current Year
(January-October 2009)

Applications taken January through October 2009	992
ARL hires from January through October 2009	237
ARL Participants licensed January through October 2009	200
ARL Participants dropped January through October 2009	97
Current # ARL Participants (hired & teaching)	639
Current passing rate for Praxis II Content Tests	95.5%

(On December 31, 2008)

ARL participants working toward an Elementary Education License	268
ARL participants working toward an Early Childhood License (kindergarten teachers)	110
ARL participants working toward a Secondary Education License with an endorsement	332
Total ARL Participants on December 31, 2008	710

(**On December 31, 2008**)

Endorsement areas for current ARL secondary education participants:	
Science	64
Mathematics	63
English	47
Visual Art	34*
History/Social Studies	24
Foreign Language	23
Spanish (12)	
ASL(4)	
French (3)	
Chinese (2)	
Latin (1)	
Japanese (1)	
Music	13*
Physical Education	17
Health/Health Sciences	16
Business	12
Computer Science/Information Technology	8
Dance	8*
Family and Consumer Science	7
Theatre	4*
Political Science/Government	3
Marketing	3
Multimedia	2
Financial Literacy	2
Psychology	1
Auto Service	1
Humanities	1
Library Media	1
Sociology	1
Natural Resource Management	1
Film-making	1
Drafting	1
(Some participants teach in more than one endorsement area) Total as of December 31, 2008	358

* Increase in number through Sorenson Fine Arts Grant

(**On December 31, 2008**)

ARL participants hired in	Charter Schools	193
	Granite District	97
	Jordan District	75
	Private/Parochial	72
	Davis District	56
	Alpine District	26
	Weber District	24
	Tooele District	22
	Ogden District	19
	Salt Lake City District	15
	Uintah District	14
	Provo District	13
	Nebo District	10
	Park City District	9
	Sevier District	7
	Cache District	6
	Murray District	5
	Iron District	5
	Wasatch District	5
	Duchesne District	5
	Carbon District	4
	Box Elder District	4
	Logan District	4
	San Juan District	4
	South Sanpete District	3
	North Sanpete District	3
	Grand District	3
	Daggett District	2
	Beaver District	1
	Morgan District	1
	Kanab District	1
	Kane District	1
	Washington	1
	Total Participants as of December 31, 2008	710

(On December 31, 2008)

Participants who left the program from January 1, 2008 through December 31, 2008		79
Reasons cited for leaving ARL	Career Change/Leaving Education	30
	Moved	15
	End of Contract	19
	Transferred to a university Graduate degree or licensing program	7
	Left because of family problems/issues	7
	School closed	1

(Summary Year 2008)

Total Number of participants in the program during all of 2008 (Current participants + those completing program in 2008)	861
Number of participants completing program and licensed from January 1 through December 31, 2008	151
Number of participants leaving ARL program from January 1 through December 31, 2008	79
Total Number of participants in ARL program on December 31, 2008	710

(Summary Previous Year: 2007)

Total Number of participants in the program during all of 2007	729
Number of participants completing program and licensed from January 1 through December 31, 2007	160
Number of participants leaving ARL program from January 1 through December 31, 2007	66
Total Number of participants in ARL program on December 31, 2007	503

(Demographics: On December 31, 2008)

Median Age of ARL Participants	38
Mean Age of ARL Participants	43
Youngest Participant	22
Oldest Participant	69
Male	219 (31%)
Female	491 (67%)

Appendix 26

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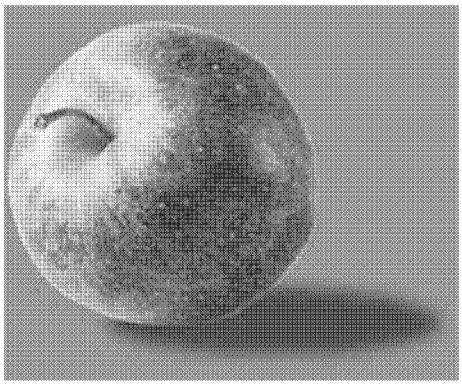
Educator Licensing Online

Utah State Office of Education

Additional Information

- Utah State Office of Education
- Educator Licensing
- Check your educator credential information



Welcome to the Utah State Office of Education's Online License System

This system allows new and existing educators to renew their Utah educator license, register or renew a background check, apply for a student teacher license, and pay license fees for a duplicate license, university recommendation, or district recommendation for a level 2. To begin, please select from the following options:

Background Check
Duplicate License
License Renewal
Expired License Renewal
Student Teacher/Intern License
University Recommendations
Upgrade to Level 2

Appendix 27

TEACHING FIELD INDEX OF CRITICALITY FOR UTAH T. H. BELL TEACHING INCENTIVE LOAN PROGRAM

By Mean Score

Criticality Scale: 4.0 - 4.9 Critical Shortage 2.0 - 2.9 Minimal Shortage 11/2009
3.0 - 3.9 Moderate Shortage 1.0 - 1.9 Oversupply

Teaching Level/Fields	Means	Points
Humanities	**1.8**	**00**
Political Science	**1.9**	**00**
Social Studies Composite	**2.0**	**05**
Health	**2.0**	**05**
Journalism	**2.1**	**05**
Physical Education	**2.1**	**05**
Psychology	**2.1**	**05**
Sociology	**2.1**	**05**
Recreation	**2.2**	**05**
History	**2.2**	**05**
Geography	**2.2**	**05**
Family Life	**2.2**	**05**
Communications	**2.3**	**05**
Elementary (1-8)	**2.3**	**05**
Administrative/Supervisory	2.3	05
Economics	2.3	05
Anthropology	2.3	05
Driver and Safety Education	2.4	05
Art	2.4	05
Coaching	2.4	05
Music	2.4	05
Dance	2.4	05
Speech	2.4	05
Elementary (K-6)	2.5	05
Drama	2.5	05
Foreign Language: Spanish	2.5	05
Photography	2.5	05
Data Processing	2.6	05
Mathematics: Level 2	2.6	05
English	2.6	05
Reading	2.6	05
Marketing Education	2.7	05
Health Science (ATE)	2.7	05
ESL	**2.7**	**05**
Foreign Language: German	**2.7**	**05**
Family & Consumer Science	**2.7**	**05**
Business	**2.7**	**05**

Teaching Level/Field	Means	Points
Foreign Language: Japanese	**2.8**	**05**
Computer Science	**2.8**	**05**
School Counselor	**2.8**	**05**
Zoology	**2.8**	**05**
Botany	**2.8**	**05**
Native American Studies	**2.8**	**05**
Agriculture	**2.9**	**05**
Library Media	**2.9**	**05**
School Social Worker	**2.9**	**05**
Foreign Language: Russian	**2.9**	**05**
Geology	**2.9**	**05**
Trade, Technical & Industrial Ed.	**2.9**	**05**
Foreign Language: Sign Lang.	**3.0**	**10**
Information Technology	**3.0**	**10**
Foreign Language: Latin	**3.0**	**10**
Foreign Language: French	**3.0**	**10**
Mathematics: Level 3	**3.0**	**10**
Early Childhood	**3.0**	**10**
Technology Education	**3.0**	**10**
Biology	**3.0**	**10**
Physical Science	**3.1**	**10**
Earth Science	**3.1**	**10**
Gifted and Talented	**3.1**	**10**
Integrated Science	**3.3**	**10**
Mathematics: Level 4	**3.3**	**10**
Chemistry	**3.3**	**10**
Audiology	**3.3**	**10**
Physics	**3.4**	**10**
Bilingual	**3.4**	**10**
Foreign Language: Chinese	**3.5**	**10**
Preschool Special Education	**3.6**	**10**
School Psychologist	**3.7**	**10**
Speech Pathology	**3.7**	**10**
Special Education-Hearing Impaired	**3.7**	**10**
Special Education-Mild/Moderate	**3.8**	**10**
Special Education-Severe	**3.9**	**10**
Special Education-Visually Impaired	**3.9**	**10**

Appendix 28

53A-1a-601. Job enhancements for mathematics, science, technology, and special education training.

(1) As used in this part, "special education teacher" includes occupational therapist.

(2) The Public Education Job Enhancement Program is established to attract, train, and retain highly qualified:

(a) secondary teachers with expertise in mathematics, physics, chemistry, physical science, learning technology, or information technology;

(b) special education teachers; and

(c) teachers in grades four through six with mathematics endorsements.

(3) The program shall provide for the following:

(a) application by a school district superintendent or the principal of a school on behalf of a qualified teacher;

(b) an award of up to $20,000 or a scholarship to cover the tuition costs for a master's degree, an endorsement, or graduate education in the areas identified in Subsection (2) to be given to selected public school teachers on a competitive basis:

(i) whose applications are approved under Subsection **53A-1a-602**(4); and

(ii) who teach in the state's public education system for four years in the areas identified in Subsection (2);

(c) (i) as to the cash awards under Subsection (3)(b), payment of the award in two installments, with an initial payment of up to $10,000 at the beginning of the term and up to $10,000 at the conclusion of the term;

(ii) repayment of a portion of the initial payment by the teacher if the teacher fails to complete two years of the four-year teaching term in the areas identified in Subsection (2) as provided by rule of the State Board of Education in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, unless waived for good cause by the Job Enhancement Committee created in Section **53A-1a-602**; and

(iii) nonpayment of the second installment if the teacher fails to complete the four-year teaching term; and

(d) (i) as to the scholarships awarded under Subsection (3)(b), provision for the providing institution to certify adequate performance in obtaining the master's degree, endorsement, or graduate education in order for the teacher to maintain the scholarship; and

(ii) repayment by the teacher of a prorated portion of the scholarship, if the teacher fails to complete the authorized classes or program or to teach in the state system of public education in the areas identified in Subsection (2) for four years after obtaining the master's degree, the endorsement, or graduate education.

(4) An individual teaching in the public schools under a letter of authorization may participate in the cash award program if:

(a) the individual has taught under the letter of authorization for at least one year in the areas referred to in Subsection (2); and

(b) the application made under Subsection (3)(a) is based in large part upon the individual receiving a superior evaluation as a classroom teacher.

(5) (a) The program may provide for the expenditure of up to $1,000,000 of available monies, if at least an equal amount of matching monies become available, to provide professional development training to superintendents, administrators, and principals in the effective use of technology in public schools.

Public Education Job Enhancement Program

Report to the Legislative Education Interim Committee August 19, 2009

Executive Summary

Review of the Public Education Job Enhancement Program

The Public Education Job Enhancement Program (PEJEP) was created in the 2001 General Session (amended 2005, 2007). The purpose of the program is to attract, train and retain highly qualified secondary teachers in mathematics, science, information technology, and special education by providing signing bonuses and opportunities for advanced degrees.

Types of Awards

Opportunity Awards are signing bonuses used in hiring new teachers in qualifying subject areas. Awards are limited to $10,000. Recipients must teach in the qualifying subject area four years.

Advancement Awards are scholarships for licensed teachers to obtain endorsements or advanced degrees in qualifying subject areas. The maximum award amount is $20,000. Recipients must teach in a qualifying subject four years following completion of the endorsement or advanced degree.

Excellence Awards were determined in 2001 for educators teaching in qualifying subject areas. A total of 365 awards were given totaling $1,753,300.00.

Program Funding

From 2001-2004 the PEJEP program was managed and data was maintained by the Governor's Office. During this four year period $10,500,000 was appropriated and distributed according to statutory regulations. In 2005 Governor Olene Walker moved the program to the Utah State Office of Education. The data below reflects the appropriations and expenditures from that point forward.

EXPENDITURE BY PROGRAM 2005 – 2008

FY	Appropriation	Advancement Awards	Opportunity Awards	Administration
2004	Carryover from Governor's Office $959,849			
2005	5,000,000	2,571,064	636,221	60,000
2006	2,500,000	3,184,542	1,098,022	60,000
2007	2,500,000	1,842,062	591,938	66,000
2008	2,500,000	1,939,999	490,001	70,000
2009	2,257,000			
Total	$ 15,716,849	$ 9,537,667	$ 2,816,182	$ 256,000

Teacher Training

Advanced awards are provided to ensure that teachers are increasing content knowledge and skills in delivery of the content. Recipients can earn endorsements to be highly qualified in the content area as well as earning an advanced degree.

Subject Areas	2005	2006	2007	2008
Instr. Technology	17	14	13	0
Math	25	40	32	15
Science	27	27	23	17
Special Education	110	150	135	103
Totals	**179**	**231**	**203**	**135**

Signing Bonuses

Signing bonuses are determined at the district/charter level for qualified educators filling math, science or special education positions. The majority of these teachers are new to the profession while others are transfer teachers from out of state.

Subject Areas	2005	2006	2007	2008
Instr. Technology	4	0	2	0
Math	42	67	22	20
Science	32	32	17	18
Special Education	91	120	74	57
Totals	**169**	**219**	**115**	**95**

Teacher Retention

One of the goals of the PEJEP program is to positively impact retention rates in math, science, IT and special education. The chart below illustrates retention rates for teachers who received awards for advanced degrees and signing bonuses from 2005-2008 for qualified positions. Retention rates for new teachers in Utah averages around 62% which is above the national average.

Award	*Educator Recipients*	*Educators Still Teaching*	*Percent Retained*
Advancement Award (Scholarship)	748	702	93.85%
Opportunity Award (Signing Bonus)	598	510	85.28%
Excellence Award*	365	303	83%
TOTAL	**1,711**	**1,515**	**87%**

* Excellence Awards were discontinued after 2002; emphasis was placed on Advancement and Opportunity

	2005-06					2006-07					2007-08					2008-09				
	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL
Alpine		3	4	4	11		2		8	10		2	3	10	15		2		6	8
Beaver					0					0	1			1	2				1	1
Box Elder	1			2	3	1	1		3	5		1		5	6				1	1
Cache	1	4	4	6	15	2	1	3	3	9	1	1		1	3			1		1
Carbon					0				1	1					0				1	1
Daggett					0					0					0					0
Davis	3	1	1	27	32		3	5	18	26	4	10	2	12	28		1	4	16	21
Duchesne		1		1	2		1		1	2				1	1			1	2	3
Emery					0					0					0					0
Garfield					0					0					0					0
Grand					0		1			1	1				1				1	1
Granite	2	5	8	13	28	2	14	4	36	56	1	5	1	20	27		2	2	11	15
Iron					0		1		9	10				2	2				2	2
Jordan	3	1	2	7	13	1	4	6	11	22	2		5	14	21		1	4	15	20
Juab					0				1	1		3	1		4					0
Kane				2	2					0				3	3					0
Logan	5	4	1	1	11	4	5	3	9	21	1			2	3				1	1
Millard	1		1	1	3				1	1				1	1		1			1
Morgan					0					0					0					0
Murray				2	2					0		2	1	1	4				2	2
Nebo			1	6	7		1		6	7				8	8				8	8
No. Sanpete			1		1					0	1			2	3		1		2	3
No. Summit					0					0			1		1					0
Ogden	1			1	2	1	1		5	7	1			4	5		1		1	2
Park City				1	1					0		1			1		1			1
Piute				1	1					0		1			1					0
Provo					0				2	2			1	4	5				1	1
Rich					0					0					0					0
Salt Lake		2	0	4	6		1		6	7				6	6					0
San Juan					0		1			1					0				1	1
Sevier					0					0					0				2	2
So. Sanpete					0		1			1					0					0
So. Summit				1	1					0					0					0
Tintic					0					0					0					0
Tooele				6	6				7	7		3	4	6	13		1		4	5
Uintah				1	1					0					0				1	1
Wasatch				1	1		1		2	3		1		1	2		1			1
Washington		1	3	2	6			2	4	6			1	10	11			2	3	5
Wayne					0					0					0					0
Weber		2	1	17	20	3	1	3	10	17		1	2	19	22		1	2	16	19
SFDB					0				2	2					0				2	2
Charter	0	1	0	3	4			1	5	6		1	1	2	4		2	1	3	6
TOTALS	17	25	27	110	179	14	40	27	150	231	13	32	23	135	203	0	15	17	103	135

Advancement Awards

Opportunity Awards

	2005-06					2006-07					2007-08					2008-09				
	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL	IT	MATH	SCI	SP ED	TOTAL
Alpine		2	3	12	17		1	1	21	23				9	9				12	12
Beaver					0					0					0					0
Box Elder		1	2	3	6		2	3	6	11		2		1	3			2	1	3
Cache		2	4	4	10		1		6	7				5	5				5	5
Carbon					0				2	2					0					0
Daggett					0					0					0					0
Davis		3	2	14	19		14	3	10	27			1	10	11				10	10
Duchesne	1	1		2	4				1	1					0					0
Emery			1		1					0		1			1					0
Garfield			1		1					0		1		1	2					0
Grand					0					0					0					0
Granite			1	9	10		4		17	21		2	1	14	17		3	5	7	15
Iron					0		5			5		1			1					0
Jordan	2	13	6	21	42		14	6	17	37		1		5	6				7	7
Juab					0		1			1					0					0
Kane					0			2		2					0		1		1	2
Logan			1		1		1			1					0					0
Millard		1	1	1	3		1			1		1		1	2			1	1	2
Morgan		1		3	4		2			2				1	1					0
Murray					0			2		2				2	2		1	1	1	3
Nebo				6	6				11	11				6	6				2	2
No. Sanpete					0			1	1	2		1		1	2					0
No. Summit		1			1		1			1					0					0
Ogden					0			1		1			3	1	4		3		2	5
Park City					0					0				1	1					0
Piute		1			1					0					0					0
Provo				2	2		4	1	7	12		3	1		4		2			2
Rich	1	1	1	1	4		1			1					0				1	1
Salt Lake					0				1	1				3	3				3	3
San Juan				1	1					0		1	3		4			1		1
Sevier					0		1			1					0					0
So. Sanpete					0					0		1			1			2		2
So. Summit					0					0					0					0
Tintic					0					0					0					0
Tooele					0		1	6	9	16			3	1	4		1	1	2	4
Uintah					0		2			2		2		1	3					0
Wasatch		2		1	3		2		2	4					0		1	1		2
Washington		2	3	3	8		3	2	5	10		3		4	7		1	2	2	5
Wayne			3	1	4					0					0					0
Weber		9		4	13		4	2	3	9	1	1	3	4	9		3	1		4
SFDB					0					0					0					0
Charter		2	3	3	8		2	2	1	5	1	1	2	3	7		4	1		5
TOTALS	4	42	32	91	169	0	67	32	120	219	2	22	17	74	115	0	20	18	57	95

Public Education Job Enhancement Committee
Member List 2009-10

1. **John Sutherland - Chairman**
   Brigham Young University

2. **Teresa Theurer**
   Utah State Board of Regents (USBOR)

3. **Rosanita Cespedes Ph.D.**
   Sorenson Multi-Cultural Center
   Utah State Board of Regents (USBOR)

4. **Janet Cannon**
   Utah State Board of Education (SBOE)

5. **David Crandall**
   Utah State Board of Education (SBOE)

6. **Representative Ronda R. Menlove**
   Special Education USU

7. **Rick Mandahl**
   Public Specialist

8. **Rex J. Allen**
   Realtime Learning Systems
   Public Specialist

9. **Darl Lee Simmons, P.E.**
   Public Specialist

10. **Tamara Bird**
    Jordan School District
    Math Specialist - Grades 4 thru 6

11. **Teacher Specialist** **To Be Filled**
12. **General Public Appointment** **To Be Filled**
13. **General Public Appointment** **To Be Filled**

Promises to Keep

The Vision and Mission of Utah Public Education

Promises to Keep *is a statement of vision and mission for Utah's system of public education. The statement relies on the language of the Utah Constitution for its central premise. It is intended to provide focus to the work of the State Board of Education, the Utah State Office of Education, and all school districts, local boards of education, and charter schools within the general control and supervision of the Board.*

The Vision of Public Education

Utah's public education system is created in the state Constitution to "secure and perpetuate" freedom.

Freedom, as envisioned in the Utah Constitution, is a promise to future generations that requires:

- *Citizen participation in civic and political affairs.*
- *Economic prosperity for the community.*
- *Strong moral and social values.*
- *Loyalty and commitment to constitutional government.*

The premise of ***Promises to Keep*** *is that there are essential, core "promises" that leaders in the public education system should be clear about with citizens of Utah; that these "promises" are made as part of the civic compact at work as the citizens of Utah give into our hands resources for the public education system; that citizens should have high expectations regarding our success in the essential "promised" work of public education.*

The Mission of Public Education

Utah's public education system keeps its constitutional promise by:

- ***Ensuring literacy and numeracy*** *for all Utah children.*
- ***Providing high quality instruction*** *for all Utah children.*
- ***Establishing curriculum with high standards and relevance*** *for all Utah children.*
- ***Requiring effective assessment*** *to inform high quality instruction and accountability.*

Adopted by the Utah State Board of Education
August 7, 2009

INTASC Principles
Interstate New Teachers Assessment and Support Consortium

Principle 1: **Making content meaningful**
The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of subject matter meaningful for students.

Principle 2: **Child development and learning theory**
The teacher understands how children learn and develop and can provide learning opportunities that support their intellectual, social, and personal development.

Principle 3: **Learning styles/diversity**
The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Principle 4: **Instructional strategies/problem solving**
The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.

Principle 5: **Motivation and behavior**
The teacher uses an understanding individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagements in learning, and self-motivation.

Principle 6: **Communication/knowledge**
The teacher uses knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Principle 7: **Planning for instruction**
The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Principle 8: **Assessment**
The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Principle 9: **Professional growth/reflection**
The teacher is a reflective practitioner who continually evaluates the effects of his or her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Principle 10: **Interpersonal relationships**
The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well being

LEGISLATIVE GENERAL COUNSEL
₵ Approved for Filing: D.S Larsen ₵
₵ 01-23-09 10:47 AM ₵

H.B. 264

EDUCATOR EVALUATION AMENDMENTS

2009 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Ronda Rudd Menlove

Senate Sponsor: _____

LONG TITLE

General Description:

This bill modifies requirements for educator evaluations.

Highlighted Provisions:

This bill:

- ▸ requires a local school board to:
  - • develop an educator evaluation program consistent with criteria specified by the State Board of Education in rules;
  - • support, monitor, and maintain the educator evaluation program; and
  - • provide ongoing evaluation of career educators;
- ▸ requires the principal or immediate supervisor of a provisional educator to assign a person who has received training in mentoring educators to mentor the provisional educator;
- ▸ requires the State Board of Education to make rules specifying criteria for an educator evaluation system adopted by a local school board; and
- ▸ makes technical changes.

Monies Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

H.B. 264

AMENDS:

53A-10-101, as last amended by Laws of Utah 2001, Chapter 86

53A-10-102, as last amended by Laws of Utah 1990, Chapter 78

53A-10-103, as last amended by Laws of Utah 2003, Chapter 315

53A-10-107, as last amended by Laws of Utah 1990, Chapter 78

53A-10-108, as last amended by Laws of Utah 2001, Chapter 86

ENACTS:

53A-10-102.5, Utah Code Annotated 1953

53A-10-106.5, Utah Code Annotated 1953

53A-10-112, Utah Code Annotated 1953

REPEALS AND REENACTS:

53A-10-106, as last amended by Laws of Utah 1990, Chapter 78

REPEALS:

53A-10-104, as enacted by Laws of Utah 1988, Chapter 2

53A-10-109, as enacted by Laws of Utah 1988, Chapter 2

53A-10-110, as last amended by Laws of Utah 1990, Chapter 78

53A-10-111, as last amended by Laws of Utah 2001, Chapter 86

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **53A-10-101** is amended to read:

53A-10-101. Legislative findings.

(1) The Legislature recognizes that the quality of public education can be improved and enhanced by providing for systematic, fair, and competent evaluation of public educators and remediation of those whose performance is inadequate.

(2) In accordance with Subsections 53A-1a-104(7) and 53A-6-102(2)(a) and (b), the desired purposes of evaluation are to:

(a) allow the educator and the school district to promote the professional growth of the [~~teacher, to identify and encourage teaching strategies which contribute to student progress, to identify teachers according to their abilities, and to improve the education system.~~] educator; and

(b) identify and encourage quality instruction in order to improve student achievement.

Section 2. Section **53A-10-102** is amended to read:

53A-10-102. Definitions.

As used in this chapter:

(1) "Career educator" means a [~~certified~~] licensed employee entitled to rely upon continued employment under the policies of a local school board.

(2) "Educator" means [~~any~~] an individual[~~, except the superintendent,~~] employed by a school district who is required to hold a professional [~~certificate~~] license issued by the State Board of Education[~~. Educator does not include individuals who work less~~], except:

(a) a superintendent; or

(b) an individual who:

(i) works fewer than three hours per day; or [~~who are~~]

(ii) is hired for less than half of a school year.

(3) "Probationary educator" means [~~any~~] an educator employed by a school district who, under local school board policy, has been advised by the district that [~~his~~] the educator's performance is inadequate.

(4) "Provisional educator" means [~~any~~] an educator employed by a school district who has not achieved status as a career educator within the school district.

Section 3. Section **53A-10-102.5** is enacted to read:

53A-10-102.5. Local school board's responsibilities for an educator evaluation program.

A local school board shall:

(1) develop an educator evaluation program in accordance with this chapter and support, monitor, and maintain the program; and

(2) provide for:

(a) the evaluation of provisional and probationary educators at least twice each school year;

(b) the ongoing evaluation of all career educators; and

(c) an orientation on the educator evaluation program.

Section 4. Section **53A-10-103** is amended to read:

53A-10-103. Establishment of educator evaluation program -- Joint committee.

(1) Each local school board, consistent with criteria specified in rules of the State

Board of Education, shall develop an evaluation program in consultation with its educators through appointment of a joint committee.

(2) The joint committee shall [~~be comprised~~] consist of an equal number of classroom teachers, parents, and administrators appointed by the local school board.

(3) A local school board may appoint members of the joint committee from a list of nominees:

(a) voted on by classroom teachers in a nomination election;

(b) voted on by the administrators in a nomination election; and

(c) of parents submitted by school community councils within the district.

(4) The evaluation program developed by the joint committee must comply with the requirements of [~~Section 53A-10-106~~] this chapter.

Section 5. Section **53A-10-106** is repealed and reenacted to read:

53A-10-106. Components of educator evaluation program.

An educator evaluation program adopted by a local school board in consultation with a committee shall include the following components:

(1) a reliable and valid evaluation program consistent with generally accepted professional standards for personnel evaluation systems;

(2) systematic evaluation procedures for both provisional and career educators;

(3) the use of multiple lines of evidence, such as:

(a) self-evaluation;

(b) student and parent input;

(c) peer observation;

(d) supervisor observations;

(e) evidence of professional growth;

(f) student achievement data; and

(g) other indicators of instructional improvement;

(4) a reasonable number of observation periods for an evaluation to insure adequate reliability; and

(5) administration of an educator's evaluation by:

(a) the principal;

(b) the principal's designee;

(c) the educator's immediate supervisor; or

(d) another person specified in the evaluation program.

Section 6. Section **53A-10-106.5** is enacted to read:

53A-10-106.5. Evaluation timelines.

(1) The person responsible for administering an educator's evaluation shall:

(a) at least 15 days before an educator's first evaluation:

(i) notify the educator of the evaluation process; and

(ii) give the educator a copy of the evaluation instrument, if an instrument is used;

(b) (i) allow the educator to make a written response to any part of the evaluation; and

(ii) attach the educator's response to the evaluation;

(c) within 15 days after the evaluation process is completed, discuss the written evaluation with the educator; and

(d) following any revision of the written evaluation made after the discussion:

(i) file the evaluation and any related reports or documents in the educator's personnel file; and

(ii) give a copy of the written evaluation and attachments to the educator.

(2) An educator who is not satisfied with an evaluation may request a review of the evaluation within 30 days after receiving the written evaluation.

(3) If a review is requested, the school district superintendent or the superintendent's designee shall appoint a person not employed by the school district who has expertise in teacher or personnel evaluation to review and make recommendations to the superintendent regarding the teacher's evaluation.

(4) Nothing in this section prevents the educator and the superintendent or superintendent's designee from agreeing to another method of review.

Section 7. Section **53A-10-107** is amended to read:

53A-10-107. Deficiencies -- Remediation.

(1) [~~An~~] The person responsible for administering an educator's evaluation shall give an educator whose performance is inadequate or in need of improvement [~~shall be provided with~~] a written document clearly identifying:

(a) deficiencies[~~,~~];

(b) the available resources for improvement[~~,~~]; and

(c) a recommended course of action that will improve the educator's performance.

(2) The district shall provide the educator with reasonable assistance to improve performance.

(3) An educator is responsible for improving performance by using the resources identified by the school district and demonstrating acceptable levels of improvement in the designated areas of deficiencies.

(4) (a) The person responsible for administering the evaluation of an educator whose performance has been determined to be inadequate or in need of improvement shall complete written evaluations and recommendations regarding the educator at least 60 days before the end of the educator's contract school year.

(b) The final evaluation shall include only data previously considered and discussed with the educator as required by Section 53A-10-106.5.

Section 8. Section **53A-10-108** is amended to read:

53A-10-108. Mentor for provisional educator.

(1) In accordance with Subsections 53A-1a-104(7) and 53A-6-102(2)(a) and (b), the principal or immediate supervisor of a provisional educator shall assign a person who has received training in mentoring educators as a mentor to the provisional educator.

(2) Where possible, the mentor shall be a career educator who performs substantially the same duties as the provisional educator and has at least three years of educational experience.

(3) The mentor shall assist the provisional educator to become effective and competent in the teaching profession and school system, but may not serve as an evaluator of the provisional educator.

(4) An educator who is assigned as a mentor may receive compensation for those services in addition to the educator's regular salary.

Section 9. Section **53A-10-112** is enacted to read:

53A-10-112. State Board of Education to make rules specifying criteria for an educator evaluation program.

The State Board of Education shall make rules in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, that specify criteria for an educator evaluation program adopted by a local school board.

Section 10. **Repealer.**

This bill repeals:

Section **53A-10-104, Frequency of evaluations.**

Section **53A-10-109, Final evaluation.**

Section **53A-10-110, Review of evaluation -- Time limit on request.**

Section **53A-10-111, Additional compensation for services.**

Legislative Review Note
as of 1-22-09 10:26 AM

Office of Legislative Research and General Counsel

Entry Years Enhancements

Utah's Support and Enhancement Program for Level 1 Teachers

EYE

Utah State Office of Education - www.schools.utah.gov

August 26, 2009 – Last Updated
This document describes policies and procedures for Utah's Entry Years Enhancements (EYE) program. Since this program continues to change and develop, it is advisable to refer to the most recent version of the document available at www.schools.utah.gov.

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WHAT IS ENTRY YEARS ENHANCEMENTS (EYE)?

Entry Years Enhancements (EYE) is a structured support program for Level 1 educators as they fulfill the requirements for a Level 2 professional license. EYE provides novice teachers with school, district, and state support for a three-year period. All new educators are required to participate and all requirements must be completed within the first three years of service.

The goal of the EYE program is to encourage Level 1 educators to develop successful teaching skills and strategies as described in the Utah Professional Teacher Standards (UPTS), with assistance from experienced colleagues. Upon successful completion of three years of service and all EYE requirements, the district/school may recommend the new teacher for a Level 2 Utah Professional Educator License. If all EYE requirements have not been met, the district/charter school may request a one-year extension at its discretion.

WHAT ARE THE UTAH PROFESSIONAL TEACHER STANDARDS?

The standards are based on current research and expert advice pertaining to best teaching practice. Each standard contains specific elements of teaching practice, but all of the standards are interrelated and work together to provide a complete picture of effective teaching practices to promote high quality student learning. The standards are designed to be used by teachers to set professional goals to improve practice, prompt reflection about student learning and teaching practice, and guide and assess the progress of a teacher's practice toward professional goals and student achievement.

Standard 1 Creating and maintaining a positive classroom environment that promotes student learning	**Standard 4** Assessing and evaluating student learning
A. Create a physical environment that supports a culture for learning and engaging students. B. Implement classroom procedures to enhance student learning. C. Manage student behavior. D. Establish a civic classroom based on caring, responsibility, and respect for diversity.	A. Assess learning goals based on Utah Core Curriculum Standards. B. Use multiple sources of formal and informal assessment to verify student learning. C. Maintain accurate records of student progress. D. Use student achievement data to inform instruction. E. Communicate feedback on learning progress to students and parents/guardians.
Standard 2 Planning curriculum and designing instruction to enhance student learning	**Standard 5** Demonstrating professionalism to support student learning
A. Demonstrate knowledge of content. B. Demonstrate knowledge of age-appropriate pedagogy. C. Design and articulate instruction aligned with Utah Core Curriculum standards. D. Select instructional goals based on student achievement data and knowledge of students. E. Connect curricula to student development and cultural background. F. Use appropriate resources to facilitate individual student learning.	A. Understand and act consistently with education laws. B. Demonstrate moral and ethical conduct as educators and role models for young people. C. Maintain professional demeanor and appearance. D. Establish professional goals, reflect on teaching, and pursue opportunities to grow professionally. E. Contribute to the educational community and demonstrate professional leadership.
Standard 3 Engaging and supporting all students in learning	
A. Communicate instruction clearly and accurately. B. Use research-based instructional strategies to enhance student learning of content. C. Accommodate individual students' cultural, physical, emotional, social, and intellectual growth. D. Reflect on teaching and learning. E. Differentiate instruction to meet individual student learning needs. F. Incorporate understanding of the diversity of the school community into student learning. G. Integrate the Utah Life Skills document into student learning. H. Engage families as partners in learning.	

WHO MUST COMPLETE EYE?

All educators with a Level 1 Utah Educator License must complete the EYE requirements appropriate to their area of concentration. Educators holding a license with more than one area of concentration must complete all EYE requirements for each area of concentration.

WHAT ARE THE EYE REQUIREMENTS?

All Level 1 educators must complete the EYE requirements appropriate to their area(s) of concentration by the time they have completed three years of experience (as designated by the EYE program) and their Level 1 license has expired. A district/school may request a one-year extension at its discretion to support a Level 1 educator in completing EYE requirements.

Educators applying for a Utah Educator License who hold an educator license and have three or more years of prior experience from another state, or who have three or more years of experience in Utah beginning prior to 2003, may be recommended for a Level 2 Utah Educator License after one year of service, two professional evaluations, and a recommendation from the employer. Teachers in the Return to Licensure program who have two or more years service and have not completed EYE must include the completion of EYE in their Professional Development plan. The district/charter has discretion in determining the employment or re-employment status of educators.

EYE REQUIREMENTS

Educators With Prior Experience

- Hold a Level 1 Utah educator License.
- Complete one year of service in a Utah public or accredited private school.
- Receive two successful professional evaluations in a Utah public or accredited private school.
- Complete any additional district/school requirements.
- Receive a district/school recommendation for upgrade to Level 2.
- Achieve NCLB HQ status in at least one licensure area.

General Education and Special Education Teachers

- Hold a Level 1 Utah Educator License.
- Complete a professional portfolio.
- Receive two successful professional evaluations per year for three years in a Utah public or accredited private school.
- Achieve a score of 160 or better on the *Praxis II: Principles of Learning and Teaching* test at the appropriate level of educational preparation: *Praxis II (0521), Praxis II (0522), Praxis II (0523), or Praxis II (0524).*
- Work with a trained mentor for three years.
- Complete any additional district/school requirements.
- Receive a district/school recommendation for upgrade to Level 2.
- Achieve NCLB HQ status in at least one licensure area.

Suggested Schedule for Completion of EYE Requirements

YEAR 1	YEAR 2	YEAR 3
Mentor	Mentor	Mentor
Two evaluations	Two evaluations	Two evaluations
Work on portfolio	Work on portfolio	Complete portfolio
Pass *Praxis II: Principles of Learning and Teaching* test		
Achieve Highly Qualified status under NCLB		
		Employer recommendation for upgrade to Level 2

Communication Disorders, Speech-Language Pathologist, and Speech-Language Technician

- Hold a Level 1 Utah Educator License.
- Complete a professional portfolio (for SLT area of concentration and SLP area of concentration for those licensed and hired after July 1, 2009).
- Receive two successful professional evaluations per year for three years in a Utah public or accredited private school.
- Work with a trained mentor for three years.
- Complete any additional district/school requirements.
- Receive a district/school recommendation for upgrade to Level 2.

School Counselor, School Psychologist, and School Social Worker

- Hold a Level 1 Utah Educator License.
- Receive two successful professional evaluations per year for three years in a Utah public or accredited private school.
- Work with a trained mentor for three years.
- Complete any additional district/school requirements.
- Receive a district/school recommendation for upgrade to Level 2.

WHAT IS A PROFESSIONAL PORTFOLIO?

The EYE portfolio is a record of the beginning teacher's growth, represented through artifacts and reflections. The portfolio is prepared according the guidelines of the employing district or charter school, and is submitted during the Level 1 teacher's second or third year of teaching. The portfolio is evaluated by the employer.

The portfolio provides a professional record to guide future professional development, and may serve as supportive evidence in future employment interviews. It provides introspection opportunities for the beginning teacher as well as a conversation tool between the mentor and the new teacher. Each district and charter school will design and evaluate its own EYE portfolio requirements, using the following guidelines. The portfolio should:

- Be based upon the Utah Professional Teacher Standards or district/charter school standards.
- Include teaching artifacts.
- Include notations and reflections explaining the artifacts.
- Be a vehicle for collaboration with the mentor.
- Provide evidence of content knowledge and pedagogy.

WHAT ARE PROFESSIONAL EVALUATIONS?

Utah school districts are required to observe Level 1 teachers and evaluate their teaching skills at least twice during each of the three EYE years. Evaluations and evaluation plans are developed by each district and charter school. It is recommended that evaluations of EYE teachers be linked to the requirements of the Utah Professional Teacher Standards.

WHAT TESTS ARE NEEDED TO COMPLETE EYE REQUIREMENTS?

Praxis II: Principles of Learning and Teaching Tests
The *Praxis II: Principles of Learning and Teaching* (PLT) test is required of all teachers to complete EYE requirements and qualify for a Level 2 license. The test is designed to assess a beginning teacher's pedagogical knowledge. It assesses a teacher's understanding of such areas as human growth and development, classroom management, instructional design and delivery techniques, and evaluation and assessment. The test uses a case study approach and features constructed-response and multiple-choice items.

Beginning teachers must pass the PLT test with a score of 160 or greater in order to apply for a Level 2 license. Educators who do not achieve a passing score may retake the test within the three-year duration of the Level 1 license.

Registration information and current test fee information can be found at the Educational Testing Service (ETS) website, www.ets.org/praxis. ETS will forward scores to the Utah State Office of Education upon the teacher's request. Please allow 6-8 weeks to receive test results.

Teachers select the Praxis II: Principles of Learning and Teaching test in their area of education preparation and assignment:

Early Childhood	*Praxis II* ***(0521)*** *Principles of Learning and Teaching*
Grades K-6	*Praxis II* ***(0522)*** *Principles of Learning and Teaching*
Grades 5-9	*Praxis II* ***(0523)*** *Principles of Learning and Teaching*
Grades 7-12	*Praxis II* ***(0524)*** *Principles of Learning and Teaching*

Praxis II Content Tests
To complete EYE requirements and qualify for Level 2 licensure, a teacher must be NCLB Highly Qualified in at least one of the NCLB license areas in which she/he is endorsed. Teachers licensed in non-NCLB areas are not held to this requirement.

Early Childhood and Elementary Teachers
To become NCLB Highly Qualified, elementary and early childhood teachers must submit a score of 150 or better on *Praxis II (0014) Elementary Education: Content Knowledge* or *Praxis II (0012) Elementary Education: Content Area Exercises.* Teachers may register for these tests, view test descriptions, and obtain study guides at www.ets.org/praxis.

Secondary Teachers Endorsed in NCLB Areas
Secondary teachers endorsed in NCLB areas must become HQ before applying for, a Level 2 license. Highly Qualified status applies to teachers of core subjects in the following areas: Fine Arts, Foreign Language, Language Arts, Mathematics, Science, and Social Studies. Additional information regarding HQ status is available at http://www.schools.utah.gov/cert/nclb/hqt/hq.htm.

Special Education
Special education teachers must be HQ in one area of licensure in order to apply for a Level 2 license. For additional information regarding content testing, teachers should consult with their district/school special education department.

WHAT IS THE ROLE OF THE MENTOR?

The trained mentor, assigned by the district/charter school, acts as a resource for the beginning teacher. Utah State Board rule requires that EYE mentors be trained to successfully carry out their assignment. Mentors should develop appropriate attitudes, knowledge, and skills as described in the *Utah EYE Mentor Standards* to effectively assist new teachers.

HOW MAY AN EDUCATOR UPGRADE TO A LEVEL 2 LICENSE?

The Level 1 Utah Educator License is issued to an individual who is recommended by a Board-approved educator preparation program, an individual approved by an alternative reparation program, or an educator who was originally licensed in another state.

During the three-year duration of the Level 1 license, the new teacher is supervised by the employing district/charter school and completes the EYE requirements. A Level 2 license may be issued after three years of service, the completion of all EYE requirements, and a recommendation by the employing charter school or district. The Level 2 license is issued for five years and may be renewed for successive five-year periods.

One-Year Extension
If a Level 1 teacher fails to complete all of the EYE requirements within the three-year period, the employer may request a one-year extension of the Level 1 license in order to provide additional time for the educator to complete the requirements.

Recommendation for Upgrade
Upon the Level 1 teacher's successful completion of state EYE requirements and any additional district/charter requirements, the employer may recommend the teacher to the State Board of Education for a Level 2 Utah Professional Educator License. The employing district/charter will make the upgrade recommendation in the teacher's file in the *Comprehensive Administration Credentials for* Teachers in Utah Schools (CACTUS) system. This electronic recommendation must be followed by payment of an upgrade fee by the recommended teacher. Teachers may access www.utah.gov/teachers, choose **Level 1 to Level 2 Upgrade**, and follow the online instructions. At the end of the process, a new Utah Educator License showing Level 2 status will be available to print.

WHAT ARE THE ETHICS REQUIRED FOR UTAH EDUCATORS?

The Utah State Board of Education requires educators to comply with federal, state, and local laws, maintain a safe learning environment, and exhibit appropriate professional educator conduct. Violations of professional standards may result in license discipline. All educators are responsible for

their own professional conduct and should be familiar with Utah State Board requirements detailed in State Board Rule R277-515.

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onal learning, performance assessment and advancement.

TS with support from the National Staff Development Council.

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The Multi-State Cons

Revisioning the Profes
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e greatest contributing factor to student
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ative problem-solving to envision a new
development, preparation and advancement.
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hat contribute to both student and

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n members committed to strengthening educator practice as a significant force for
ting with available research, consortium members examined factors contributing to
d success, and drafted an agenda for strengthening the teaching profession.

sidered as it began its work include:

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- Professional learning for professional advancement
- Limited opportunities available to teachers who want to remain in their classrooms to develop professionally and assume additional responsibilities for improving teaching and learning

hat these issues require immediate attention in order to develop and support teachers
d to ongoing development, and aspire to continue in the profession.

nt research and practice, the multi-state consortium members identified areas to
nsformative change. To date, they have completed the following actions:

f an educator

f practice for

- Integrated into each level of practice innovative, 21st Century thinking

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- Evaluate pilot outcomes
- Revise the continuum based on the results of the pilot
- Disseminate the continuum of educator

Defining a Continuum: Four Stages of Developmen

As one of its first steps, the consortium defined four stages of educator development:

- Preparatory Practitioner
- Developing Practitioner
- Novice Practitioner
- Experienced Practitioner

These four stages are based on actual development and demonstrated effectiveness to enhance student learning rather than years of service. To move from one stage to the next, educators demonstrate proficiency of knowledge, and skills, and ongoing professional growth appropriate for transition to the next stage.

Figure 1

To guide thinking about the stages of effective practice, consortium members defined a continuum of educator support and development. The continuum provided (see Figure 1) serves as the core for ongoing dialogue and development. It depicts the progression of educator growth across the continuum of practice. The continuum stresses that, regardless of stage of development, students are the primary focus. It acknowledges that experienced educators impact and support colleagues who are at other stages, their profession and communities, as well as their students.

The actual movement of educators across the continuum of practice is depicted here. Educators' movement throughout their career development from Preparatory to Novice to Developing to Experienced Practitioner is evident as an educator becomes more skillful and produces results for students. What the consortium members emphasize with the two-sided arrows is that educators in each stage also impact educators in the previous stages, thereby contributing to the development of their colleagues and the profession. At each stage, as the model depicts, educators also impact and learn from their students.

Figure 2

A more linear view of the continuum is shown here (see Figure 2); in this model, students and the school and community form the background of the continuum, to show that at each stage of development, the ultimate goal is student learning.

The Multi-State Consortium:

REVISIONING

A Professional Educator Continuum

ETS

y Practitioner

RY PRACTITIONERS – HEY?

ng to become teachers who …

- *ate in an accredited preparatory*
- *at a college/university*
- *in other state approved pathways*
- *ing*
- *in ongoing learning*

DATIONS FOR ENHANCING RY PRACTITIONER DEVELOPMENT

- *early field experiences in all preparation*
- *s within cross-level cohorts and in a*
- *f school/community backed settings*
- *e cohort exemplary cohort models*
- *formance assessments for exiting a*
- *tion program*
- *ofessional growth plans based on feed-*
- *m a career inventory and assessment*

- *ent innovative internships, professional*
- *ment school models, and other school-*
- *rograms for preparing teachers*
- *multiple models that incentivize student*
- *and create a more authentic experience*

Second-Stage Continuum of Practice

Novice Practitioner

NOVICE PRACTITIONERS – WHO ARE THEY?

Teachers who …

- *Have a teaching position with an initial license*
- *Focus on student and personal growth*
- *Enroll in an alternative program, available from state approved service providers, for professionals from other fields moving to teaching*
- *Develop an awareness of self-efficacy*
- *Engage in professional learning designed to continue the development of novice practitioners*
- *Apprentice in collaborative communities*
- *Receive support from mentoring and induction programs*
- *Develop and refine instructional skills within their classroom*
- *Are teaching a content area or developmental level for the first time*

RECOMMENDATIONS FOR ENHANCING NOVICE PRACTITIONER DEVELOPMENT

- *Require classroom support from compensated, trained mentors*
- *Provide release time for novice and mentor to meet*
- *Offer release time to observe experienced teachers in practice*
- *Provide opportunities to serve as co-teacher with experienced teachers*
- *Implement teacher-as-researcher model*

Third-Stage Continuum of Practice

Developing Practitioner

DEVELOPING PRACTITIONERS – WHO ARE THEY?

Teachers who …

- *Have a teaching position with a license, preparing for next level of licensure*
- *Are a consumer of, and contributor to, professional learning*
- *Develop an awareness of how personal growth impacts student growth*
- *Differentiate instruction based on knowledge of students*
- *Develop and refine self-efficacy*
- *Engage in professional learning focused on personal needs informed by own practice*
- *Initiate a community of learners*
- *Explore emerging leadership skills and opportunities*
- *Are teaching a content area or developmental level for the first time*

RECOMMENDATIONS FOR ENHANCING DEVELOPING PRACTITIONER DEVELOPMENT

- *Provide release time for career advancement including shadowing, observation, etc.*
- *Offer distributed leadership opportunities (i.e., learning teams)*
- *Engage in authentic and reflective teacher evaluation*
- *Provide opportunities for advancing along various career pathways*
- *Provide meaningful observations of practice with constructive feedback*

Fourth-Stage Continuum of Practice

Experienced Practitioner

EXPERIENCED PRACTITIONERS – WHO ARE THEY?

Teachers who …

- *Have a teaching position with license*
- *Seek opportunities for leaders both formal and informal*
- *Engage in contributing to lear colleagues*
- *Promote growth in others to i learning*
- *Lead by demonstrating refine students to help others differe*
- *Influence the efficacy of other*
- *Inform and lead others' profes*
- *Lead collaborative communiti*
- *Mentor novice and developing*
- *Serve as change agents and a*
- *Invest in education as a profes career choice*
- *Conduct formative observatio*

RECOMMENDATIONS FOR ENHAN EXPERIENCED PRACTITIONER DE

- *Differentiate staffing options a*
- *Provide release time for exper who serve as mentors to work teachers*
- *Distribute leadership through opportunities (i.e., learning tea*
- *Provide ongoing and continue learning*
- *Develop partnerships to expan developing content knowledg the whole child*
- *Build relationships to establish the local and global communi*
- *Provide opportunities for facil learning within school districts*
- *Promote job sharing within dis districts, and with IHE faculty providing release time for lead and professional support for c*

http://www.schools.utah.gov/cert/profDevel/guidelines/ut_guidelines.htm

Utah Professional Development Standards

The primary purpose of professional development is to ensure high levels of learning for all students through improved professional learning experiences for every school employee who affects student learning. These standards are intended to be used by schools and school districts to improve the quality of professional development efforts so student learning will be increased. Recent research identifies and supports the link between student achievement and the professional learning of educators. The standards fall into three categories: context, process, and content. Context standards describe "where" the learning will be applied, the organizational environment in which improved performance is expected. Process standards refer to "how" the learning occurs. Content standards refer to "what" is learned.

Context Standards

Professional development that improves the learning of all students:

- Organizes adults into learning communities whose goals are aligned with those of the school and district. (Learning Communities)
- Requires skillful school and district leaders who guide continuous instructional improvement. (Leadership)
- Requires resources to support adult learning and collaboration. (Resources)
- Appropriates funds for professional development. (Money)
- Provides job-imbedded time for educators to engage in continuous improvement. (Time)

Process Standards

Professional development that improves the learning of all students:

- Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement. (Data-Driven)
- Uses multiple sources of information to guide improvement and demonstrate its impact. (Evaluation)
- Prepares educators to apply research to decision-making. (Research-Based)
- Uses learning strategies appropriate to the intended goal. (Design)
- Applies knowledge about change and human learning. (Learning)
- Provides educators with the knowledge and skills to collaborate. (Collaboration)
- Provides knowledge, skills, and attitudes regarding organization development and systems thinking. (Organization/Systems)
- Provides for the phases of the change process. (Change)
- Requires knowledge and use of the stages of group development to build capacity for all educators. (Group Development

APPENDIX 36

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R277. Education, Administration.

R277-114. Corrective Action and Withdrawal or Reduction of Program Funds.

R277-114-1. Definitions.

A. "Board" means the Utah State Board of Education.

B. "Program" for purposes of the rule means a public education project or plan under the direction of the Board, with a specific goal or outcome for which public education funding is provided.

C. "Recipient" means a local education agency (LEA), contractor or subrecipient.

D. "State Superintendent" means the State Superintendent of Public Instruction.

E. "USOE" means the Utah State Office of Education.

R277-114-2. Authority and Purpose.

A. This rule is authorized by Utah Constitution Article X, Section 3 which vests general control and supervision of public education in the Board and by Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities.

B. The purpose of the rule is to provide procedures for public education program monitoring and corrective action for noncompliance with identified program requirements, program accountability standards, and financial propriety.

R277-114-3. USOE Responsibilities.

A. Directors, coordinators and program specialists shall act as designees of the Superintendent and shall review compliance with program outcomes and financial propriety.

B. Designated program reviewers shall act and carry out responsibilities consistent with federal requirements, state law and administrative rules.

C. The following minimum procedures shall be followed prior to reducing or withholding funds from a recipient:

(1) The USOE, with assistance from directors, coordinators and program specialists, shall draft and implement a consistent monitoring procedure that includes standards for both recipient program outcomes and financial compliance. This monitoring program shall be communicated to the recipient regularly, and proper documentation of monitoring and compliance procedures conducted by USOE staff shall be maintained at the USOE.

(2) Recipients that do not demonstrate satisfactory outcomes, demonstrate noncompliance with program requirements or allowable program expenditures, or those that do not comply with requests to provide accurate and complete program or financial information enabling determination of compliance may be placed on corrective action.

(3) All courses of action should be discussed with the deputy/associate superintendent who supervises the program, prior to placing recipients on a corrective action plan as follows:

(a) Corrective action plans shall clearly outline all areas of noncompliance and establish a reasonable time frame for the recipient to correct identified issues.

(b) Notification and a copy of the corrective action plan shall be communicated in writing to a program administrator as well as the superintendent/CEO and business administrator of the school district/contractor/sub-recipient in question, the deputy/associate superintendent over the program, the USOE internal auditor, and the State Superintendent.

(4) Directors, coordinators and program specialists shall follow up with the recipient to clarify questions and assist the recipient in establishing appropriate corrective measures to further compliance.

(5) If a recipient does not respond or does not satisfy the requirements of the corrective action plan by established deadline(s), the program director, coordinator, or supervisor shall notify the Internal Auditor, who will notify the State Superintendent.

(6) Verification of noncompliance and contact with the recipient to discuss and investigate the issues addressed in the corrective action plan shall be left to the discretion of the State Superintendent, Board Audit Committee and Internal Auditor.

(7) The Board shall determine if and at what level funding for programs may be withheld or terminated by the State Superintendent and when the Board should withhold or terminate a program or validate the State Superintendent's recommendation for withholding or

termination of funding.

KEY: programs, noncompliance, correction action

Date of Enactment or Last Substantive Amendment: 2010

Authorizing, and Implemented or Interpreted Law: Art X Sec 3; 53A-1-401(3)

APPENDIX 37

53A-1a-509. Noncompliance -- Rulemaking.

(1) (a) If a charter school is found to be out of compliance with the requirements of Section 53A-1a-507 or the school's charter, the chartering entity shall notify the school's governing board in writing that the school has a reasonable time to remedy the deficiency, except as otherwise provided in Subsection 53A-1a-510(3)(a).

(b) If the school does not remedy the deficiency within the established timeline, the chartering entity may:

(i) remove a school director or finance officer;

(ii) remove governing board members;

(iii) appoint an interim director or mentor to work with the charter school; or

(iv) terminate the school's charter.

(c) The costs of an interim director or mentor appointed pursuant to Subsection (1)(b) shall be paid from the funds of the charter school for which the interim director or mentor is working.

(2) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, the State Board of Education shall make rules:

(a) specifying the timeline for remedying deficiencies under Subsection (1)(a); and

(b) ensuring the compliance of a charter school with its approved charter.

APPENDIX 38

53A-1a-510. Termination of a charter.

(1) A chartering entity may terminate a school's charter for any of the following reasons:

(a) failure of the school to meet the requirements stated in the charter;

(b) failure to meet generally accepted standards of fiscal management;

(c) subject to Subsection (6), failure to make adequate yearly progress under the No Child Left Behind Act of 2001, 20 U.S.C. Sec. 6301 et seq.;

(d) violation of requirements under this part or another law; or

(e) other good cause shown.

(2) (a) The chartering entity shall notify the governing body of the school of the proposed termination in writing, state the grounds for the termination, and stipulate that the governing body may request an informal hearing before the chartering entity.

(b) The chartering entity shall conduct the hearing in accordance with Title 63G, Chapter 4, Administrative Procedures Act, within 30 days after receiving a written request under Subsection (2)(a).

(c) If the chartering entity, by majority vote, approves a motion to terminate a charter school, the governing body of the charter school may appeal the decision to the State Board of Education.

(d) (i) The State Board of Education shall hear an appeal of a termination made pursuant to Subsection (2)(c).

(ii) The State Board of Education's action is final action subject to judicial review.

(3) (a) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, the State Board of Education shall make rules that require a charter school to report any threats to the health, safety, or welfare of its students to the State Charter School Board in a timely manner.

(b) The rules under Subsection (3)(a) shall also require the charter school report to include what steps the charter school has taken to remedy the threat.

(4) The chartering entity may terminate a charter immediately if good cause has been shown or if the health, safety, or welfare of the students at the school is threatened.

(5) If a charter is terminated during a school year:

(a) the school district in which the school is located may assume operation of the school; or

(b) a private management company may be hired to operate the school.

(6) (a) If a charter is terminated, a student who attended the school may apply to and shall be enrolled in another public school under the enrollment provisions of Title 53A, Chapter 2, Part 2, District of Residency, subject to space availability.

(b) Normal application deadlines shall be disregarded under Subsection (6)(a).

(7) A chartering entity may terminate a charter pursuant to Subsection (1)(c) under the same circumstances that local educational agencies are required to implement alternative governance arrangements under 20 U.S.C. Sec. 6316.

Appendix 39

53A-1a-502.5. Charter schools -- Maximum authorized students.

(1) The State Charter School Board and local school boards may only authorize a combined maximum student capacity of:

(a) 32,921 students for the charter schools in the 2008-09 school year; and

(b) beginning in the 2009-10 school year, an annual increase in charter school enrollment capacity equal to 1.4% of total school district enrollment as of October 1 of the previous school year.

(2) (a) The State Board of Education, in consultation with the State Charter School Board, shall allocate the students under Subsection (1) between the State Charter School Board and local school boards.

(b) One-third of the student capacity described under Subsection (1)(b) shall be allocated to increase the maximum student capacity of operating charter schools.

(c) If the operating charter schools do not use the allocation described under Subsection (2)(b), the remaining student capacity may be used by new charter schools.

(3) An increase in charter school enrollment capacity in the 2011-12 school year or thereafter shall receive:

(a) tentative approval by the State Board of Education by November 30 of the year that is two years before the year that the increase in charter school enrollment capacity takes effect; and

(b) final approval by the State Board of Education by the following April 1, subject to legislative authorization of the increase in charter school enrollment capacity.

APPENDIX 40

R277. Education, Administration.
R277-470. Charter Schools.
R277-470-1. Definitions.

A. "Board" means the Utah State Board of Education.

B. "Charter schools" means schools acknowledged as charter schools by local boards of education under Section 53A-1a-515 and this rule or by the Board under Section 53A-1a-505.

C. "Charter school application" means the official chartering document by which a prospective charter school seeks recognition and funding under Section 53A-1a-505. The application includes the basic elements of the charter to be established between the charter school and the chartering board.

D. "Charter school deficiencies" means the following information:

(1) a charter school is not satisfying financial obligations as required by Section 53A-1a-505 in the charter school's written contractual agreement;

(2) a charter school is not providing required documentation following reasonable warning;

(3) compelling evidence of fraud or misuse of funds by charter school governing board members or employees.

E. "Charter school founding member" or "founding member" means an individual who had a significant role in the initial development of the charter school up until the first instructional day of school, the first year of operation, as submitted in writing to the State Charter School Board the first day of operation.

F. "Charter school governing board" means the board designated by the charter school to make decisions for the operation of the school similar to a local board of education.

G. "Days" means calendar days, unless specifically designated.

H. "Expansion" means a proposed ten percent increase of students or grade level(s) in an operating charter school at a single location.

I. "Local education agency (LEA)" means a local board of education, combination of school districts, other legally constituted local school authority having administrative control and direction of free public education within the state, or other entities as designated by the Board, and includes any entity with state-wide responsibility for directly operating and maintaining facilities for providing public education.

J. "Northwest Association of Accredited Schools (NAAS) accreditation" means the formal process for evaluation and approval under the Standards for Accreditation of the Northwest Association of Accredited Schools or the accreditation standards of the Board, available from the Utah State Office of Education Accreditation Specialist. Accreditation ensures that the credits/diploma a student earns is the result of a quality educational experience. The purpose of accreditation is to ensure excellence in education by holding schools accountable to rigorous standards and a process of continued improvement.

K. "Neighborhood or traditional school" for purposes of this rule, means a public, non-charter school.

L. "New charter school" as provided in Section 53A-21-401(5)(d) means any charter

school through the first day of its second year with students, or a satellite school that requires a new location/campus.

M. "No Child Left Behind (NCLB)" means the federal law under the Elementary and Secondary Education Act, Title IX, Part A, 20 U.S.C. 7801.

N. "On-going funds" means funds that are appropriated annually by the Legislature with the expectation that the funds shall continue to be appropriated annually.

O. "Satellite school" means a charter school affiliated with an operating charter school having a common governing board and a similar program of instruction, but located at a different site or in a different geographical area. The parent school and all satellites shall be considered a single local education agency (LEA) for purposes of public school funding and reporting.

P. "State Charter School Board" means the board designated in Section 53A-1a-501.5.

Q. "Subaccount" means the Charter School Building Subaccount consisting of funds provided under 53A-21-401(5)(b)

R. "Subaccount Committee" means the committee established by the Superintendent under Section 53A-21-401(6).

S. "Superintendent" means the State Superintendent of Public Instruction as designated under 53A-1-301.

T. "Urgent facility need" as provided in Section 53A-21-401(5)(d) means an unexpected exigency that affects the health and safety of students such as:

(1) to satisfy an unforeseen condition that precludes a school's qualification for an occupancy permit; or

(2) to address an unforeseen circumstance that keeps the school from satisfying provisions of public safety, public health or public school code.

U. "USOE" means the Utah State Office of Education.

V. "Weighted Pupil Unit (WPU)" means the unit of measure that is computed in accordance with the Minimum School Program Act for the purpose of distributing revenue on a uniform basis for each pupil.

R277-470-2. Authority and Purpose.

A. This rule is authorized under Utah Constitution Article X, Section 3 which vests general control and supervision over public education in the Board, Section 53A-1a-513 which directs the Board to distribute funds for charter school students directly to the charter school, Section 53A-1-401(3) which allows the Board to adopt rules in accordance with its responsibilities, and 20 U.S.C., Section 8063(3) which directs the Board to submit specific information prior to charter schools' receipt of federal funds.

B. The purpose of this rule is to establish procedures for authorizing, funding, and monitoring charter schools and for repealing charter school authorizations. The rule also establishes timelines as required by law to provide for adequate training for beginning charter schools.

R277-470-3. Maximum Authorized Charter School Students.

A. Local school boards may not approve district-chartered schools unless they notify the State Charter School Board by August 15 two years prior to opening of proposed district-

chartered schools and estimated numbers of students.

B. The Board, in consultation with the State Charter School Board, may approve schools, expansions and satellite charter schools for the total number of students authorized under 53A-1a-502.5

C. District-chartered schools submitting applications shall be considered with all new charters.

R277-470-4. Charter School Orientation and Training.

A. Beginning with the 2006-2007 school year, all charter school applicants shall attend orientation/training sessions designated by the State Charter School Board.

B. Orientation meetings shall be scheduled at least quarterly and be available electronically, as determined by the State Charter School Board.

C. Charter schools and applicants that attend orientation/training sessions shall be eligible for additional funds, upon approval, in an amount to be determined by the State Charter School Board provided through federal charter school funds or a General Fund appropriation to the extent of funds available. Charter school applicants that attend training and orientation sessions may receive priority for approval from the State Charter School Board and the Board.

D. Orientation/training sessions shall provide information including:

(1) charter school implementation requirements;

(2) charter school statutory and Board requirements;

(3) charter school financial and data management requirements;

(4) charter school legal requirements;

(5) federal requirements for charter school funding; and

(6) other items as determined by the State Charter School Board.

R277-470-5. New or Expanding Charter School Notification to Prospective Students and Parents.

A. All charter schools opening or expanding by at least ten percent of overall enrollment or adding one or more grade levels after July 1, 2007 shall notify all families consistent with the schools' outreach plans described in the charter agreements of:

(1) a new or expanding charter school's purpose, focus and governance structure, including names, qualifications, and contact information of governing board members;

(2) the number of new students that will be admitted into the school by grade;

(3) the proposed school calendar for the charter school including at a minimum the first and last days of school, scheduled holidays, pre-scheduled professional development days (no student attendance), and other scheduled non-school days;

(4) the charter school's timelines for acceptance or rejection of new students consistent with Section 53A-1a-506.5;

(5) a State-approved student charter school application (beginning with the 2008-09 school year);

(6) procedures for transferring to or from a charter school, together with applicable timelines; and

(7) provide for payment, if required, of a one-time fee per secondary school enrollment,

not to exceed $5.00, consistent with Section 53A-12-103.

B. Charter schools shall provide written notice of the information in R277-470-5A consistent with the school's outreach plan and at least 180 days before the proposed opening day of school.

C. Charter schools shall have an operative and readily accessible electronic website providing information required under R277-470-5A in place. The completed charter school website shall be provided to the State Charter School Board at least 180 days prior to the proposed opening day of school. The State Charter School Board shall require new charter schools to have websites that may be reviewed by the State Charter School Board prior to the schools posting the websites publicly.

R277-470-6. Transfer Student Criteria.

A. Charter schools shall allow students to transfer from one charter school to another and enroll students only consistent with Sections 53A-1a-506.5(2) through (6), including timelines.

B. Charter schools shall provide notice to a withdrawing student's school of residence consistent with Section 53A-1a-506.5(5) and using USOE-designated transfer forms.

C. Both charter schools and neighborhood schools shall enroll students and exchange student information consistent with 53A-1a-506.5(2)(c) and 53A-11-504 and using USOE-designated transfer forms.

D. Both charter schools and neighborhood schools shall have policies that provide procedures for properly excluding students and notifying students and parents under 53A-11-903 and 53A-11-904.

E. Neither neighborhood schools nor charter schools may discourage students from attending schools of choice in violation of state or federal law.

F. Neither charter schools nor neighborhood schools shall be required to enroll students who have been properly excluded from public schools under 53A-11-903 and 53A-11-904.

R277-470-7. Timelines - Charter School Starting Date.

A. The State Charter School Board shall accept a proposed starting date from a charter school applicant, or the State Charter School Board shall negotiate and recommend a starting date prior to recommending final charter approval to the Board.

B. A local or state-chartered school shall be approved by November 30, two years prior to the school year it intends to serve students in order to be eligible for state funds.

C. A local or state-chartered school shall acquire a facility and enter into a written agreement, or begin construction on a new or existing facility no later than January 1 of the year the school is scheduled to open. Each state-chartered school shall submit any lease, lease-purchase agreement, or other contract or agreement relating to the charter school's facilities or financing the charter school facilities to its chartering entity for review and advice prior to the charter school entering into the lease, agreement, or contract, consistent with Section 53A-1a-507(9).

D. If students are not enrolled and attending classes by October 1, a charter school shall not receive funding from the state for that school year.

E. Despite a charter school meeting starting dates, a charter school shall be required to satisfy R277-419 requirements of 180 days and 990 hours of instruction time, unless otherwise

exempted by the Board under 53A-1a-511.

F. The Board may, following review of information, approve the recommended starting date or determine a different charter school starting date after giving consideration to the State Charter School Board recommendation.

R277-470-8. Remedying Charter School Financial Deficiencies.

A. Upon receiving credible information of charter school financial deficiencies, the State Charter School Board shall immediately direct a review or audit through the charter school governing board, by State Charter School Board staff, or by an independent auditor hired by the State Charter School Board.

B. The State Charter School Board or the Board through the State Charter School Board may direct a charter school governing board or the charter school administration to take reasonable action to protect state or federal funds consistent with Section 53A-1a-510.

C. The State Charter School Board or the Board in absence of the State Charter School Board action may:

(1) allow a charter school governing board to hold a hearing to determine financial responsibility and assist the charter school governing board with the hearing process;

(2) immediately terminate the flow of state funds; or

(3) recommend cessation of federal funding to the school;

(4) take immediate or subsequent corrective action with employees who are responsible for financial deficiencies; or

(5) any combination of the foregoing (1), (2), (3) and (4).

D. The recommendation by the State Charter School Board shall be made within 20 school days of receipt of complaint of deficiency(ies).

E. The State Charter School Board may exercise flexibility for good cause in making recommendation(s) regarding deficiency(ies).

F. The Board shall consider and affirm or modify the State Charter School Board's recommendation(s) for remedying a charter school's financial deficiency(ies) within 60 days of receipt of information from the State Charter School Board.

G. In addition to remedies provided for in Section 53A-1a-509, the State Charter School Board may provide for a remediation team to work with the school.

R277-470-9. Charter School Financial Practices and Training.

A. Charter school business and financial staff shall attend USOE required business meetings for charter schools.

B. Local charter school board members and directors shall be invited to all applicable Board-sponsored training, meetings, and sessions for traditional school district financial personnel/staff if charter schools supply current staff information and addresses and indicate the desire to attend.

C. The Board shall work with other education agencies to encourage their inclusion of charter school representatives at training and professional development sessions.

D. A charter school shall appoint a business administrator consistent with Sections 53A-3-302 and 303. The business administrator shall be responsible for the submission of all financial and statistical information required by the Board.

E. The Board may interrupt disbursements to charter schools for failure to comply with financial and statistical information required by law or Board rules.

F. Charter schools are not eligible for necessarily existent small schools funding under Section 53A-17a-109(2) and R277-445.

G. Charter schools shall comply with R277-471, Oversight of School Inspections.

R277-470-10. Procedures and Timelines for Schools Chartered by Local Boards to Convert to Board-Chartered Schools.

A. A charter school chartered initially by a local board of education shall notify the local board that it will seek Board approval for a state conversion to its charter with adequate notice for the local board to make staffing decisions.

B. A locally chartered school shall operate successfully for at least nine months prior to applying for conversion to a Board chartered school.

C. A charter school shall submit an application to convert from a locally chartered school to a Board chartered school to the State Charter School Board; the State Charter School Board shall provide an application for schools seeking to convert.

D. The application may require some or all of the following, depending upon the school's longevity, successful operation and existing documentation at the USOE:

(1) current board members and founding members;

(2) audit and financial records:

(a) record of state payments received;

(b) record of contributions received by the school from inception to date;

(c) test scores, including calendar of testing;

(d) current employees: identifying assignments and licensing status, if applicable;

(e) student lists, including home addresses or uniform student identifiers for current students;

(f) school calendar for previous school year and prospective school year;

(g) course offerings, if applicable;

(h) affidavits, signed by all board members providing or certifying (documentation may be required):

(i) the school's nondiscrimination toward students and employees;

(ii) the school's compliance with all state and federal laws;

(iii) that all information on application provided is complete and accurate;

(iv) that school meets/complies with all health and safety codes/laws;

(v) that the school is current with all required policies (personnel, salaries, and fees), including board minutes for the most recent three months;

(vi) that the school is operating consistent with the school's charter;

(vii) the school's Annual Yearly Progress status under No Child Left Behind;

(viii) that there are no outstanding lawsuits or judgments or identifying outstanding lawsuits filed or judgments against the school;

(ix) that the previous local board of education supports or does not support conversion;

E. Applications for conversion from locally chartered to Board chartered shall be considered by the State Charter School Board within 60 days of submission of complete applications, including all required documentation.

F. Following approval by the State Charter School Board, proposals of charter schools seeking conversion approval shall be submitted to the Board for review.

G. If an applicant is not accepted for conversion, the State Charter School Board shall provide adequate information for the charter school to review and revise its proposal and reapply no sooner than nine months from the previous conversion application.

H. The Board shall consider the conversion application within 45 days of State Charter School Board approval, or next possible monthly Board meeting, whichever is sooner.

I. Final approval or denial of conversion is final administrative action by the Board.

R277-470-11. Charter Schools and NCLB Funds.

A. Charter schools that desire to receive NCLB funds shall comply with the requirements of R277-470-11.

B. To obtain its allocation of NCLB formula funds, a charter school shall complete all appropriate sections of the Consolidated Utah Student Achievement Plan (CUSAP) and identify its economically disadvantaged students in the October upload of the Data Clearinghouse

C. If the school does not operate a federal school lunch program, the school:

(1) shall determine the economically disadvantaged status for its students on the basis of criteria no less stringent than those established by the U.S. Department of Agriculture for identifying students who qualify for reduced price lunch for the fiscal year in question; or

(2) may use the Charter School Declaration of Household Income form provided by the USOE for this purpose.

D. A school which does not use the form shall maintain equivalent documentation in its records, which may be subject to audit.

R277-470-12. Charter School Parental Involvement.

A. Charter schools shall encourage and provide opportunities for parental involvement in management decisions at the school level.

B. Charter schools that elect to receive School LAND Trust funds shall have a committee consisting of a majority of parents elected from parents of students currently attending the charter school that is designated to make decisions about the School LAND Trust funds consistent with R277-477-3E.

R277-470-13. Charter School Oversight and Monitoring.

A. The State Charter School Board shall provide direct oversight to the state's board chartered schools, including:

(1) requiring that all charter schools shall be members of and accredited by NAAS;

(2) annual review of student achievement indicators for all schools, disaggregated for various student subgroups;

(3) quarterly review of summary financial records and disbursements and student enrollment;

(4) annual review conducted through site visits or random audits of personnel matters such as employee licensure and evaluations;

(5) regular review of other matters specific to effective charter school operations as determined by the USOE charter school staff; and

(6) audits and investigations of claims of fraud or misuse of public assets or funds; and

(7) requiring that charter schools are in compliance with their charter agreement, as maintained by the USOE. It is presumed that the charter agreement maintained by the USOE is the final, official and complete agreement.

B. The Board retains the right to review or repeal charter school authorization based upon factors that may include:

(1) financial deficiencies or irregularities; or

(2) persistently low student achievement inconsistent with comparable schools; or

(3) failure of the charter school to comply with state law, Board rules, or directives; or

(4) failure to comply with currently approved charter commitments.

C. All charter schools shall amend their charters to include the following statement:

> To the extent that any charter school's charter conflicts with applicable federal or state law or rule, the charter shall be interpreted and enforced to comply with such law or rule and all other provisions of the charter school shall remain in full force and effect.

D. District charter school authorizers shall:

(1) visit a charter school at least once during its first year of operation;

(2) visit a charter school as determined in the review process; and

(3) provide written reports to the charter schools after the visits.

R277-470-14. Approved Charter School Expansion.

A. The following shall apply to requests for expansion for approved and operating charter schools:

(1) The school satisfies all requirements of state law and Board rule.

(2) The approved Charter Agreement shall provide for an expansion consistent with the request; or

(3) The charter school governing board has submitted a formal amendment request to the State Charter School Board that provides documentation that:

(a) the school district in which the charter school is located has been notified of the proposed expansion in the same manner as required in Section 53A-1s-505(1);

(b) the school can accommodate the expansion within existing facilities or that necessary structures will be completed, meeting all requirements of law and Board rule, by the proposed date of operation;

(c) the school currently satisfies all requirements of state law and Board rule including adequate insurance, adequate parental involvement, compliance with all fiscal requirements, and adequate services for all special education students at the school;

(d) students at the school are performing on standardized assessments at an acceptable level with stable scores or scores showing an upward trend;

(e) adequate qualified administrators and staff shall be available to meet the needs of the increased number of students at the time the expansion is implemented.

B. The charter school governing board shall file a request with the State Charter School Board for an expansion no later than April 1 two years prior to the date of the proposed implementation of the expansion.

C. Expansion requests shall be considered by the State Charter School Board as part of the total number of charter school students allowed under 53A-1a-502.5(1).

R277-470-15. Satellite School for Approved Charter Schools.

A. An existing charter school may submit an amendment request to the State Charter School Board for a satellite school no later than April 1 two years prior to the date of the proposed implementation of the satellite if the charter school fully satisfies the following:

(1) The school currently satisfies all requirements of state law and Board rule including adequate insurance, adequate parental involvement, compliance with all fiscal requirements, and adequate services for all special education students at the school;

(2) The school has operated successfully for at least three years;

(3) Students at the school are performing on standardized assessments at an acceptable level with stable scores or scores showing an upward trend;

(4) The proposed satellite school will provide educational services, assessment, and curriculum consistent with the services, assessment, and curriculum currently being offered at the existing charter school;

(5) The school shall be financially stable; there have been no repeat findings of deficiencies on required outside audits for at least two consecutive years;

(6) Adequate qualified administrators, including at least one onsite administrator, and staff are available to meet the needs of the proposed student population at the satellite site school;

(7) The school has had an audit by Charter School Section staff regarding performance of the current charter agreement, contractual agreements, and financial records; and

(8) The school provides any additional information or documentation requested by the Charter School Section staff or the Board.

(9) A satellite school that receives School LAND Trust funds shall have a School LAND Trust committee and satisfy all requirements for School LAND Trust committees consistent with R277-477.

B. The satellite school amendment request shall include the following:

(1) Written certification from the charter school governing board that the charter school currently satisfies all requirements of state law and Board rule;

(2) A detailed explanation of the governance structure for the satellite school, including appointed, elected and parent representation on the governing board, parental involvement and professional staff involvement in implementing the educational plan. The applicant charter school shall include at least two voting parent members representing the parents of students at the satellite school on its governing board; at least one parent shall be elected by parents of students attending the satellite school;

(3) Information detailing the grades to be served, the number of students to be served and general information regarding the physical facilities anticipated to serve the school;

(4) A detailed financial plan for the satellite school;

(5) A signed acknowledgment by the charter school governing board certifying board members' understanding that a physical site for the building must be secured no later than January 1 of the year the satellite school is scheduled to open;

(a) the securing of the building site must be verified by a real estate closing document,

signed lease agreement, or other contract indicating a right of occupancy pursuant to R277-470-7C;

(b) failure to secure a site by the required date may, at the discretion of the State Charter School Board, delay the opening of the satellite school for at least one academic year.

(6) Notification to both the school district in which the charter school is located and the school district of the proposed satellite school location in the same manner as required in Section 53A-1a-505(1);

(7) Written certification that no later than 15 days after securing a building site, the charter school governing board shall notify the school district in which the charter school satellite school is located of the school location, grades served, and anticipated enrollment by grade with a copy of the notification sent to the State Charter School Board; and

(8) A signed acknowledgment by the charter school governing board that the board understands the satellite school shall be held accountable for its own AYP report and disaggregated financial data and reports.

C. The approval of the satellite school by the State Charter School Board requires ratification by the State Board of Education and will expire 24 months following such ratification if a building site has not been secured for the satellite school.

D. A charter school may not apply for more than three satellite locations.

R277-470-16. Transportation.

A. Charter schools are not eligible for to-and-from school transportation funds.

B. A charter school that provides transportation to students shall comply with Utah law Section 53-8-211.

C. A school district may provide transportation for charter school students on a space-available basis on approved routes.

(1) School districts may not incur increased costs or displace eligible students to transport charter school students.

(2) A charter school student shall board and leave the bus only at existing designated stops on approved bus routes or at identified destination schools.

(3) A charter school student shall board and leave the bus at the same stop each day.

(4) Charter school students and their parents who participate in transportation by the school district as guests shall receive notice of applicable district transportation policies and may forfeit with no recourse the privilege of transportation for violation of the policies.

R277-470-17. Charter School Building Subaccount.

A. The Board shall establish or reauthorize a Subaccount Committee consistent with 53A-21-401(6) by July 15 annually.

(1) The Superintendent, on behalf of the Board, may annually accept nominations of individuals who meet the qualifications of 53A-21-401(6)(a) from interested parties, including individuals nominating themselves, before June 1. The Board shall appoint five Subaccount Committee members; the Committee shall consider the Governor's nomination as one of the five appointees and the State Charter School Board's nomination as one of the five appointees.

(2) Per Section 53A-21-401(6)(a), the governor shall nominate one individual who meets the qualifications of 53A-21-401(6)(a) before the Board appoints Committee members.

(3) The State Charter School Board shall nominate one individual who meets the qualifications of Section 53A-21-401(6)(a) before June 1 consistent with R277-470-17A(1).

(4) Subaccount Committee members shall be appointed by the Board to terms that do not exceed three years.

(a) In order to stagger terms, terms of appointed Committee members shall be determined by the Board, upon the effective date of this rule.

(b) Future Committee members shall serve three year terms.

(c) The USOE Charter School Director or designee shall be a non-voting Subaccount Committee member.

B. The Subaccount Committee shall develop and the USOE shall make available a loan application that includes criteria designated under Sections 53A-21-401(6)(b) and (8).

C. The Subaccount Committee shall include other criteria or information from loan applicants that the committee or the Board determines to be necessary and helpful in making final recommendations to the Superintendent, the State Charter School Board and the Board. The Subaccount Committee shall also establish terms and conditions for loan repayment, consistent with Section 53A-21-401(6)(b).

D. Applications for loans shall be accepted on an ongoing basis, subject to eligibility criteria and availability of funding.

(1) To apply for a loan, a charter school shall submit the information requested on the Board's most current loan application form together with the requested supporting documentation.

(2) The application shall include a resolution from the governing board of the charter school that the governing board, at a minimum:

(a) agrees to enter into the loan as provided in the application materials;

(b) agrees to the interest established by the Subaccount Committee and repayment schedule of the loan designated by the Subaccount Committee and the Board;

(c) agrees that loan funds shall only be used consistent with the purposes of Section 53A-21-401(5)(c) and the purpose of the approved charter;

(d) agrees to any and all audits or financial reviews ordered by the Subaccount Committee or the Board;

(e) agrees to any and all inspections or reviews ordered by the Subaccount Committee or the Board;

(f) understands that repayment, including interest, shall be deducted automatically from the charter school's monthly fund transfers, as appropriate.

E. The Subaccount Committee shall not make recommendations to the Superintendent, the State Charter School Board or the Board until the committee receives complete and satisfactory information from the applicant and the Subaccount Committee has reached a majority recommendation.

F. The submission of intentionally false, incomplete or inaccurate information from a loan applicant shall result in immediate cancellation of any previous loan(s), the requirement for immediate repayment of any funds received, denial of subsequent applications for a 12 month period from the date of the initial application, and possible Board revocation of a charter.

G. The Superintendent, in consultation with USOE and State Charter Board staff, shall

review recommendations from the Subaccount Committee and make final recommendations to the Board.

H. The Superintendent shall submit final recommendations from the Subaccount Committee to the Board no more than 60 days after submission of all information and materials from the loan applicant to the Subaccount Committee.

I. The Board may request additional information from loan applicants or a reconsideration of a recommendation by the Subaccount Committee.

J. The Board's approval or denial of loan applications constitutes the final administrative action in the charter school building revolving loan process.

R277-470-18. Appeals Criteria and Procedures.

A. Only an operating charter school, a charter school that has been recommended by the State Charter School Board to the Board, or a charter school applicant that has met State Charter School Board requirements for review by the full State Charter School Board, may appeal State Charter School Board administrative decisions or recommendations to the Board.

B. Only the following State Charter School Board administrative decisions or recommendations may be appealed to the Board:

(1) recommendation for termination of a charter;

(2) recommendation for denial of expansions or satellite schools;

(3) recommendation for denial of local charter board proposed changes to approved charters;

(4) recommendation for denial or withholding of funds from local charter boards; and

(5) recommendation for denial of a charter.

C. No other issues may be appealed.

D. Appeals procedures and timelines

(1) The State Charter School Board shall, upon taking any of the administrative actions under R277-470-17A:

(a) provide written notice of denial to the charter school or approved charter school;

(b) provide written notice of appeal rights and timelines to the local charter board chair or authorized agent; and

(c) post information about the appeals process on the State Charter School Board website and provide training to prospective charter school board members and staff regarding the appeals procedure.

(2) A local charter school board chair or authorized agent (appellant) may submit a written appeal to the State Superintendent within 14 calendar days of the State Charter School Board administrative action or recommendation.

(3) The Superintendent shall, in consultation with the Board chair, designate three to five Board members and a hearing officer, who is not a Board member, to act as an objective hearing panel.

(4) The hearing officer, in consultation with the Superintendent, shall set a hearing date and provide notice to all parties, including the State Charter School Board staff and State Charter School Board.

(5) The Hearing shall be held no more than 45 days following receipt of the written appeal.

(6) The hearing officer shall establish procedures that provide fairness for all parties, which may include:

(a) a request for parties to provide a written explanation of the appeal and related information and evidence;

(b) a determination of time limits and scope of testimony and witnesses;

(c) a determination for recording the hearing;

(d) preliminary decisions about evidence; and

(e) decisions about representation of parties.

(7) The hearing panel shall make written findings and provide an appeal recommendation to the Board no more than 10 calendar days following the hearing.

(8) The Board shall take action on the hearing report findings at the next regularly scheduled Board meeting.

(9) The recommendation of the State Charter School Board shall be in place pending the conclusion of the appeals process, unless the Superintendent in her sole discretion, determines that the State Charter School Board's recommendation or failure to act presents a serious threat to students or an imminent threat to public property or resources.

(10) All parties shall work to schedule and conclude hearings as fairly and expeditiously as possible.

(11) The Board's acceptance or rejection of the hearing report is the final administrative action on the issue.

R277-470-19. Miscellaneous Provisions.

A. The State Charter School Board and the Board shall, in the recommendation and approval process, consider and may give priority to charter school applications that target underserved student populations, among traditional public schools and operating charter schools.

(1) Underserved student populations may include low income students, students with disabilities, English Language Learners (ELL), or students in remote areas of the state who have limited access to the full range of academic courses;

(2) Priority may also be given to charter school applicants for proposed schools that do not have other charter schools within the school district; and

(3) To be given priority, the charter school application and proposed employee and site information shall support the school's designated focus.

B. The State Charter School Board shall provide a form on its website for individuals to report threats to health, safety, or welfare of students consistent with 53A-1a-510(3).

(1) Individuals making reports shall be directed to report suspected criminal activity to local law enforcement and suspected child abuse to local law enforcement or the Division of Child and Family Services consistent with 62A-4a-403 and 53A-11-605(4).

(2) Additionally, Individuals may report threats to the health, safety, or welfare of students to the local charter board.

(a) reports shall be made in writing;

(b) reports shall be timely;

(c) anonymous reports shall not be reviewed further.

(3) Local charter boards shall verify that potential criminal activity or suspected child

abuse has been reported consistent with state law and this rule.

(4) Local charter boards shall act promptly to investigate disciplinary action, if appropriate, against students who may be participants in threatening activities or take appropriate and reasonable action to protect students or both.

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Notice of Continuation: October 9, 2008
Authorizing, and Implemented or Interpreted Law: Art X, Sec 3; 53A-1a-515; 53A-1a-505; 53A-1a-513; 53A-1a-502; 53A-1-401(3); 53A-1a-510; 53A-1a-509; 41-6-115; 53A-1a-506; 53A-21-401; 53A-1a-519; 53A-1a-520; 53A-1a-501.5; 53A-1-301; 53A-1a-502.5; 53A-1a-506.5; 53A-12-103; 53A-11-504; 53A-11-903; 53A-11-904; 53A-1a-511; 53A-1-302 and 303; 53A-17a;109; 53-8-211; 62A-4a-403; 53A-11-605

APPENDIX 41

R277. Education, Administration.
R277-513. Dual Certification.
R277-513-1. Definitions.

A. "Basic Certificate" means the initial certificate issued by the Board permitting the holder to be employed as an educator in the public schools.

B. "Board" means the Utah State Board of Education.

C. "Core Curriculum" means minimum academic standards as established by the Utah State Board of Education which shall be mastered by all students K-12 as a requisite for graduation from Utah's secondary schools.

D. "Endorsement" means a specialty field or area listed on a certificate which indicates specific qualification of the holder.

E. "ESL" means English as a Second Language--an instructional method whereby an instructor teaches students of limited English-speaking ability how to use standard English in order to become functional in the world of work or in their daily activities.

F. "Standard Certificate" means a certificate issued by the Board after a holder has demonstrated teaching competency under the Basic Certificate.

R277-513-2. Authority and Purpose.

A. This rule is authorized under Article X, Section 3 of the Utah Constitution which vests general control and supervision of public education in the Board, Sections 53A-6-101(1) and (2), U.C.A. 1953, which permit the Board to issue certificates for educators, and Section 53A-1-401(3), U.C.A. 1953, which allows the Board to adopt rules in accordance with its responsibilities.

B. The purpose of this rule is to specify the procedure whereby a teacher who holds one level of teaching certificate may qualify for a certificate on another level or whereby a teacher may be certified in a specific subject area.

R277-513-3. Dual Certification Levels.

A. This section applies to all of the following certification levels:

(1) elementary to secondary;

(2) secondary to elementary;

(3) elementary to special education;

(4) special education to elementary.

B. A teacher who holds a Basic or Standard Certificate on the Early Childhood, Elementary, Secondary or Special Education level, may qualify for a certificate on another level by completing an approved program at the new level. Specific certification requirements for that level included in the Standards for Early Childhood, Elementary, Secondary, Preschool Special Education, Special Education and Communications Disorders Certificates must be met.

C. Competencies developed as a result of completion of an approved program on one level of training which are also relevant and substantially equivalent to the competencies required on the other level shall be evaluated for the purpose of waiving comparable course and experience requirements.

D. Applications for dual certification from out-of-state candidates shall be evaluated according to the requirements of the minimum approved program of a Utah teacher education institution. Recommendation for certification from an institution in Utah is not required unless the applicant needs additional preparation and completes that training at a Utah institution.

E. Two years of successful teaching experience may be accepted in lieu of all or any part of the student teaching requirement.

F. Applicants for a Basic Elementary Certificate with a Basic Early Childhood Education Certificate must either have appropriate course work and laboratory experience or demonstrate the competencies prescribed for prospective intermediate grade teachers that provide greater depth in academic subjects to be taught.

R277-513-4. Dual Certification of Secondary Music Teachers.

A. Teachers holding or eligible to hold Basic or Standard secondary certification with a music endorsement may qualify to teach vocal or instrumental music in the elementary schools of the state by demonstrating the competency to:

(1) express a basic philosophy regarding appreciation and understanding of music at the elementary school level;

(2) identify the physical traits, mental traits, social-emotional traits, and needs relative to the growth and development of elementary school children;

(3) describe the characteristics of the child's voice at the kindergarten, primary, and intermediate levels relative to tone production and range;

(4) identify the physical characteristics which will influence the child's ability to play various musical instruments;

(5) identify and interpret the concepts of rhythm, melody, harmony, form, and expression as they appear in musical notation at the elementary school level;

(6) perform basic movement exercises and demonstrate coordination skills as they relate to rhythm, form, and melody;

(7) perform on basic classroom musical instruments such as the autoharp, recorder, tone bells, and ukulele;

(8) select and perform a repertoire of music literature appropriate to children at primary and intermediate grade levels including songs, recordings of master works, and orchestra and band music appropriate for the elementary school.

B. Applicants shall complete a successful elementary school clinical experience that demonstrates:

(1) management techniques, including scheduling;

(2) teaching techniques;

(3) grading procedures;

(4) curriculum planning;

(5) extra curricular activity planning; and

(6) lesson planning.

R277-513-5. Dual Certification of Secondary Physical Education Teachers.

Teachers holding secondary certification with a physical education endorsement may qualify to teach physical education in the elementary schools of the state by demonstrating the

competency to:

A. Perform fundamental skills and body movements in games, gymnastics, and dance that would be encountered in an elementary school physical education curriculum.

B. Analyze skills and correct movement errors.

C. Actively participate in developmental skills pertinent to the education of elementary school-age children.

D. Articulate the importance of physical fitness for children and the activities that contribute to fitness.

E. Implement correct principles of teaching physical education to children.

F. Plan lessons, units, and program sequences for young children.

G. Select teaching methods appropriate for the teacher-learner activities and learning environment.

H. Organize a class for most effective learning.

I. Identify the growth and sequential development of movement patterns in children.

J. Adapt physical education activities for atypical children.

K. Design and implement a program of physical fitness for children.

L. Express a philosophy of physical education for children.

M. Recognize potentially hazardous situations and propose preventative measures;

N. Report the status and progress of skill development.

R277-513-6. Dual Certification of Secondary Art Teachers.

A. Teachers holding or eligible to hold secondary certification with an art endorsement may qualify to teach art in the elementary schools of the state by demonstrating the competency to:

(1) express a philosophy of appropriate visual arts instruction at the elementary school level;

(2) identify the physical, mental, and social-emotional traits and needs of elementary school children;

(3) use art media appropriate for elementary schools;

(4) implement the State core required for the visual arts, in grades kindergarten through six in an appropriate sequence;

(5) integrate the arts, including art, music, dance, and drama, as well as the visual arts, into other areas of the curriculum;

(6) use art prints and other visual resources at all grade level to assist elementary students in understanding and implementing basic art concepts;

(7) appropriately display and critique elementary student art work;

(8) use good classroom management techniques for media and materials used in elementary art activities;

(9) assist other elementary teachers to understand and implement basic art concepts.

B. Applicants shall complete a successful elementary school clinical experience that demonstrates competency in:

(1) management techniques;

(2) teaching techniques;

(3) lesson planning and scheduling;

(4) grading procedures;
(5) curriculum planning;
(6) extra curricular activity planning.

R277-513-7. Dual Certification of ESL Teachers.

A. Teachers holding or eligible to hold Basic or Standard secondary certification with an ESL endorsement may qualify to teach ESL in the elementary schools of the state by demonstrating the competency to:

(1) express a philosophy of appropriate ESL instruction at the elementary school level;

(2) identify the physical, mental, and social-emotional traits and needs of elementary school children;

(3) select and use ESL media and procedures appropriate for elementary schools;

(4) implement the State Core required for language arts (grades K-6) in an appropriate sequence for limited English-proficient students;

(5) integrate ESL into other areas of the curriculum; and

(6) assist other elementary teachers to understand and implement appropriate procedures for mainstreaming limited English-proficient students into other areas of the curriculum.

B. Candidates shall complete a successful elementary school clinical experience that demonstrates competency in:

(1) management techniques;
(2) teaching techniques;
(3) lesson planning (including scheduling);
(4) grading procedures;
(5) curriculum planning; and
(6) extracurricular activity planning.

KEY: professional competency, school personnel, teacher certification
Date of Enactment or Last Substantive Amendment: 1991
Notice of Continuation: May 1, 2006
Authorizing, and Implemented or Interpreted Law: Art X Sec 3; 53A-6-101(1) and (2); 53A-1-401(3)

APPENDIX 42

53A-21-401. Capital Outlay Loan Program -- School Building Revolving Account -- Access to the account.

(1) There is created:

(a) the "Capital Outlay Loan Program" to provide:

(i) short-term help to school districts to meet district needs for school building construction and renovation; and

(ii) assistance to charter schools to meet school building construction and renovation needs; and

(b) a nonlapsing "School Building Revolving Account" administered within the Uniform School Fund by the state superintendent of public instruction in accordance with rules adopted by the State Board of Education.

(2) The State Board of Education may not allocate funds from the School Building Revolving Account that exceed a school district's bonding limit minus its outstanding bonds.

(3) In order to receive monies from the account, a school district shall:

(a) levy a combined capital levy rate of at least .0024;

(b) contract with the state superintendent of public instruction to repay the monies, with interest at a rate established by the state superintendent, within five years of receipt, using future state capital outlay allocations, local revenues, or both;

(c) levy sufficient ad valorem taxes under Section 11-14-310 to guarantee annual loan repayments, unless the state superintendent of public instruction alters the payment schedule to improve a hardship situation; and

(d) meet any other condition established by the State Board of Education pertinent to the loan.

(4) (a) The state superintendent shall establish a committee, including representatives from state and local education entities, to:

(i) review requests by school districts for loans under this section; and

(ii) make recommendations regarding approval or disapproval of the loan applications to the state superintendent.

(b) If the committee recommends approval of a loan application under Subsection (4)(a)(ii), the committee's recommendation shall include:

(i) the recommended amount of the loan;

(ii) the payback schedule; and

(iii) the interest rate to be charged.

(5) (a) There is established within the School Building Revolving Account the Charter School Building Subaccount administered by the State Board of Education, in consultation with the State Charter School Board, in accordance with rules adopted by the State Board of Education.

(b) The Charter School Building Subaccount shall consist of:

(i) money appropriated to the subaccount by the Legislature;

(ii) money received from the repayment of loans made from the subaccount; and

(iii) interest earned on monies in the subaccount.

(c) The state superintendent of public instruction shall make loans to charter schools

from the Charter School Building Subaccount to pay for the costs of:

(i) planning expenses;

(ii) constructing or renovating charter school buildings;

(iii) equipment and supplies; or

(iv) other start-up or expansion expenses.

(d) Loans to new charter schools or charter schools with urgent facility needs may be given priority.

(6) (a) The State Board of Education shall establish a committee, which shall include individuals who have expertise or experience in finance, real estate, and charter school administration, one of whom shall be nominated by the governor to:

(i) review requests by charter schools for loans under this section; and

(ii) make recommendations regarding approval or disapproval of the loan applications to the State Charter School Board and the State Board of Education.

(b) If the committee recommends approval of a loan application under Subsection (6)(a)(ii), the committee's recommendation shall include:

(i) the recommended amount of the loan;

(ii) the payback schedule; and

(iii) the interest rate to be charged.

(c) The committee members may not:

(i) be a relative, as defined in Section 53A-1a-518, of a loan applicant; or

(ii) have a pecuniary interest, directly or indirectly, with a loan applicant or any person or entity that contracts with a loan applicant.

(7) The State Board of Education, in consultation with the State Charter School Board, shall approve all loans to a charter school under this section.

(8) The term of a loan to a charter school under this section may not exceed five years.

(9) The State Board of Education may not approve loans to charter schools under this section that exceed a total of $2,000,000 in any year.

APPENDIX 43

53A-1a-519. Charter school students' participation in extracurricular activities at other public schools.

(1) A charter school student is eligible to participate in extracurricular activities not offered by the student's charter school at:

(a) the school within whose attendance boundaries the student's custodial parent or legal guardian resides; or

(b) the public school from which the student withdrew for the purpose of attending a charter school.

(2) A school other than a school described in Subsection (1)(a) or (b) may allow a charter school student to participate in extracurricular activities other than:

(a) interschool competitions of athletic teams sponsored and supported by a public school; or

(b) interschool contests or competitions for music, drama, or forensic groups or teams sponsored and supported by a public school.

(3) A charter school student is eligible for extracurricular activities at a public school consistent with eligibility standards as applied to full-time students of the public school.

(4) A school district or public school may not impose additional requirements on a charter school student to participate in extracurricular activities that are not imposed on full-time students of the public school.

(5) (a) The State Board of Education shall make rules establishing fees for charter school students' participation in extracurricular activities at school district schools.

(b) The rules shall provide that:

(i) charter school students pay the same fees as other students to participate in extracurricular activities;

(ii) charter school students are eligible for fee waivers pursuant to Section 53A-12-103;

(iii) for each charter school student who participates in an extracurricular activity at a school district school, the charter school shall pay a share of the school district's costs for the extracurricular activity; and

(iv) a charter school's share of the costs of an extracurricular activity shall reflect state and local tax revenues expended, except capital facilities expenditures, for an extracurricular activity in a school district or school divided by total student enrollment of the school district or school.

(c) In determining a charter school's share of the costs of an extracurricular activity under Subsections (5)(b)(iii) and (iv), the State Board of Education may establish uniform fees statewide based on average costs statewide or average costs within a sample of school districts.

(6) When selection to participate in an extracurricular activity at a public school is made on a competitive basis, a charter school student is eligible to try out for and participate in the activity as provided in this section.

APPENDIX 44

53A-1a-511. Waivers from state board rules -- Application of statutes and rules to charter schools.

(1) A charter school shall operate in accordance with its charter and is subject to Title 53A, State System of Public Education, and other state laws applicable to public schools, except as otherwise provided in this part.

(2) (a) A charter school or any other public school or school district may apply to the State Board of Education for a waiver of any state board rule that inhibits or hinders the school or the school district from accomplishing its mission or educational goals set out in its strategic plan or charter.

(b) The state board may grant the waiver, unless:

(i) the waiver would cause the school district or the school to be in violation of state or federal law; or

(ii) the waiver would threaten the health, safety, or welfare of students in the district or at the school.

(c) If the State Board of Education denies the waiver, the reason for the denial shall be provided in writing to the waiver applicant.

(3) (a) Except as provided in Subsection (3)(b), State Board of Education rules governing the following do not apply to a charter school:

(i) school libraries;

(ii) required school administrative and supervisory services; and

(iii) required expenditures for instructional supplies.

(b) A charter school shall comply with rules implementing statutes that prescribe how state appropriations may be spent.

(4) The following provisions of Title 53A, State System of Public Education, and rules adopted under those provisions, do not apply to a charter school:

(a) Sections 53A-1a-108 and 53A-1a-108.5, requiring the establishment of a school community council and school improvement plan;

(b) Sections 53A-3-413 and 53A-3-414, pertaining to the use of school buildings as civic centers;

(c) Section 53A-3-420, requiring the use of activity disclosure statements;

(d) Section 53A-12-207, requiring notification of intent to dispose of textbooks;

(e) Section 53A-13-107, requiring annual presentations on adoption;

(f) Chapter 19, Part 1, Fiscal Procedures, pertaining to fiscal procedures of school districts and local school boards; and

(g) Section 53A-14-107, requiring an independent evaluation of instructional materials.

(5) For the purposes of Title 63G, Chapter 6, Utah Procurement Code, a charter school shall be considered a local public procurement unit.

(6) Each charter school shall be subject to:

(a) Title 52, Chapter 4, Open and Public Meetings Act; and

(b) Title 63G, Chapter 2, Government Records Access and Management Act.

(7) (a) The State Charter School Board shall, in concert with the charter schools, study existing state law and administrative rules for the purpose of determining from which laws and rules charter schools should be exempt.

(b) (i) The State Charter School Board shall present recommendations for exemption to the State Board of Education for consideration.

(ii) The State Board of Education shall consider the recommendations of the State Charter School Board and respond within 60 days.

APPENDIX 45

53A-1-402. Board to establish minimum standards for public schools.

(1) The State Board of Education shall establish rules and minimum standards for the public schools that are consistent with this title, including rules and minimum standards governing the following:

(a) (i) the qualification and certification of educators and ancillary personnel who provide direct student services;

(ii) required school administrative and supervisory services; and

(iii) the evaluation of instructional personnel;

(b) (i) access to programs;

(ii) attendance;

(iii) competency levels;

(iv) graduation requirements; and

(v) discipline and control;

(c) (i) school accreditation;

(ii) the academic year;

(iii) alternative and pilot programs;

(iv) curriculum and instruction requirements;

(v) school libraries; and

(vi) services to:

(A) persons with a disability as defined by and covered under:

(I) the Americans with Disabilities Act of 1990, 42 U.S.C. 12102;

(II) the Rehabilitation Act of 1973, 29 U.S.C. 705(20)(A); and

(III) the Individuals with Disabilities Education Act, 20 U.S.C. 1401(3); and

(B) other special groups;

(d) (i) state reimbursed bus routes;

(ii) bus safety and operational requirements; and

(iii) other transportation needs; and

(e) (i) school productivity and cost effectiveness measures;

(ii) federal programs;

(iii) school budget formats; and

(iv) financial, statistical, and student accounting requirements.

(2) The board shall determine if:

(a) the minimum standards have been met; and

(b) required reports are properly submitted.

(3) The board may apply for, receive, administer, and distribute to eligible applicants funds made available through programs of the federal government.

(4) (a) The Utah College of Applied Technology shall provide competency-based career and technical education courses that fulfill high school graduation requirements, as requested and authorized by the State Board of Education.

(b) A school district may grant a high school diploma to a student participating in courses described under Subsection (4)(a) that are provided by the Utah College of Applied Technology.

APPENDIX 46

53A-1-403.5. Education of persons in custody of the Utah Department of Corrections -- Contracting for services -- Recidivism reduction plan -- Collaboration among state agencies -- Annual report.

(1) The State Board of Education, the State Board of Regents, and the Utah Department of Corrections, subject to legislative appropriation, are responsible for the education of persons in the custody of the Utah Department of Corrections.

(2) (a) To fulfill the responsibility under Subsection (1), the State Board of Education and the Utah Department of Corrections shall, where feasible, contract with appropriate private or public agencies to provide educational and related administrative services. Contracts for postsecondary education and training shall be under Subsection (2)(b).

(b) (i) The contract under Subsection (2)(a) to provide postsecondary education and training shall be with a community college if the correctional facility is located within the service region of a community college, except under Subsection (2)(b)(ii).

(ii) If the community college under Subsection (2)(b)(i) declines to provide the education and training or cannot meet reasonable contractual terms for providing the education and training as specified by the Utah Department of Corrections, postsecondary education and training under Subsection (2)(a) may be procured through other appropriate private or public agencies.

(3) (a) As its corrections education program, the State Board of Education, the State Board of Regents, and the Utah Department of Corrections shall develop and implement a recidivism reduction plan, including the following components:

(i) inmate assessment;

(ii) cognitive problem-solving skills;

(iii) basic literacy skills;

(iv) career skills;

(v) job placement;

(vi) postrelease tracking and support;

(vii) research and evaluation;

(viii) family involvement and support; and

(ix) multiagency collaboration.

(b) The plan shall be developed and implemented through the State Office of Education, the State Board of Regents, and the Utah Department of Corrections in collaboration with the following entities:

(i) the Utah College of Applied Technology Board of Trustees;

(ii) local boards of education;

(iii) Department of Workforce Services;

(iv) Department of Human Services;

(v) Board of Pardons and Parole;

(vi) State Office of Rehabilitation; and

(vii) the Governor's Office.

(4) The department shall make a report to the Education and Law Enforcement and Criminal Justice Interim Committees on the recidivism reduction plan before October 1, 2010.

APPENDIX 47

53A-15-202. Powers of the board.

The State Board of Education:

(1) shall establish minimum standards for career and technical education programs in the public education system;

(2) may apply for, receive, administer, and distribute funds made available through programs of federal and state governments to promote and aid career and technical education;

(3) shall cooperate with federal and state governments to administer programs which promote and maintain career and technical education;

(4) shall cooperate with the Utah College of Applied Technology, Salt Lake Community College's School of Applied Technology, Snow College, and the College of Eastern Utah to ensure that students in the public education system have access to career and technical education at Utah College of Applied Technology campuses, Salt Lake Community College's School of Applied Technology, Snow College, and the College of Eastern Utah;

(5) shall require that before a minor student may participate in clinical experiences as part of a health care occupation program at a high school or other institution to which the student has been referred, the student's parent or legal guardian has:

(a) been first given written notice through appropriate disclosure when registering and prior to participation that the program contains a clinical experience segment in which the student will observe and perform specific health care procedures that may include personal care, patient bathing, and bathroom assistance; and

(b) provided specific written consent for the student's participation in the program and clinical experience; and

(6) shall, after consulting with school districts, charter schools, the Utah College of Applied Technology, Salt Lake Community College's School of Applied Technology, Snow College, and the College of Eastern Utah, prepare and submit an annual report to the governor and to the Legislature's Education Interim Committee by October 31 of each year detailing:

(a) how the career and technical education needs of secondary students are being met; and

(b) what access secondary students have to programs offered:

(i) at applied technology colleges; and

(ii) within the regions served by Salt Lake Community College's School of Applied Technology, Snow College, and the College of Eastern Utah.

APPENDIX 48

53A-15-401. State Board of Education to supervise.

(1) The general control and supervision, but not the direct management, of adult education is vested in the State Board of Education.

(2) The board has the following powers:

(a) makes and enforces rules to organize, conduct, and supervise adult education;

(b) appoints state staff for the adult education program, establishes their duties, and fixes their compensation;

(c) determines the qualifications of, and issues teaching certificates to, persons employed to give adult education instruction; and

(d) determines the basis of apportionment and distributes funds made available for adult education.

(3) (a) The State Board of Education shall make rules providing for the establishment of fees which shall be imposed by local school boards for participation in adult education programs.

(b) A fee structure for adult education shall take into account the ability of a Utah resident who participates in adult education to pay the fees.

(c) Sections 53A-12-103 and 53A-12-104 pertaining to fees and fee waivers in secondary schools do not apply to adult education.

APPENDIX 49

53A-17a-120. Appropriation for accelerated learning programs.

(1) Money appropriated to the State Board of Education in Section 53A-17a-104 for accelerated learning programs shall be allocated to local school boards and charter schools for the following programs:

(a) programs in grades 1-12 for the gifted and talented;

(b) advanced placement; and

(c) International Baccalaureate.

(2) (a) Districts shall spend monies for these programs according to rules established by the State Board of Education in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

(b) The State Board of Education shall develop uniform and consistent policies for school districts to follow in utilizing advanced placement monies.

APPENDIX 50

53A-15-1001. Title.

This part is known as the "Electronic High School Act."

Budget Part II: Project-Level Budgets

Reform Area One Project One: Adoption and Implementation of the New Common Core Standards in Reading/Language Arts and in Mathematics

Budget Part II: Project-Level Budget Table

Project Name: Adoption and Implementation of the New Common Core Standards in Reading/Language Arts and in Mathematics

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area One: **Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace and Competitive Area STEM**

Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$415,870	$380,710	$380,710	$380,710	$1,558,000
2. Fringe Benefits	$-	$-	$-	$-	$-
3. Travel	$10400	$10,400	$10,400	$10,400	$41,600
4. Equipment	$16,000	$-	$-	$-	$16,000
5. Supplies	$88,063	$88,063	$88,062	$88,062	$352,250
6. Contractual	$50,000	$50,000	$50,000	$50,000	$200,000
7. Training Stipends	$994,000	$994,000	$200,000	$200,000	$2,388,000
8. Other					$-
9. Total Direct Costs (lines 1-8)	$1,574,333	$1,523,173	$729,172	$729,172	$4,555,850
10. Indirect Costs*	$56,142	$51,396	$51,396	$51,396	$210,330
11.Funding for Involved LEAs					$-
12. Supplemental Funding for Participating LEAs	$378,094	$378,094	$378,094	$378,094	$1,512,377
13. Total Costs (lines 9-12)	$2,008,570	$1,952,663	$1,158,662	$1,158,662	**$6,278,557**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

1

Reform Area One Project One: Adoption and Implementation of the New Common Core Standards in Reading/Language Arts and in Mathematics

BUDGET NARRATIVE

1) Personnel

Personnel (Fringe benefits have not been separated out from teacher stipends.)	% FTE	Base Salary	Total
A1: Stipends for teachers from across the state who are considered to be Master Teachers will review and map the Common Core to the current Utah Core Curriculum.		$200/day @128 teachers x 5 days	$128,000
		Total	**$128,000**
A2: Stipends for 1430 Language Arts teachers	100%	$500/teacher @1430 teachers	$715,000
A2: Stipends for 1430 Mathematics teachers	100%	$500/teacher @1430 teachers	$715,000
		Total	**$1,430,000**
Total			**$1,558,000**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel **$41,600**

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $50.		
Activity 1. None		
Activity 2. Language Arts 15 trips for committee work x 250 each = 3750 Mileage and instate travel for Coordinator = 1450 Total = 5,200/year x four years		20,800
Activity 3. Mathematics 15 trips for committee work x 250 each = 3750 Mileage and instate travel for Coordinator = 1450 Total = 5200/year x four years		20,800

4) Equipment

Equipment:	Cost of	Item Description	Total

	Item		
Activity 2. Language Arts/Mathematics Two (2) each of the following for professional development use.	$2,586	Laptop	$5,172
	$535	Monitor	$1,070
	$877	Computer Accessories	$1,754
	$668	Software	$1,336
	$1,063	Printer	$2,126
	$2,271	Projector	$4,542
		Total	**$16,000**

5) Supplies

Activity 1. Supplies and materials for core alignment	3,250
Activity 1. Supplies and materials for Language Arts training in Core for 1650 superintendents/directors/teach representatives @ $90/person	148,500
Activity 1. Supplies and materials for Mathematics training in Core for 1650 superintendents/directors/teach representatives @ $90/person	148,500
Activity 2. Supplies and materials for professional development (10,000/year)	26,000
Activity 3. Supplies and materials for professional development (10,000/year)	26,000
Total	**$352,250**

6) Contractual

The State will follow the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36. The estimated cost for contractual services over the 4 years will be **$200,000.** The State plans to contact with experts to assist with implementation and delivery of the Reading/Language Arts and Mathematics CC. Regional trainings and conferences will be held statewide to ensure proper delivery and implementation of the CC Standards.

Activity 1. None	
Activity 2. 25,000/year for four years	100,000
Activity 3. 25,000/year for four years	100,000
Total	**$200,000**

7) Training Stipends

The purpose of the training:
The first purpose of this long-term training is to create master Reading/Language Arts coaches in each of Utah's 994 schools. Each coach will receive $1,200 over the 4 year cycle to provide teachers in their school with effective tools and best practices to successfully implement the Common Core. Each coach will monitor teacher progress and provide the SEA documentation.

The second purpose of this long-term training is to create master Mathematics coaches in each of Utah's 994 schools. Each coach will receive $1,200 over the 4 year cycle to provide teachers in their school with effective tools and best practices to successfully implement the CC. Each coach will monitor teacher progress and provide the SEA documentation.

Activity 2. Professional Development on new Common Core in Language Arts Year 1 497,000 Year 2 497,000 Year 3 100,000 Year 4 100,000	1,194,000
Activity 3. Professional Development on new Common Core in Mathematics Year 1 497,000 Year 2 497,000 Year 3 100,000 Year 4 100,000	1,194,000
Total	**$2,388,000**

8) Other

9) Total Direct Costs
See Budget Table

10) Indirect Costs
See Budget Table

11) Funding for Involved LEAs
None

12) Supplemental Funding for Participating LEAs
Capacity Building Grants of **$1,512,377**

Reform Area One Project Two: Using the Common Core Standards to Ensure Literacy for all Utah Children

Budget Part II: Project-Level Budget Table

Project Name: Using the Common Core Standards to Ensure Literacy for all Utah Children
Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area One**: Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace**
Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.
(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$306,882	$349,396	$349,396	$321.230	$1,326,904
2. Fringe Benefits	$22,882	$22,882	$22,882	$22,882	$91,527
3. Travel	$60,989	$50,608	$50,608	$44,655	$206,860
4. Equipment					$0
5. Supplies	$15,621	$39,936	$15,947	$10,740	$82,244
6. Contractual	$123,252	$111,091	$95,434	$79,434	$409,211
7. Training Stipends		$25,000	$25,000	$25,000	$75,000
8. Other					$-
9. Total Direct Costs (lines 1-8)	$529,626	$598,913	$559,267	$503,941	$2,191,746
10. Indirect Costs*	$44,518	$50,257	$50,257	$46,455	$191,488
11.Funding for Involved LEAs					$-
12. Supplemental Funding for Participating LEAs	$137,240	$259,230	$259,230	$259,230	$914,930
13. Total Costs (lines 9-12)	$711,384	$908,400	$868,754	$809,626	**$3,298,164**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area One Project Two: Using the Common Core Standards to Ensure Literacy for all Utah Children

BUDGET NARRATIVE

1) Personnel **$1,326,904**

Amount costs in the right column are the four-year total. Cost of living increases are reflected as appropriate. All Indirect Costs are computed at 13.5%.

Personnel (Fringe benefits have not been separated out from teacher stipends.)			
Activity 1. Teacher stipends to write and submit lesson plans to the web site; lesson plans will include differentiation for underserved populations	$250/ Lesson	1,257 Lessons	Total $: 314,250
Activity 2. Six working groups (math, science, social studies, healthy lifestyles, fine arts, and CTE courses), 15 members each (90 total) to write a literacy strand to embed K-12 into the six content areas listed; groups will meet 10 days in year 1, 6 days in year 2, and 2 days in years 3 and 4 Project Director Stipends for professional development, # of stipends: Year 1, 80; Year 2, 320; Year 3, 320; Year 4, 161	5 days in summer @ $250/day .15 FTE $250/day	5 days in school year @ $100 for sub.	333,000 52,004 220,250
Activity 3. None			
Activity 4. Three working committees will be formed: 1. Adolescent Literacy Advisory Committee 2. Adolescent Literacy Standards Development Committee 3. Adolescent Literacy Course Development Committee The effect of their combined work will shape the direction of Adolescent Literacy in Utah for years to come. Total personnel costs for all three groups: Teacher stipends and substitute costs for professional development	440 Stipends: 480 Sub payments 658 Stipends 549 Sub payments	$250 each $100 each $250 each $100 each	110,000 48,000 164,500 54,900

Activity 5. Stipends for 30 participants/year x 4 years for Annual Family Literacy Center Workshop.	$250 each		30,000

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel

Travel	**$206,860**
Activity 1. Travel costs for advisory committee, to meet four times per year; 8 hotel rooms and mileage	6,580
Activity 2. Mileage costs for members of working groups; estimate that one third of those members (30 members at 20 days) will need mileage paid, average at 91 miles per trip, $.50/mile) Hotels for working group members (60 rooms @ $90) Content-Area Literacy national convention, 8 people (2 per working group) at 3,000 each.	27,300 5,400 24,000
Activity 3. None	
Activity 4. Mileage for committee members, professional development participants, and members of the Secondary Principals Literacy Institute. Hotel costs for committee members, professional development participants, and members of the Secondary Principals Literacy Institute. Out of state training (conventions and workshops, 4/year @ 3,000 each) Per diem costs (4 years x 100/year x $36/day)	30,180 46,000 48,000 14,400
Activity 5. Mileage for participants in Family Literacy Center Annual Workshop (10 participants/year x 250 miles x $.50/mile x 4 years)	5,000

4) Equipment: None

5) Supplies **$82,244**

The basis for cost estimates or computations is the Utah State Materials Bid.

Supplies		
Activity 2. Content Area Literacy texts and teacher books for working group members; 90 people at $50 per person Office supplies and materials for members of the working groups @ 975/year		4,500 3,900
Activity 3. Printing of training materials for Professional Development of trainers and teachers Purchase of texts for Professional Development Office supplies and related materials@$975/year		9,750 3,900 3,900
Activity 4. Printing of training materials for Professional Development (1000 participants x $10) Purchase of texts/books/materials for Professional Development (1,000 x $30) Office supplies and related materials@975/year		10,000 3,000 3,900
Activity 5. Training materials for Annual Family Literacy Center Workshops (approx. $32/participant x 30 participant x 4 years) Purchase of current ELL software for each site (purchase will be made when software is adequately evaluate—could be in year 1 or year 2)		3,840 8,554

6) Contractual

Contractual		**$409,211**
Activity 1. Programming Meeting space and necessary meals		 25,000 3,027
Activity 2. Programming Meeting space and meals for working group meetings ($11/lunch for 1800 meals) National trainers, 6 days @ 5,000 per day		 25,000 19,800 30,000
Activity 3. National trainers, 6 days @ 5,000 per day		 30,000
Activity 4. Meeting space and meals for committees, professional development, Secondary Principals Literacy Institute, and Annual State Adolescent Literacy Convention (1,736 x $11 x 4 years) Consultants for committees, standards development, Secondary Principals Literacy Institute, and Annual State Adolescent Literacy Conference (6/year @2,500 and 6/year @ 5,000 x 4 years)		 76,384 180,000
Activity 5.		

Programming for web-based data gathering system ($5,000/year)		20,000

7) Training Stipends

Training Stipends		**75,000**
Activity 4. 25 participants in University Adolescent Literacy Course with new syllabus, $1,000 tuition each, one cohort each in years 2, 3, and 4.		75,000
Activity 5.		

8) Other

None

9) Total Direct Costs

See Budget Table

10) Indirect Costs

See Budget Table

11) Funding for Involved LEAs

None

12) Supplemental Funding for Participating LEAs $914,930

Supplemental for Participating LEAs		
Activity 2. Grants to LEAs for training trainers and teachers in content areas to incorporate the literacy strands into their teaching.		548,958
Activity 4. Grants to LEAs for training and implementation of Adolescent Literacy standards and courses, for years 2, 3, and 4.		365,972

Reform Area One Project Three: Using the Common Core Standards to Ensure Mathematics Literacy for all Utah Children

Budget Part II: Project-Level Budget Table

Project Three: Using the Common Core Standards to Ensure Mathematics Literacy for all Utah Children

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area One: **Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace** and Competitive Priority Two: **STEM**

Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$105,000	$157,000	$102,000	$102,000	$466,000
2. Fringe Benefits	$15,400	$15,400	$15,400	$15,400	$61,600
3. Travel	$14,500	$16,500	$8,000	$8,000	$47,000
4. Equipment	$9,082	$-	$-	$-	$9,082
5. Supplies	$9,325	$8,260	$5,873	$5,800	$29,258
6. Contractual	$62,100	$102,070	$71,050	$71,050	$306,270
7. Training Stipends					$-
8. Other					$-
9. Total Direct Costs (lines 1-8)	$215,407	$299,230	$202,323	$202,250	$919,210
10. Indirect Costs*	$16,254	$23,274	$15,849	$15,849	$71,226
11.Funding for Involved LEAs					$-
12. Supplemental Funding for Participating LEAs	$129,025	$ 129,025	$129,026	$ 129,026	$516,102
13. Total Costs (lines 9-12)	$360,686	$451,529	$347,198	$347,125	**$1,506,538**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area One Project Three: Using the Common Core Standards to Ensure Mathematics Literacy for all Utah Children

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Activity 1:			
Stipends/Substitute Reimbursements for a one to two week development workshop. Years one and two - 30 participants for 5 days at 200.00 per day. Years three and four – 35 participants for 5 days at 200.00 per day.	60 x 5 days & 70 x 5	$200	$130,000
Activity 2:			
Year one – development of courses – 20 participants for 5 days at 200.00 per day; Year two – 6 participants at $2000 total stipend each, Years 3 and 4, 30 participants at $200 per day for 5 days professional development on new courses, 2 facilitators at $2000 each.	20x5 6 60 x 5 2	$200 $2000 $200 $2000	$96,000
Educational Specialist – 45% of total salary - $35,000 per year for 4 years.	1	$35,000	$140,000
Activity 3:			
Stipends/Substitute Reimbursements – Year 1 - task force participants 20 participants at $200 per day for 5 days, Year 2 – participants in 2 professional development "train the trainers" weeklong workshops – 40 total participants at 200.00 per day for 10 days.			$100,000
Total Personnel			**$466,000**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel

Travel: Travel expenses include the average mile reimbursements of $100 each.	# Trips	$ per Mileage	Total
Activity 1:			
Years one and two – development workshops include 30 participants x 3 trips	90	100	9000
Years three and four – development workshops include 35	70	100	7000

participants			
Activity 2:			
Year one – course design workshops include 20 participants anticipate an average of 4to5 trips per participant	90	100	9000
Year two – PD design workshops include 10 participants – estimate 4 trips	40	100	4000
Years three and four – Instructional support workshops include 30 participants x3 trips	90	100	9000
Activity 3			
Year one – travel expenses for 10 of 20 participants in task forces	10	100	1000
Year two – train the trainers workshops include 40 participants for two workshops, estimate 2 trips each	80	100	8000
Total Travel			**$47,000**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Activity 2			
Macintosh laptop computer used for editing video clips and creating web enabled video	$2,038	Macintosh laptop	$2,038
Three mid-range video cameras for recording video clips for web-based instructional supports. Will be used for all three activities.	$2,348	Video Camera	$7,044
Total Equipment			**$9,082**

5) Supplies

The basis for cost estimates or computations is the Utah State Materials Bid.

Supplies	
Activity 1: Printing, bound instructional materials, unbound instructional materials - estimate	$6,223
Activity 2: Printing, bound instructional materials, unbound instructional materials - estimate	$13,700
Activity 2: Printing, bound instructional materials, unbound instructional materials - estimate	$9,335
Total	**$29,258**

6) Contractual

Contractual: contracted services including professional services and contracted rates for lodging and food for professional workshops	% FTE	Base Salary	Total
Activity 1:			
Food and lodging for a one to two week development workshop. Years one and two - 30 participants for 10 days at $134 per day. Years three and four – 35 participants for 5 days at $134 per day.			$127,300
½ programming consultant for development and maintenance of web repository			$30,000
Activity 2:			
Food and lodging for design, PD development, and instructional support workshops. Year one – 20 participants at $134 per day for 5days, Year two – 7 participants at $11 (lunch) for 10 days, Years three and four – 30 participants at $134 per day for 5 days.			$54,370
Contracted services for videotaping - $20,000 x 2 yrs			$40,000
Activity 3:			
Food and lodging for: Year 1 - for task force participants $1,000 estimated for food, Year 2 – for participants in 2 professional development "train the trainers" weeklong workshops - 40 participants in each workshop at $134 per day for 5 days times two workshops			$54,600
Total Contractual			**$306,270**

7) Training Stipends

NA

8) Other

- NA

9) Total Direct Costs

- See Budget Table

10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs: NA

12) Supplemental Funding for Participating LEAs

.

Supplemental Funding for Participating LEAs	Total
Activity 3:	
Competitive or formula grants for school districts not receiving other RTTT funds for implementation of K-6 Mathematics and Algebra Initiatives	**$516,102**

Reform Area One Project Four: **Ensuring Postsecondary Success**

Budget Part II: Project-Level Budget Table

Project Name: Ensuring Postsecondary Success

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area One**: Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace** Competitive Priority Two: **STEM, and Priority 5: Invitational Priority - P-20 Coordination, Vertical and Horizontal**
Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$194,547	$194,547	$194,547	$194,547	$778,188
2. Fringe Benefits	$24,550	$24,550	$24,550	$24,550	$98,200
3. Travel	$19,875	$15,375	$13,375	$13,375	$62,000
4. Equipment	$3,000	$11,000			$14,000
5. Supplies	$23,500	$23,500	$23,500	$23,500	$94,000
6. Contractual	$235,000	$211,000	$75,000	$75,000	$596,000
7. Training Stipends	$65,000	$65,000	$65,000	$65,000	$260,000
8. Other					
9. Total Direct Costs (lines 1-8)	$565,472	$544,972	$395,972	$395,972	$1,902,388
10. Indirect Costs*	$7,532	$7,532	$7,533	$7,533	$30,130
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs	$168,274	$168,274	$168,275	$168,275	$673,098
13. Total Costs (lines 9-12)	$763,324	$742,824	$593,825	$593,825	**$2,693,798**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area One Project Four: Ensuring Postsecondary Success

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Activity 1: Specialist (1): This person will be responsible for assisting the Project Manager in carrying out specific tasks related to the Ensuring Postsecondary Success program.	25%	$19445	$77,780
Activity 1: Office Specialist II (1): This person will serve as clerical support for the Ensuring Postsecondary Success program, and will be under the direct supervision of the Project Manager.	100%	$36352	$145,408
Activity 2, Year 1: Stipends for a broad-based committee to develop a career pathway initiative and stipends for teachers to align course work. $200 x 60 people x 5 days	60	$200x5	$60,000
Activity 2, Year 2: Stipends for professional development for guidance counselors and other education support personnel and stipends for teachers to align course work. $200 x 65 people x 5 days	65	$200x5	$65.000
Activity 8: Provide stipends for teacher and student summer internships in STEM related fields. Provide stipends for a conference for K-12 educators and industry partners. Provide stipends for the development of a model to increase student participation in the study of STEM fields.	50 100 20	$5,000 $200 $2000	$250,000 $20,000 $40,000 $310,000
Activity 9, Years 2-4: Provide stipends for committee to develop six year plan to address acquisition of critical skills for workforce preparation. To provide professional development for teachers implementing local plans.	20 x 3	$2,000	$120,000
Total Personnel			**$778,188**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel

Utah has many rural LEAs. The travel money will enable USOE to convene stakeholders in regional settings to get broad-based input and reach all Utah students

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $36 In State/$45 Out of State.	# Trips	$ per Trip	Total
Activity 1: In State travel for project personnel to visit participating LEAs and Out of State travel to attend necessary conferences.	Varies each year	Varies	$13,500
Activity 2, Year 1: Travel for consultant and committee members			$3,500
Activity 2, Year 2: Travel for consultant and committee members			$2,000
Activity 3, Year 1: Travel for consultants and mileage for committee members			$3,000
Activity 6: To send school teams to national/regional conferences which support their work.			$40,000
Total Travel			**$62,000**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Activity 1: Desktop Computers (2): two desktop computers will be needed to expand our current office and supply the needs of 3 new employees.	$3,000	Computer including monitor	$3,000
Activity 1: Printer (1) and Smartboard (1): The printer, and Smartboard, will be used by employees engaged in work with the Ensuring Postsecondary Success program.	$11,000	Printer and Smartboard	$11,000
Total Equipment			**$14,000**

5) Supplies

The basis for cost estimates or computations is the Utah State Materials Bid.

Supplies:	Cost of Item	Item Description	Total
Activity 1: Office supplies	$6000	Ink cartridges, paper, pens, folders, etc.	$24,000
Activity 2: Career pathway materials	Varies	Brochures, pamphlets, and flyers related to career pathways.	$20,000
Activity 3, Years 1-4:	$2500 x 4	Brochures, pamphlets, and flyers	$10,000

Academic pathway materials	years	related to academic pathways.	
Activity 4: Materials for instructional use and professional development	$5000 x 4 yrs.	Books, multicultural and/or motivational materials	$20,000
Activity 8: Instructional materials for professional development training and for classroom use.		Books, software, training manuals, and manipulatives.	$20,000
Total			**$94,000**

6) Contractual

Contractual:	Item Description	Total
Activity 2, Years 1 & 2: Contract with educational (K-16) and industry experts to facilitate the development of the career and college pathways and to align course work.		$100,000
Activity 3, Year 1: Contract for the development and implementation of a pathways website.		$20,000
Activity 4: Hotel contract to host annual meeting for participating schools. Consultant to work directly with the redesigned and/or reorganization of the school.	$25,000 per year x 4	$100,000
Activity 6: Contract with consultant to create and implement plan to address equal access to AP and Concurrent Enrollment classes.		$200,000
Activity 8: Consultants for conference, the development of the model, and to assist with the implementation of developed projects.		$76,000
Activity 9: To conduct a statewide study of workforce preparation to ascertain the skills required for students to be successful in the workforce. To utilize the results to assist LEAs in the development of local plans. To serve as facilitators for the collaboration between business/industry and education.		$100,000
Total		**$596,000**

7) Training Stipends

Training Stipends:	Item Description	Total

Activity 6: Provide professional development to teams from the two high needs LEAs	$15,000 per year	$60,000
Activity 8: To provide sustained professional development (including yearlong internships with industry partners) for practicing educators in STEM related fields.	$50,000 x 4 yrs.	$200,000
Total Training Stipends		**$260,000**

8) Other

- None

9) Total Direct Costs

- See Budget Table

10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs

- None

12) Supplemental Funding for Participating LEAs

Supplemental Funding for Participating LEAs	Item Description	Total
Activity 6: Formula grants for each identified high need LEA to develop and implement an action plan to increase the number of disadvantaged subgroups in AP and Concurrent Enrollment classes.		**$673,098**

Reform Area One Project Five: Improving Early Learning Outcomes

Budget Part II: Project-Level Budget Table

Project Name: Improving Early Learning Outcomes

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area One**: Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace, and Invitational Priority 3: Innovations for Improving Early Learning Outcomes**

Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$169,800	$199,800	$192,800	$139,800	$702,200
2. Fringe Benefits					
3. Travel	$40,845	$50,145	$43,065	$43,065	$177,120
4. Equipment	$9,000	$5,590	$2,000	$2,000	$18,590
5. Supplies	$40,000	$50,000	$50,000	$50,000	$190,000
6. Contractual	$45,200	$45,200	$45,200	$45,200	$180,800
7. Training Stipends		$61,333	$61,333	$61,334	$184,000
8. Other					
9. Total Direct Costs (lines 1-8)	$304,845	$412,068	$394,398	$341,399	$1,452,710
10. Indirect Costs*	$22,923	$26,973	$26,028	$18,873	$94,797
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs	$91,735	$91,736	$91,736	$91,736	$366,943
13. Total Costs (lines 9-12)	$419,503	$530,777	$512,162	$452,008	**$1,914,450**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area One Project Five: Improving Early Learning Outcomes

BUDGET NARRATIVE

1) Personnel

Personnel (Fringe benefits have not been separated out from teacher stipends.)		
Activity 1. Stipends for Kindergarten Common Data Protocol Committee members 3 summer days @ $250 x 15 members = 11,250/year x 4 years = 2 school year days @ $100 for sub costs x 15 members = 3,000/year x 4 years = Stipends for LEA trainers and coaches professional development 38 participants x 6 days/year x $100 sub costs = 22,800/year x 4 =		 45,000 12,000 91,200
Activity 2. Full Day/Extended Day Kindergarten Data Committee 1 summer mtg x 15 participants x $250 stipend = $3,750/year 2 school year mtgs x 15 participants x $100 sub costs = $3,000/year		 15,000 12,000
Activity 3. Pre-K Assessment Committee (years 2-4 after development of standards) 2 summer days @ $250 each x 15 participants = $7500/year 2 school year days @ $100 for subs x 15 participants = $3,000/year Pre-K Web Site Committee will develop a full-service elegant web site for parents and providers, with a priority to provide services to those who work with high-risk pre-K children. 2 summer days @ $250 each x 15 participants = $7500/year 2 school year days @ $100 for subs x 15 participants = $3,000/year		 30,000 12,000 30,000 12,000
Activity 4. Stipends for the Pre-K Academic Standards Committee development of Pre-K Academic Standards (20 members x 24 days over 4 years x $250/day; Year 1 9 days, Years 2-4 5 days) Stipends for Professional Development on Pre-K Academic Standards to be done in Years 2-4 (200 people per year x 1 day x $250/day) Stipends for submitting lesson plans and parent activities to lesson plan/activity repository in Pre-K site (Year 1, 240; Year 2, 240; Year 3, 212; $250/day).		 120,000 150,000 173,000
Total Personnel		**$702,200**

2) Fringe Benefits N/A

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel: $177,120

Travel	
Activity 1. Mileage projected for 10% of Committee work and Professional Development = 660 days/year x .1 x 200 miles x $.5/mile = $6,600/year Hotel usage projected at 10% of Committee work and Professional Development = 660 days/year x .1 x $90 = $5,940/year National convention 1 Curriculum Specialists x 1/year x 3,000 = 3,000/year x 4 years =	26,400 23,760 12,000
Activity 2. Mileage for 10% of Committee days 45 days x .1 x 200 miles x $.5/mile = $450/year Hotel usage for 10% of Committee days 45 days x .1 x $90 = $405/year	 1,800 1,620
Activity 3. Mileage for 10% of Committee days Year 1 60 days x .1 x 200 miles x $.5/mile = $600/year Year 2 120 days x .1 x 200 miles x $.5/mile = $1,200/year Hotel usage for 10% of Committee days Year 1 60 days x .1 x $90 = $540/year Year 2 120 days x .1 x $90 = $1,080/year	 3,420
Activity 4. Mileage for 50% of training days: Year 1 = 50% x 180 days x $.5/mile x 200 miles = 9,000 Years 2-4 = 50% x 300 days x $.5/mile x 200 miles = 15,000 x 3 = 45,000 Hotels for 20% of training days: Year 1 = 20% x 180 days x $90/day = 3,240 Years 2-4 = 20% x 300 days x $90/day = 5,400 x 3 years = 16,200 National conference for Curriculum Specialist 3,000 x 4 years = 12,000 Mileage for Curriculum Specialist @ $100/month x 48 months = 4,800 Hotels for Curriculum Specialist 3 times/year x $90 x 4 years = $1,080	 9,000 45,000 3,240 16,200 12,000 4,800 1,080
Activity 5. Mileage and local travel for Adolescent Literacy Specialist ($100/month x 48 months), including per meal costs and hotels for remote parts of state. National travel, once per year @ 3,000	4,800 12,000

4) Equipment

Equipment	
Activity 5. Computer and related technology for Curriculum Specialist and Office Specialist 1 (4,500 each); 2,000 in years 2, 3, and 4; equipment for presentation 3,590	 9,000 6,000 3,590

5) Supplies: $190,000

The basis for cost estimates or computations is the Utah State Materials Bid.

Supplies	
Activity 1. Materials for Professional Development 200 participants x $50 = $10,000/year Printing for Professional Development 200 participants x $50 = $10,000/year Office supplies and related materials $1,500/year	 40,000 40,000 6,000
Activity 2. Annual Conference printing (100 participants x $50 each = $5,000/year Office supplies and related materials ($1,500/year)	 20,000 6,000
Activity 3. Printing for Committee work and products 30 participants x $50 = $1,500/year Office supplies and related materials ($1,500/year)	 6,000 6,000
Activity 4. Printing of Pre-K Standards and training materials (600 x $50) Office supplies and related materials ($1,500/year)	 30,000 6,000
Activity 5. Office supplies and materials for USOE staff to support early literacy (1,500/year) Materials for professional development	 6,000 24,000

6) Contractual: $180,800

Contractual	
Activity 1. Programming to make Kindergarten Data gather instruments and scoring protocols web based (5,000/year) Consultants to assist in development of common data protocols and for Professional Development (8,000/year) Meals and meeting space (200 x $11 = 2,200/year)	 20,000 32,000 8,800
Activity 2. Local and national consultants/trainers (10,000/year)	 40,000

Activity 3. Programming for Pre-K Support Site ($5,000/year)		20,000
Activity 4. Programming for web-based hosting of Pre-K Academic Standards $5,000/year National and local Early Childhood consultants $10,000/year		20,000 40,000

7) Training: $184,000

Training Stipends		
Activity 4. Professional Development		75,000
Activity 5. Professional Development		109,000

8) Other
None

9) Total Direct Costs
- See Budget Table

10) Indirect Costs
- See Budget Table

11) Funding for Involved LEAs
None

12) Supplemental Funding for Participating LEAs $366,943

Supplemental Funding for Participating LEAs	Item Description	Total
Formula grants for participating LEAs.		**$366,943**

Reform Area One Project Six: Refinement of Utah Performance Assessment System for Students (U-PASS) Testing

Budget Part II: Project-Level Budget Table
Project Name Project Six: Refinement of Utah Performance Assessment System for Students (U-PASS) Testing

Associated with Criteria: : Funds will be used to accomplish the State's plans and meet its targets in Reform Area One Measurable Goals: Adopting Standards and Assessments that Prepare Students to Succeed in the Workplace

Reform Area One Goal: Implement National Common Core Standards and assessments in literacy and numeracy that prepare students for success in college and careers.
(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$436,000	$416,000	$129,000	$129,000	$1,290,000
2. Fringe Benefits	$191,840	$183,040	$56,760	$56,760	$488,400
3. Travel	$13,900	$10,000	$10,000	$10,000	$43,900
4. Equipment	$1,500,000	$1,057,000			$2,557,000
5. Supplies					
6. Contractual	$1,211,250	$1,211,250	$1,211,250	$1,211,250	$4,845,000
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	$3,352,990	$2,877,290	$1,407,010	$1,407,010	$9,044,300
10. Indirect Costs*	$119,750	$80,870	$25,078	$25,078	$250,776
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs	$426,231	$426,231	$426,231	$426,231	$1,704,924
13. Total Costs (lines 9-12)	$3,898,971	$3,384,391	$1,858,319	$1,858,319	**$11,000,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area One Project Six: Refinement of Utah Performance Assessment System for Students (U-PASS) Testing

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be contracted as temporary hourly employees for the project.	% FTE	Base Salary	Total
Participate in the formative and interim assessment consortium while expanding informal, ongoing formative assessment of math and reading in all schools. • Contract IT analysts @ $100/hr (2 in year 1/2, .5 in year 3/4) • Data Analyst @ $100/hr (250 hrs. years 3/4) • Special Ed Specialist @$100 hr (200 hrs. year 1)	3.0	$208,000	$1,040,000 $50,000 $20,000
Total:			**$1,110,000**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates.

3) Travel **$43,900**

	# Trips	$ per Trip	Total
Travel to LEAs for technical consulting and training			
Mileage (at an estimated average of 150 miles each @ $.36/mile)	350	$54	$18,900
Overnight stay (estimated at $200/day)	125	$200	$25,000

Staff will need to make numerous trips to LEAs to for technical consulting and training.

4) Equipment

	Cost of Item	Items	Total
Student computer testing stations at $1,000 per station: 1,500 computers during year 1 and 1,057 during year 2.	$1,000	2,557	**$2,557,000**

5) Supplies n/a

6) Contractual **$4,845,000**

1. USOE will contract with individual teachers from all LEAs across the state to write test items for the formative assessments. These items will then be leveraged in the sharing process of the interim assessment consortium.
Cost per teacher per day $100 at 3,300 teacher days per year in years 2/3/4 **$990,000**
2. High speed internet connections for 23 schools below current standard.
$75,000 per school for 23 schools = **$1,725,000**
3. RFP for development/deployment of K assessment 250,000 year 1, 100,000 year 2 **$350,000**
4. Contract services with existing ELL consortium at $445,000 per year in years 1-4 **$1,780,000**

7) Training Stipends

n/a

8) Other

n/a

9) Total Direct Costs

See Budget

10) Indirect Costs

See Budget

11) Funding for Involved LEAs

12) Supplemental Funding for Participating LEAs

	Total
Activity 2:	
Capacity grants for school districts needing additional RttT funds for implementation of on-line testing Initiatives. The number of LEAs will vary according to need.	**$1,704,924**

Reform Area Two Project One: Expansion and Adaptation of State Longitudinal Data Systems (SLDS)

Budget Part II: Project-Level Budget Table

Project Name: Expansion and Adaptation of State Longitudinal Data Systems (SLDS)

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area Two**: Building Data Systems that Measure Student Growth and Success, and Inform Teachers and Principals about How They Can Improve Instruction**

Reform Area Two Goal: Refine Utah's Data Systems to ensure that student growth and proficiency in Literacy and Numeracy is measured, data can be used to in a timely manner to inform Teachers and Principals about instruction, and the system includes data that measures instructional quality in the classroom for formative and summative educator evaluations.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$205,920	$205,920	$328,640	$122,720	$863,200
2. Fringe Benefits	$90,605	$90,605	$144,602	$53,997	$379,809
3. Travel		$12,440	$12,440	$6,220	$31,100
4. Equipment	$246,455	$157,630			$404,085
5. Supplies					
6. Contractual	$1,560,000	$1,144,000			$2,704,000
7. Training Stipends					$-
8. Other					$-
9. Total Direct Costs (lines 1-8)	$2,102,980	$1,610,595	$485,682	$182,937	$4,382,194
10. Indirect Costs*	$40,031	$40,031	$63,887	$23,857	$167,806
11.Funding for Involved LEAs					$-
12. Supplemental Funding for Participating LEAs					$-
13. Total Costs (lines 9-12)	$2,143,011	$1,650,626	$549,569	$206,794	**$4,550,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Two Project One: Expansion and Adaptation of State Longitudinal Data Systems (SLDS)

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Activity 6 - To introduce new data elements to allow connections between measures of quality instruction, teacher practice, strategies, teacher performance and student achievement:			
• SEA IT Analyst (years 1-3)	1.00	68,640	205,920
• SEA data analyst/statistician/trainer (years 3-4)	1.00	66,560	133,120
Activity7 -To integrate the Utah SIS2000+ system's grade book with the Utah Test Item Pool (UTIPS) formative assessment delivery system:			
• SEA IT Analysts (2 in years 1-3)	1.00	68,640	411,840
• SEA data analyst/trainer (years 3-4)	1.00	56,160	112,320
Total:			**863,200**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.
- Benefits for contractors are included in hourly rates

3) Travel

Activity 6 -To introduce new data elements to allow connections between measures of quality instruction, teacher practice, strategies, teacher performance and student achievement:

SEA Staff will need to make numerous trips to plan for and manage the activity. Some trips will be out-of-state to national conferences and meetings, but most will be to LEAs within the state for technical consulting and training.

For the second and third years of the activity, these trips will be budgeted. **$12,440**

- 2 out-of-state trips to national meetings/conferences @ $1500 each
- 30 in-state trips of 150 miles each @ $.36/mile
- 8 in-state overnight stays at $200/day

For the fourth year of the activity, these trips will be budgeted. **$3,110**

- 1 out-of-state trips to national meetings/conferences @ $1500 each
- 15 in-state trips of 150 miles each @ $.36/mile
- 4 in-state overnight stays at $200/day

Activity 7 -To integrate the Utah SIS2000+ system's grade book with the Utah Test Item Pool (UTIPS) formative assessment delivery system:

SEA Staff will need to make numerous trips to plan for and manage the activity. Some trips will be out-of-state to national conferences and meetings, but most will be to LEAs within the state for technical consulting and training.

For the second and third years of the activity, these trips will be budgeted. **$12,400**

- 2 out-of-state trips to national meetings/conferences @ $1500 each
- 30 in-state trips of 150 miles each @ $.36/mile
- 8 in-state overnight stays at $200/day

For the fourth year of the activity, these trips will be budgeted. **$3,110**

- 1 out-of-state trips to national meetings/conferences @ $1500 each
- 15 in-state trips of 150 miles each @ $.36/mile
- 4 in-state overnight stays at $200/day

For each of these activities the USOE plans to hire local contractors or national contractors with local offices in order to avoid paying contractor travel costs.

4) Equipment **$404,085**

This project with its two activities has as its primary outcomes new software to expand the capability and functionality of existing software systems. For activities 6 and 7, these software outcomes/products require new hardware and upgrades to existing hardware infrastructure (servers and telecommunications) to accommodate additional data and network loads. Activity 6 is being budgeted $236,455 for these needs while activity 7 is being budgeted $157,630. In addition, funds for laptops for five new USOE staff members have been budgeted at $2500 each. These hardware items, which will also include some systems software purchases, will be purchased through existing state contracts.

5) Supplies: none.

6) Contractual **$2,704,000**

For each activity the USOE will rely heavily on the professional services of IT contractors that have the requisite technical and business expertise to complete the work. In each case, the contractors will be the primary parties responsible for the delivery of the software needed to fulfill the requirements, outcomes and products of the project.

Activity 6 - To introduce new data elements to allow connections between measures of quality instruction, teacher practice, strategies, teacher performance and student achievement:

- Contract IT analysts @ $100/hr (2 in years 1 and 2) for a total of **$624,000**
- Contract manager/analyst/leader @ $125/hr (1 in years 1 and 2) for a total of **$520,000**

Activity7 -To integrate the Utah SIS2000+ system's grade book with the Utah Test Item Pool (UTIPS) formative assessment delivery system:

- Contract IT analysts @ $100/hr (3 in year 1, 2 in year 2) for a total of **$1,040,000**
- Contract manager/analyst/leader @ $125/hr (1 in years 1 and 2) for a total of **$520,000**

All such contracts will be made through competitive bidding processes as specified in the State of Utah procurement code and in the procedures specified for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

7) Training Stipends

n/a

8) Other

n/a

9) Total Direct Costs

See Budget Table

10) Indirect Costs

See Budget Table

11) Funding for Involved LEAs

12) Supplemental Funding for Participating LEAs

Reform Area Two Project Two: Effective Data Access for Instructional Improvement

Budget Part II: Project-Level Budget Table

Project Name: Effective Data Access for Instructional Improvement

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area Two**: Building Data Systems that Measure Student Growth and Success, and Inform Teachers and Principals about How They Can Improve Instruction**

Reform Area Two Goal: Refine Utah's Data Systems to ensure that student growth and proficiency in Literacy and Numeracy is measured, data can be used to in a timely manner to inform Teachers and Principals about instruction, and the system includes data that measures instructional quality in the classroom for formative and summative educator evaluations.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$247,254	$247,254	$247,254	$247,254	$989,016
2. Fringe Benefits	$108,792	$108,792	$108,792	$108,792	$435,168
3. Travel	$6,550	$6,550	$6,550	$6,550	$26,200
4. Equipment	$387,352				$387,352
5. Supplies					0
6. Contractual	$1,040,000	$1,040,000	$624,000	$624,000	$3,328,000
7. Training Stipends					0
8. Other	$500	$500	$500	$500	$2,000
9. Total Direct Costs (lines 1-8)	$1,790,448	$1,403,096	$987,096	$987,096	$5,167,735
10. Indirect Costs*	$48,066	$48,066	$48,066	$48,066	$192,264
11.Funding for Involved LEAs					0
12. Supplemental Funding for Participating LEAs					$0
13. Total Costs (lines 9-12)	$1,838,514	$1,451,162	$1,035,162	$1,035,162	**$5,360,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Two Project Two: Effective Data Access for Instructional Improvement

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Project Manager (years 1-4): will manage IT contractors for the software development of the Data Management System	1.00	77,778/yr	311,112
2 IT Consultant/Trainers (years 1-4): will provide support to LEAs in developing and implementing the Data Management System	2.00	66,560/yr	532,480
Office Specialist (years 1-4): will provide support to project manager and IT Consultant/Trainer	1.00	36,356/yr	145,424
TOTAL:			**$989,016**

Newly hired personnel will support the development and implementation of Local Data Management Systems.

2) Fringe Benefits

- Benefits for SEA are calculated at 44% or salaries.

3) Travel

	# Trips	$ per Trip	Total
Travel to LEAs for technical consulting and training			
Mileage (at an estimated average of 150 miles each @ $.36/mile)	300	$54	$16,200
Overnight stay (estimated at $200/day)	50	$200	$10,000
TOTAL:			**$26,200**

Staff will need to make numerous trips to LEAs to for technical consulting and training.

4) Equipment $387,352

	Cost of Item	Total
Hardware to support software	$381,352	$381,352
Laptop Computers (3)	$2,000	$6,000

Equipment will be needed to support software and supply needs of 3 new employees.

5) Supplies n/a

6) Contractual

Estimating 2,080 hours a year	% FTE	$/hr	Base Salary	Total
IT Analysts/Programmers (years 1-4)	3.00	$100	208,000/yr	2,496,000
IT Analysts/Programmers (years 1-2)	2.00	$100	208,000/yr	832,000
TOTAL:				**$,3,328,000**

For software development of the Data Management System:

- In the first and second years will need 5 IT Analysts/Programmers at $100/hr.
- In the third and fourth years will need 3 IT Analysts/Programmers at $100/hr.

7) Training Stipends

- n/a

8) Other

	Cost Per Year	Total
Printing	$100	$400
Communications	$400	$1,600

Printing and communication costs in working with LEAs.

9) Total Direct Costs

See budget chart

10) Indirect Costs

See budget chart

11) Funding for Involved LEAs

12) Supplemental Funding for Participating LEAs

- n/a

Reform Area Two Project Three: Effective Data Use

Budget Part II: Project-Level Budget Table

Project Name: Effective Data Use

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area Two**: Building Data Systems that Measure Student Growth and Success, and Inform Teachers and Principals about How They Can Improve Instruction**

Reform Area Two Goal: Refine Utah's Data Systems to ensure that student growth and proficiency in Literacy and Numeracy is measured, data can be used to in a timely manner to inform Teachers and Principals about instruction, and the system includes data that measures instructional quality in the classroom for formative and summative educator evaluations.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$169,476	$169,476	$435,716	$435,716	$1,210,384
2. Fringe Benefits	$74,569	$74,569	$191,715	$191,715	$532,569
3. Travel	$40,250	$40,100	$21,200	$10,130	$111,680
4. Equipment	$51,000	$75,000	30000		$156,000
5. Supplies					0
6. Contractual	$104,000				$104,000
7. Training Stipends					0
8. Other	$199,325	$332,125	$132,925	$693	$665,068
9. Total Direct Costs (lines 1-8)	$638,620	$691,270	$811,556	$638,254	$2,779,700
10. Indirect Costs*	$32,947	$32,947	$84,703	$84,703	$235,300
11.Funding for Involved LEAs					0
12. Supplemental Funding for Participating LEAs					$0
13. Total Costs (lines 9-12)	$671,567	$724,217	$896,259	$722,957	**$3,015,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Two Project Three: Effective Data Use

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
2 Consultant/Trainers (years 1-4)	2.00	66,560/yr	$532,480
1 Office Specialist (years 1-4)	1.00	36,356/yr	$145,424
8 Data Mentors (half funding, years 3-4)	4.00	66,560/yr	$532,480
TOTAL:			**$1,210,384**

Newly hired Consultant/Trainers will continue the development of the Principals Data Institute. They will run Principal Data Institutes, train core LEA data teams and Data Mentors.

SEA will help LEAs fund 8 additional Data Mentors (pay ½ salary).

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel

	# Trips	$ per Trip	Total
Instate travel for trainings			
Mileage (at an estimated average of 150 miles each @ $.36/mile)	1420	$54	$76,680
Overnight stay (estimated at $200/day)	100	$200	$20,000
Out of State Travel	10	$1,500	$15,000
Total:			**$111,680**

Staff will need to travel out of state to national trainings.

- 5 staff to 2 national trainings in the first year.

Staff will need to travel instate to the Principal Data Institute and to meet with Data Mentors.

- 5 staff traveling to 5 sessions of 13 Data Institutes in year one
- 5 staff traveling to 5 sessions of 24 Data Institutes in year two
- 5 staff traveling to 5 sessions of 10 Data Institutes in year three
- 245 follow-up visits over 4 years

4) Equipment **$156,000**

	Cost of Item	Total
Laptop Computers (3)	$2,000	$6,000

Books (25,000)	$6	$150,000

Laptop will be needed to supply needs of 3 new employees. SEA will also supply books to Data Institute participants.

5) Supplies: n/a

6) Contractual **$104,000**

Estimating 2,080 hours a year	% FTE	$/hr	Base Salary	Total
Graphic Designer (year 1)	0.50	$100	$104,000	$104,000

For developing presentations for the Data Institute will need one Graphic Designer.

7) Training Stipends

n/a

8) Other **$665,068**

	Cost Per Year	Total
Printing	$3,500	$14,000
Food	$162,500	$650,000
Communication	$125	$975
Supplies	$93	$93

Printing costs are for binders (hand outs) for Data Institute. Lunch ($10) and a snack ($3 each) provided to Data Institute participants. (25,000 participants * 2 sessions * $13 = 650,000)
Printing and food costs are prorated according to the number of data institutes held.
Extra $475 for communication is allocated in year 4. Miscellaneous office supplies are for year one to prepare for the Data Institutes.

9) Total Direct Costs

See budget chart

10) Indirect Costs

See budget chart

11) Funding for Involved LEAs n/a

12) Supplemental Funding for Participating LEAs n/a

Reform Area Three Project One: Using Student Data to Assist in Monitoring Instructional Quality

Budget Part II: Project-Level Budget Table

Project Name: Using Student Data to Assist in Monitoring Instructional Quality

Associated with Criteria:: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	65,000	65,000	65,000		195,000
2. Fringe Benefits	28,600	28,600	28,600		85,800
3. Travel	5,000	5,000	10,000	10,000	30,000
4. Equipment	5,000				5,000
5. Supplies	2,000	5,000	5,000	4,292	16,292
6. Contractual			70,000	60,000	130,000
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	105,600	103,600	178,600	74,292	462,092
10. Indirect Costs*	12,636	12,636	12,636		37,908
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs					
13. Total Costs (lines 9-12)	118,236	116,236	191,236	74,292	**$500,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project One: Using Student Data to Assist in Measuring Instructional Quality

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Data Analyst will be hired for a three year period to work with programmers and existing data staff to develop reporting mechanisms for properly using student achievement data to inform teacher and principal evaluation. Once mechanism for reporting and initial PD with LEAs is complete, duties of monitoring and training will be absorbed by current SEA and LEA staff.	1.0	65,000	**195,000**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel

# Trips	$ per Trip	Total
Initial travel will entail traveling to various LEAs and regions to work with data teams and provide training on use of data in evaluation systems. (5 trips @ 2 nights each to work with several LEAs at once).	5x $500 x 2 years	$5,000
Years three and four of the project will involve additional monitoring visits to LEAs (10 trips X 500) as well as paying for travel expenses for meetings held at USOE. (4 USOE meetings with 25 participants – hotel, mileage)	10 x $500 x2 4x25x$150	$10,000 $15,000
Total		**$30,000**

4) Equipment

Cost of Item	Total
Laptop, monitor, keyboard, phone for data analyst to be used for data analyst and subsequent work with student achievement and teacher evaluation at projects end.	**$5,000**

5) Supplies

Cost of Item	Total

Various supplies will be needed throughout project to conduct work of data analyst, consultants, and other specialists. Included in budget are office supplies, printing, books and other support materials over a four year period.	**$16,292**

6) Contractual

Cost of Item	Total
Years 3 and 4 of the project will focus on implementation of data in statewide teacher and principal evaluation efforts. Experts will be contracted ($26,000 x 5 over 2 years) to work with LEAs to provide technical assistance and monitoring. State will be divided into five regions to provide localized assistance. Travel expenses are found in travel budget.	**$130,000**

7) Training Stipends

Cost of Item	Total

8) Other

9) Total Direct Costs

See budget chart

10) Indirect Costs
See budget chart

11) Funding for Involved LEAs

12) Supplemental Funding for Participating LEAs

Reform Area Three Project Two: Developing and Implementing Measures of Instructional Quality

Budget Part II: Project-Level Budget Table

Project Two: Developing and Implementing Measures of Instructional Quality

Associated with Criteria: : Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	125,000	100,000	50,000		275,000
2. Fringe Benefits					
3. Travel	27,500	32,000	20,000	20,000	99,500
4. Equipment					
5. Supplies	25,000	100,000	10,000	10,000	145,000
6. Contractual		250,000	250,000	250,000	750,000
7. Training Stipends		100,000	100,000		200,000
8. Other					
9. Total Direct Costs (lines 1-8)	177,500	582,000	430,000	280,000	1,469,500
10. Indirect Costs*	16,875	13,500	6,750		37,125
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs		500,000	981,437	981,438	2,462,875
13. Total Costs (lines 9-12)	256,800	1,145,440	1,374,490	1,192,770	**$3,969,500**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project Two: Developing and Implementing Measures of Instructional Quality

PROJECT-LEVEL BUDGET NARRATIVE

1) Personnel

Personnel Expenditures		Total
25 Instructional Measures Workgroup stipends for 1st year development activities (studying research, conducting focus groups, observing classrooms, developing framework and tools)	5,000	125,000
25 Workgroup stipends for year 2 of development and pilot implementation activities	4,000	100,000
25 Workgroup stipends for year 3 of project including monitoring, analysis and implementation oversight. Transition work year 4 to SEA and LEA personnel	2,000	50,000
Personnel Total		**275,000**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel $99,500

Travel: Travel expenses include the average mile reimbursements of $100 each, hotel @ 150 per night, per diem of $50.	# Trips	$ per Trip	Total
• Mileage, lodging, and per-diem for workgroup for development work 25 members x 5 days x $200 lodging + $100 x 25 mileage	5 days	300 x 25	27,500
• Travel expenses for LEA representatives to attend regional training for implementation of measures of instructional quality and committee members to provide outreach activities to pilot LEAs. (no mileage)	160	200	32,000
• Travel for monitoring and technical assistance to pilot LEAs by committee members (lodging and mileage)	66 (2 to 3 trips per member	300	20,000
• Technical assistance for LEAs during LEA development and implementation stages of toolkit aligned with teacher	66 (2 to 3 trips per member	300	20,000

and principal evaluation systems.			
Total			**$99,500**

4) Equipment: none

5) Supplies

Materials for workgroup development activities to enable LEAs to measure instructional quality. Study and development materials include books, research briefs, video, printing costs, office supplies. (year one)	25,000
Video production costs, observation protocols and other materials for toolkit. (year two)	100,000
Production and dissemination costs for toolkit (years three and four)	20,000
Total Supplies:	**$145,000**

(6) Contractual

Year two of project through year four RFP will be issued in accordance with Utah Code procurement requirements. Consultant will be hired for three years to develop video and accompanying observation protocols for use in LEAs.	$250,000
Contract year three and four will focus on refinement and additions to toolkit while customizing specific tools for LEAs.	$500,000
Total Contractual	**$750,000**

7) Training Stipends

Year two of project will entail training teachers and principals in pilot LEAs to use the measurement tools. Stipends will be paid for teachers in pilot schools to engage in professional development that includes a coaching component for fidelity of implementation.	$500 x 200 educators	$100,000
Year three of project will provide stipends for pilot teachers and principals ongoing coaching, feedback and analysis of process as well as integrating results into LEA teacher and principal evaluation systems.	$500 x 200 educators	$100,000
Total		**$200,000**

9) Total Direct Costs: See Budget Table.
10) Indirect Costs: See Budget Table
11) Funding for Involved LEAs; none
12) Supplemental Funding for Participating LEAs

Pilot schools will need funding to take measurement tools for instructional effectiveness and embed them in LEA evaluation systems. Pilot LEAs will	5 pilot LEAs	500,000

use funding year two to engage in this process.		
Years three and four funding will be provided to non-pilot LEAs to effectively embed measurement tools into their evaluation systems. LEAs will be able to apply for funding to engage in yearlong implementation activities.	Up to 40 LEAs	1,962,875
Total		**$2,462,875**

Reform Area Three Project Three: Revise and Implement Utah Professional Teaching Standards

Budget Part II: Project-Level Budget Table

Project Three: Revise and Implement Utah Professional Teaching Standards

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel					
2. Fringe Benefits					
3. Travel	20,000	10,000	10,000	10,000	50,000
4. Equipment					
5. Supplies	25,000	75,000	25,000		125,.000
6. Contractual	200,000	25,000	25,000	25,000	275,000
7. Training Stipends	40,000	10,000			50,000
8. Other					
9. Total Direct Costs (lines 1-8)	285,000	120,000	60,000	35,000	500,000
10. Indirect Costs*					
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs					

13. Total Costs (lines 9-12)	285,000	120,000	60,000	35,000	**$500,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project Three: Revise and Implement Utah Professional Teaching Standards

PROJECT-LEVEL BUDGET NARRATIVE

1) Personnel: none

2) Fringe Benefits: none

3) Travel

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $50.	# Trips	$ per Trip	Total
Year one travel provides funding for UPTS Workgroup members to come together for development activities. Minimum of five meetings with most members being able to travel to meeting site without hotel. (20 members x 5 trips x $200)	5 x 20 participants	$200	20,000
Years two –four travel will provide mileage, hotel and per diem to make site visits to LEAs for monitoring, evaluation and technical assistance as well as travel by LEA representatives for professional development and ongoing support.	150	$200	30,000
Total Travel			**$50,000**

4) Equipment: none

5) Supplies

Materials needed for seminars, conference breakouts and LEA meetings to share updated UPTS. Printing, web development and online brochures will be developed to ensure sustainability. Year one will focus on materials for workgroup UPTS development.	25,000
Year two supplies will primarily center on web-based tools for sustainable implementation as well as materials for onsite training.	75,000
Year three supplies will be used for dissemination and professional development	25,000
Total Supplies	**$125,000**

(6) Contractual

Services will be purchased to integrate updated UPTS with two online tools: OnTrack professional development management system and PD360 online professional development and learning communities. Contracts currently exist with both vendors in support of current platforms. Addition to contract for year one will enable USOE to build out existing programs to align with and include updated UPTS.	Year One	200,000
Years two-four of project will include contracted services for project analysis of LEA implementation of new UPTS as foundation for teacher and principal evaluation systems, teacher preparation programs, and ongoing LEA professional development.	3 years x $25,000	75,000
Total Contractual Costs		**$275,000**

7) Training Stipends:

UPTS Workgroup will be assembled to revisit the current Utah Professional Teaching Standards for revision in accordance with new INTASC Standards and Utah Continuum of Support for Educators. Stipends will be paid at rate of $2000 for one year of work for 20 workgroup members. It is anticipated that 8-10 meetings will be needed for analysis and development work in year one.	20 x $2000	$40,000
Workgroup will meet year two to manage and monitor new UPTS communication plan and implementation strategies.		$10,000
Personnel Total		**$50,000**

9) Total Direct Costs

- See Budget Table.

10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs: None

12) Supplemental Funding for Participating LEAs: None

Reform Area Three Project Four: Implement Statewide Educator Evaluation System

Budget Part II: Project-Level Budget Table

Project Four: Implement Statewide Educator Evaluation System

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	30,000	150,000	120,000		300,000
2. Fringe Benefits					
3. Travel	15,000	15,000	8,000	4,000	42,000
4. Equipment			500,000		500,000
5. Supplies	10,000	10,000	5,000	3,000	28,000
6. Contractual	250,000	620,000	550,000	350,000	1,770,000
7. Training Stipends		120,000	120,000	120,000	360,000
8. Other					
9. Total Direct Costs (lines 1-8)	305,000	915,000	1,303,000	477,000	3,000,000
10. Indirect Costs*	4,050	20,250	16,200		40,500
11.Funding for Involved LEAs					
12. Supplemental Funding for			959,500		959,500

Participating LEAs					
13. Total Costs (lines 9-12)	309,050	935,250	2,278,700	477,000	**$4,000,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project Four: Implement Statewide Educator Evaluation System

BUDGET NARRATIVE

1) Personnel

Years one through three of project will entail USOE staff working with committees and consultants to carry out the work of the teacher and principal evaluation project. USOE specialists, coordinators and directors will all be involved in the detailed word of the project. In year four of the project work will transition to LEAs with oversight by USOE accompanied by contracted evaluation services.

Personnel: (Fringe benefits have not been separated out from stipends.)	# part.	Stipend amount	Total
• Committee work for **teacher** evaluation tools based on measuring instructional quality. Personnel will come from USOE and stipends will be paid for committee work by 15 stakeholders from IHEs, LEAs, teacher associations, parent groups and USOE. Committee will be comprised of 30 members with half being practicing teachers and leaders. Only school based educators will be compensated with stipend. Year one project only.	15	$2,000	$30,000
• Year two continuing committee work to choose pilot LEAs and develop pilot parameters for implementation. Pilot phase will entail monitoring and adjustments by committee based on feedback from participants and external project evaluator.	15	$2,000	$30,000
• Stipends for teachers and principals to engage in use of pilot evaluation system and accompanying tools in year two and three of project. 40 teacher participants and 20 principals in 2 year pilot phase will use system and tools, provide feedback and data analysis.	60	$2000 per year x 2	$240,000
Personnel Total	**90**		**$300,000**

2) Fringe Benefits

n/a

3) Travel

Travel: Travel expenses include the average mile	# Trips	$ per Trip	Total

reimbursements of $100 each, in addition to an amount of per diem of $50.			
• mileage and per-diem for committee work on **teacher** evaluation system	15x5 meetings	$200 (average)	$15,000
• mileage and per-diem for committee work on **administrator** evaluation system	15x5 meetings	$200 (average)	$15,000
• outreach to LEAs to get feedback on both teacher and principal evaluation systems during development phase	10	$200	2,000
• travel (mileage, per diem, hotel) monitoring of development and implementation of new evaluation frameworks by LEAs	30 trips	$200	6,000
• technical assistance for LEAs during LEA development and implementation stages of teacher and/or principal evaluation efforts	20	$200	4,000
Travel Total			**$42,000**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Netbook with accompanying software and program to assist principals in the collection and storage of teacher evaluation data. Program created for Netbook based on teacher evaluation framework. Netbooks distributed to principals of 40 teachers in pilot project and expanded to all LEAs using USOE evaluation framework for teachers.	2000 x 250	Netbook with accompanying software, cables and accessories	500,000
Total Supplies:			**$500,000**

5) Supplies

Supplies: Materials and office supplies needed to for the work of developing and implementing statewide teacher and principal evaluation systems, incorporating measures of instructional effectiveness.	Cost of Item	Item Description	Total

General office supplies (paper, markers, large post-its, etc.)	3000 x 4 years	General office supplies	12,000
Books, video, materials for development work of teacher and principal evaluation committees as well as support materials for pilot schools.	5,000 x 2 years	Books and other materials for committee work	10,000
Printing of materials to disseminate information to LEAs (most of the work will be accessed online)	2,000x 3 years	Printing	6,000
Total Supplies:			**$28,000**

6) Contractual: The Utah State Office of Education has followed the contract procurement procedures under 34 CFR Parts 74.40 – 74.48 and Part 80.36 as well as adhering to Utah State Government procurement procedures.

Contractual: Professional services and products needed in order to develop and implement teacher evaluation systems that focus on measuring instructional quality in Utah public schools (includes charters).	**Description of Services**	**Time/Cost of Services**	**Total**
Contract with expertise in defining and measuring instructional quality to develop effective teacher evaluation system that impacts student growth and school improvement efforts	Technical assistance to help teacher evaluation committee develop evaluation framework that focuses directly on measuring instructional quality. Implementation activities include working with SEA, IHEs and LEAs to ensure fidelity of implementation as well as providing ongoing professional development and evaluation	$100,000 x 4 years	$400,000
Contract with expertise to develop model tools that accompany evaluation framework for teachers.	Development activities with LEAs and SEA along with professional development and other technical assistance to LEAs	Development activities in year 1 and 2 with technical assistance for LEAs in implementation (3&4)	$200,000

Contract with expertise in defining and measuring effective principal leadership in teacher evaluation as connected to instructional quality, student growth and school improvement	Technical assistance to help educator evaluation committee develop strategies for principals that focus directly on measuring instructional quality. Assistance includes professional development for LEAs and IHEs	Three year period with emphasis on research and development along with implementation and evaluation costs.	$150,000
Expand contract with two existing vendors to marry their services in providing on-time video of models of instructional excellence as well as providing online communities, professional development, evaluation tools and other resources.	Product will consist of a professional development management system that incorporates updated instructional quality standards with accompanying video of models of instructional excellence as well as online learning communities, and links to other resources. This system will also house statewide mentoring data for teachers and principals, enabling novices and experienced educators to collaborate, collect data and analyze practices in an online format**. Expansion in years 2-4 will link data from USOE student data source to handheld devices linking student data, teacher observation data and professional development**.	Three year contract consisting of development and user fees for two vendors 300,000 PD video development and online evaluation, 300,000 for online mentoring and PD offerings	$600,000
Participation stipends for pilot teachers and principals	Pilot participation stipends for 40 teachers and 20 principals in year two for teacher evaluation framework and tools	60 x 2000	$120,000
Statewide external evaluation of project effectiveness for teacher evaluation program	RFP process for four year evaluation from planning through implementation	$100,000 x four years	$400,000
Total Contractual Cost			**$1,870,000**

7) Training Stipends

Implementation in years two - four will entail training LEA personnel beyond pilot schools/districts. Representatives from remaining LEAs will be trained in framework and use of tools. LEA personnel will assume training responsibility for training after completion of projects. Trainer of trainer model will be used.	Trainer of trainer model to build capacity in year 2 Stipends for training	60 Trainers from LEAs @ 2000 240 x 2 years @ $500	$120,000 $240,000

	@LEA level years 3 and 4		
Total Contractual Cost			**$360,000**

8) Other
None
9) Total Direct Costs: See Budget Table
10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs
None

12) Supplemental Funding for Participating LEAs

Activity	Purpose	# LEAs involved	Total
Funding for several LEAs who have current robust, research-based evaluation systems to update standards and tools with instructional quality measures.	Augment the work of three LEAs who have invested many years and dollars into developing and implementing evaluation systems to include standards, measures and tools of instructional quality for teachers and principals.	3 large urban/suburban districts	**859,500**

Reform Area Three Project Five: Develop and Implement Instructional Leadership Standards and Accompanying Evaluation System

Budget Part II: Project-Level Budget Table

Project Five: Develop and Implement Instructional Leadership Standards

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	35,000	35,000	35,000		105,000
2. Fringe Benefits	15,400	15,400	15,400		46,200
3. Travel	10,000	5,000	5,000		20,000
4. Equipment					
5. Supplies	10,000	5,000	3,000		18,000
6. Contractual	100,000	75,000	75,000		250,000
7. Training Stipends		20,000	20,000		40,000
8. Other					
9. Total Direct Costs (lines 1-8)	$170,400	$155,400	$153,400		479,200
10. Indirect Costs*	6,804	6,804	6,804		20,412
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs					

13. Total Costs (lines 9-12)	$177,204	$162,204	$160,204		**$499,612**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project Five: Develop and Implement Instructional Leadership Standards

PROJECT-LEVEL BUDGET NARRATIVE

1) Personnel

Hire half time facilitator for three year period to oversee leadership project. Personnel will facilitate work group and coordinate with Utah Council for Education Leadership (UCEL) to develop updated instructional leadership standards to guide administrator preparation programs. Project facilitator will advise Utah State Board of Education on development of Board rule that will guide principal preparation and evaluation practices. Three year project will result in standards and assessment measures that will then become part of regular service pattern for employees of Department of Teaching and Learning.	35,000 x 3 years	105,000
Personnel Total		**105,000**

2) Fringe Benefits

Benefits for SEA are calculated at 44% of salaries.

3) Travel

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $50.	# Trips	$ per Trip	Total
Mileage for travel to committee meetings – 8 members x 5 meetings	40	100	4,000
Mileage, hotel and per diem to provide technical assistance to LEAs – average of $275	40	275	11,000
Travel to national or regional conference focused on administrator evaluation	2	2,500	5,000
Total Travel			**20,000**

4) Equipment

5) Supplies

Materials needed for development work as well as printing of materials for LEAs as part of principal evaluation toolkit. Tools will be web based in order for continuing access by LEAs. Supplies include material development.	12,000	$12,000

Office supplies related to work of principal evaluation	2,000 x 3 years	$6,000
Total Supplies:		$18,000

(6) Contractual

Contract with expert in principal evaluation focused on instructional leadership to inform work of committee in year one and implementation activities in years two and three. Expert will also work with facilitator to provide outreach services during implementation phase to LEAs.	$50,000	3 years	$150,000
Substitutes for teacher participation on committee year one	$125	8 teachers x 5 meetings	$5,000
Stipends for work by committee members outside of workday	$1000	20	$20,000
Evaluation services to ensure fidelity of planning and implementation as well as provide measures of reliability and validity embedded in tools of measurement of principal effectiveness	$25,000	3 years of service	$75,000
Total Contractual Costs			**$250,000**

7) Training Stipends

Stipends for LEA personnel to serve as trainers in new principal evaluation framework and accompanying toolkit. Training will occur years two and three of project then absorbed thereafter by LEAs	40 x 2 years	$500	$40,000
Total Stipends:			$40,000

8) Other

9) Total Direct Costs

- See Budget Table.

10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs

None

12) Supplemental Funding for Participating LEAs: None

Reform Area Three Project Six: Providing Statewide Policy and Resources for Equitable Distribution

Budget Part II: Project-Level Budget Table

Project Six: Providing Statewide Policy and Resources for Equitable Distribution

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$65,000	$65,000	$65,000	$65,000	$260,000
2. Fringe Benefits					
3. Travel	$10,000	$5,000	$5,000	$5,000	$25,000
4. Equipment	$5,000	$7,500			$12,500
5. Supplies	$10,000	$10,000	$10,000	$10,000	$40,000
6. Contractual	$500,000	$500,000	$500,000	$500,000	$2,000,000
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	$590,000	$587,500	$580,000	$580,000	$2,337,500
10. Indirect Costs*	$8,775	$8,775	$8,775	$8,775	$35,100
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs	$32,486	$32,486	$32,486	$32,486	$129,944
13. Total Costs (lines 9-12)	$631,261	$628,761	$621,261	$621,261	**$2,502,544**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Three Project Six: Providing Statewide Policy and Resources for Equitable Distribution

PROJECT-LEVEL BUDGET NARRATIVE

1) Personnel

Stipends for data analysis and technical assistance in LEAs showing high levels of inequity in teacher assignments and effectiveness. LEA representatives will engage in analysis and technical support for their LEA to make improvements by working with existing USOE staff with expertise in best practices for equitable distribution. Stipends of $5,000 will support 13 LEAs who need to make significant progress. CACTUS data will be programmed to include effectiveness data by existing USOE personnel enabling LEA reps to work with CACTUS data effectively for purposes of staffing analysis and placement.	13 x $5,000	$65,000 x four years	$260,000
Personnel Total			**$260,000**

2) Fringe Benefits

- Fringe benefits have not been separated out from stipends.

3) Travel

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $50.	# Trips	$ per Trip	Total
Travel during first year of project will include travel for two people to attend a national conference focused on equitable distribution to enable Utah to keep abreast of best practices and incorporate these practices as part of overall plan.	2	$2,500	$5,000
Years one through four funding provided for USOE personnel to travel to LEAs to assist with equitable distribution plans as well as working with LEA analysts who are closing achievement gaps through effective ED planning.	20 per year x 4 years	$250	$20,000
Total Travel			**$25,000**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Computer and office equipment for USOE personnel to use in field during four year project period.	$5,000	Computer, monitor, docking station, keyboard, software	$5,000
Flip cams to be used in urban and frontier classrooms to aide analysts and LEA staff in promoting best instructional practices among less experiences and ineffective teachers. Video will be used for online ARL coursework to assist in licensure and PD for ARL teachers in frontier LEAs.	$250 x 30	Flip cams and accompanying support tools	$7,500
Total Equipment Cost			**$12,500**

5) Supplies

Materials to be used in LEAs working to close achievement gaps through better equitable distribution practices. Up to 10 LEAs @ $1,000	$10,000 x 4 years	Books, materials, supplies, access to online coursework, etc., required by LEAs to improve ED practices	$40,000
Total Supplies:			**$40,000**

(6) Contractual

Utah Chamber of Commerce, Utah Technology Council and legislative leadership will work together to provide incentives through student loan forgiveness or housing supplements in order to attract effective teachers to frontier and hard to staff locations. Businesses, industry and government will provide matching funds over a four year period with analysis of effectiveness after four years. LEAs will apply for funding through application process. Sustainability will come (based on data) through legislated funds with matching funds from community/business sources.	$4,000,000 per year	4 years	$1,600,000
Expand teacher recruitment tool (Teachers.Teachers.com) to provide an expanded applicant pool of teachers with accompanying data for urban and frontier locations. All LEAs and IHEs will use this tool as statewide teacher employment application. After build out fees will continue to be paid for from existing USOE funds.	Funding for build out of existing program	$400,000	$400,000
Total Contractual Costs			**$2,000,000**

7) Training Stipends

9) Total Direct Costs

- See Budget Table.

10) Indirect Costs

- See Budget Table

11) Funding for Involved LEAs
None
12) Supplemental Funding for Participating LEAs $129,944

Supplemental Funding for Participating LEAs	Item Description	Total
Formula grants for participating LEAs.		**$129,944**

Reform Area Three Project Seven: Implementing Recommendations in the Multi-State Consortium for Revisioning the Professional Educator Continuum

Budget Part II: Project-Level Budget Table

Project Name: : Implementing Recommendations in the Multi-State Consortium for Revisioning the Professional Educator Continuum

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in **Reform Area Three: Recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most**.

Reform Area Three Goal: Ensure that all Utah children receive high quality instruction in every classroom every day by revising the professional educator continuum in a manner that recruits, develops and retains effective teachers and leaders and evaluates their performance in terms of measures of instructional quality, student growth and stakeholder input.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	$1,142,754	$459,339	$463,904	$468,651	$2,534,648
2. Fringe Benefits	$49,917	$51,926	$53,969	$56,141	$211,953
3. Travel	$76,926	$94,696	$66,966	$58,126	$296,714
4. Equipment		$20,000			$20,000
5. Supplies	$73,000	$18,000	$18,000	$18,000	$127,000
6. Contractual	$1,575,000	$885,000	$850,000	$690,000	$4,000,000
7. Training Stipends		$200,000	$100,000	$100,000	$400,000
8. Other					
9. Total Direct Costs (lines 1-8)	$2,917,597	$1,728,961	$1,552,839	$1,390,018	7,589,415
10. Indirect Costs*	$161,011	$69,021	$69,913	$70,847	$370,791
11.Funding for Involved LEAs					
12. Supplemental Funding for					

Participating LEAs					
13. Total Costs (lines 9-12)	$3,078,608	$1,797,982	$1,622,752	$1,460,865	**$7,960,206**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Project Seven - Implementing Recommendations in the Multi-State Consortium for Revisioning the Professional Educator Continuum

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project. • Salary computed from USOE salary schedule at mid-range of personnel position in order to attract quality candidates who are skilled in areas of leading educator quality initiatives. • Total figure is comprised of four years of salary that includes a 4% cost of living increase for each year.	% FTE	Base Salary	Total
UCSEE Project Specialist The UCSEE Project Specialist will be responsible for the overall leadership and management of the Pre-service and Teacher Leader Practitioner initiatives. Initiatives include developing standards, tools, and resources to support preparation of millennial and resident teachers as well as establishing the Teacher Leader license. The specialist will be hired from a pool of applicants with successful experience in the following: school and or district administration, interaction with teacher preparation programs, collaboration with IHEs and districts, leading mentoring initiatives and overall support of new teachers. Specialist will be supervised by Educator Effectiveness Coordinator	100%	$77,778 x 4 years + yearly cost of living increase @4%	$330,281
Office Specialist II – Responsible for all secretarial duties for the UCSEE Project Specialist. Will oversee support for all UCSEE projects including budgets, coordination efforts, correspondence, materials preparation and dissemination, etc. Will open position to current employees of USOE.	100%	$36,352 x 4 years + yearly cost of living increase	$154,367

Committee Member Stipends – teacher and principal members involved in development committees will received stipends for participation to pay for work incurred outside of workday (i.e. reading, data analysis, writing) USOE, IHE and UCSEE personnel will not be compensated	40	40 total educator participants on 5 UCSEE committees x $500	$100,000
Professional Development Stipends – Educators engaged in professional development during year-round off-track days, weekends or evenings will receive compensation for their time at the rate of $200 per day or $100 per half day.	1000	50% @ $200 50% @ $100	$150,000
Pilot Project Participation Stipends – Educators involved in pilot projects will be given a stipend on average of $2500 for participation, data collection, self reflection, evaluation and analysis. Pilots include collaborative induction models (50), teacher leader cadre (25), IHE/LEA pre-service/resident partnership pilot sites (cooperating teachers) (30), teacher leader performance assessment pilot phase (25), and pre-service performance assessment pilot group (100).	230	$2500 average	$575,000
Teacher Leader Cadre Stipends – The Teacher Leader Cadre members will be given a stipend to help with expenses associated with professional development, portfolio preparation, and performance exam expenses. The initial cadre participants will also be engaged in development activities outside of the workday. Initial 25 participants will continue on during the four year period through online and self-generated collaboration activities	75 part.	25 @ $5000 50 @ 2000	$225,000
Substitute funding for teacher release to engage in committee work and professional development related to UCSEE implementation activities. Over a four year period it is intended that all active educators in Utah will engage in professional learning activities according to their place on the continuum and individual growth needs. LEAs will augment this budget with support from their budget. This will pay for professional learning sponsored by SEA.	2500	4 days per participant @100 per day	$1,000,000
Total Personnel			**2,534,648**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel

Travel: Travel for Project One focuses on **development** work, technical assistance to IHES and LEAs during **implementation** and **monitoring** visits for institutionalization and evaluation. Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $36 based on state government rates. Hotel rooms for in state travel average at $90 while out of state rate is $250, airfare averages $650 and per diem at $50, plus other transportation and travel costs. Therefore, the average in state trip is quoted as $226 while an out of state trip for one person is listed at $2500. These are averages depending on the length and duration of travel. Travel for development work will be in the first year of project while travel for implementation, technical assistance and professional development will occur in years two and three. Support will occur through use of technology for online meetings and technical assistance where possible. Desk monitoring will accompany onsite monitoring visits to minimize travel expenses.	# Trips	$ per Trip	Total
Pre-service Practitioner:			
• Participants of development teams for program approval standards (15 committee members x 5 trips)	75	226	$16,950
• IHE professional development for new standards (10 IHEs)	10	226	2260
• Development of performance assessment for pre-service (trips to or by consultant – out of state)	3	2500	7500
• Technical assistance at sites for resident pilot programs (increase over four year period with increase of sites)	30	226	6780
• LEA technical assistance for expanded support to alternative route teachers (ARL on site cadre support 15 each year for 3 years)	45	226	10170
• Ongoing pre-service committee meetings with IHE and LEAs (5 per year for development and monitoring)	20	226	4520
• Professional development support for standards (10 sites in 2 years)	10	226	2260
• Attendance at out of state and in state conferences related to pre-service revisions. (4 committee members each year for 4 years)	16	2500	40,000
Novice Practitioner:			
• On site visits for IHE/LEA collaborative induction models, (One pilot site 1st year to involvement of all 10 IHEs in fourth year)	25	226	5650
• On site delivery of professional development for improved induction programs,	30	226	6780
• Out of state travel to /from New Teacher Center to work with staff members in developing and administering Teacher Working Conditions Survey. (2 staff members x 2 trips)	4	2500	10,000

• Travel to additional LEA and IHE sites to expand pilot programs for collaborative induction,	15	226	3390
• Travel to LEAs to implement Working Conditions Survey, (various stakeholder group meetings to lay groundwork for survey)	10	226	2260
• Technical assistance to LEAs for improved induction and mentoring,	30	226	6780
• Monitoring of improvement in induction and mentoring practices,	30	226	6780
• In-state conferences for updates on best induction practices (2 project staff members x 2 day conferences per year)	8	452	3616
• Out of state conferences for updates on best induction practices,(2 staff members x 1 per year)	8	2500	20,000
• On site monitoring of equitable distribution plans (required by Title IIA – no grant funds used).	125	0	0
Developing Practitioner:			
• Travel to several states to see use of state adopted toolkits. (2 project staff members x 2 states with adopted toolkits)	4	2500	10,000
• Travel to NSDC annual conference to update best practices in professional development. (2 project staff member each year)	8	2500	20,000
• Professional development to regional service centers (5) and LEAs (5 urban/suburban locations) on quality PD standards and use of accompanying toolkit.	10	226	2260
• Travel to various business coalition meetings around state to establish partnerships with business for teacher internships,	10	226	2260
• Travel to LEAs and stakeholder meetings for work on SAI implementation,	8	226	1808
• Committee work travel for various development and implementation activities.	20	226	4520
Experienced Practitioner:			
• Committee work on development of teacher leader standards and accompanying tools. (15 members times 10 meetings)	150	226	33900
• Travel to meet with consultants on development of performance assessment. (2 committee members x 2 trips)	4	2500	10000
• Travel to cadre face to face meetings for teacher leaders. (25 members first two years, 50 members years 3 and 4 times 2 meetings per year) Future statewide professional development support done online.	150	226	33900
• Observation of teacher leaders working in internships, (20 observations – 30 observations over 3 years)	75	226	16950
• Technical assistance by project staff to LEAs for help in working with teacher leaders standards and accompanying tools. Most of the TA work done online or by phone.	20	226	4520
Total Travel			**295,814**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Flip cams to for use in development of best practice modules for online video vignettes tied to updated standards as well as use in LEAs for improvement of instructional practices at all levels of continuum.	100 @ $200	Video cameras	20,000
Total Equipment			**$20,000**

5) Supplies

Supplies: Materials and office supplies needed to enable UCSEE personnel to conduct the work of the activities and project goals.	Cost of Item	Item Description	Total
Office supplies for UCSEE employees and USOE employees to engage in work of all four levels of continuum (paper, post-its, markers, staplers, pencil sharpeners, etc.). Office supplies also include tone and printer cartridges.	6 x $3000 per year	General office supplies	$72,000
Thumb drives that will hold video and electronic portfolios for 75 teacher leaders, 25 developing practitioners	100 x 50	Thumb drives	$5,000
Books and materials for teacher leader cadres and other professional development activities for 250 UCSEE participants	250 x 200	Books and support materials	$50,000
Total Supplies:			**$127,000**

6) Contractual The Utah State Office of Education has followed the contract procurement procedures under 34 CFR Parts 74.40 – 74.48 and Part 80.36 as well as adhering to Utah State Government procurement procedures.

Contractual: Professional services and products needed in order to actualize the goals of the UCSEE project. The services and products are specifically determined to be sustainable over time or serve as the basis for data collection and analysis	Cost of services or product	Contract working title	Total

to take further action for improvement in educator quality.			
IHE teacher preparation programs will engage in development and overhaul of preparation programs to better meet the needs of 21st Century Learners and millennial teachers. Programs will be aligned with program standards developed by USCEE Pre-Service Practitioner Committee and aligned with new INTASC Standards to be released Fall 2010. Ten IHEs will each receive funding as per individual program capacity and provide matching funds for the project.	Up to $50,000 per IHE (10) for development	Pre-service Program Restructuring	$500,000
Development, implementation and analysis of new performance assessment to be used as an exit requirement from teacher preparation programs. Work with existing testing vendor who has developed similar assessment for other states.	Four year contract to provide development, implementation and ongoing analysis @ $100,000 per year	Pre-service Practitioner Performance Assessment	$400,000
Professional Development School model for preparation of resident teachers in co-teaching or internships models with job-embedded professional development. Expansion of PDS model to other sites. Initial funds for Univ. of Utah and Salt Lake School District with matching funds from IHE and LEA provided. Program expansion to include other IHEs and LEAs with capacity building activities.	1st year @ 100,000 for one site to expand to 5 sites over next 3 years.	Resident Teacher PDS Pilot	$400,000
Expand Alternative Route to Licensure (ARL) Program for ARL candidates through development of online coursework and hybrid support programs. Replication of Granite School District ARL professional growth support system by other LEAs. Funding to cover	1st year development activities for online and hybrid courses, $100,000. Replication of ARL support in LEAs $300,000 over three years with candidates and LEAs absorbing costs through course fees after	Expand Support for ARL Candidates	$400,000

costs of expertise and course delivery by consultants as well as technical assistance by consultants to LEAs.	pilot project		
Pilot program development, implementation and evaluation for collaborative induction models between LEAs and IHEs. Funding for consultation with experts in seamless IHE to LEA induction practices	$250,000 for year one development, implementation and evaluation.	Collaborative Induction Models	$250,000
Development and implementation of professional learning activities and induction toolkit for Improvement of LEA induction programs. Contract with professional development experts in areas of mentoring and induction.	Development activities first year @ $200,000. USOE will work with LEA EYE Coordinators to build capacity for improved induction using toolkit.	LEA Novice Practitioner Induction Program Improvement	$200,000
Expansion of outreach to rural and frontier educators to meet licensure and endorsement requirements through online coursework, online communities of support and other professional learning resources. USOE services such as UEN and IHEs will carry coursework on their servers and sustain cost through fees	Development of online courses for practicing rural educators 1st year @ 200,000 with ongoing support for online communities and coursework expansion @ $100,000 for remaining 3 years.	Rural Novice Educator Outreach	$500,000
Administer the national Teacher Working Conditions Survey through New Teacher Center with accompanying analysis and support for recommended changes.	Flat rate for development costs, implementation and professional development by consultant authorized to administer and work with data from Teacher Working Conditions Survey @ $250,000 over three years.	Working Conditions Survey	$250,000
Adoption and implementation of National Staff Development Council professional development standards. Implementation of Standards Assessment Inventory to obtain baseline and growth data over time. Development and implementation of Utah Professional Development Toolkit for all LEAs to support use	$50,00 for adoption and implementation activities around NSDC Standards $100,000 for development of Utah PD Standards toolkit $200,000 for SAI implementation, analysis and support	Standards Based Professional Learning	$350,000

of high quality professional learning for all educators. Training in use of NSDC Innovation Configurations (ICs) to enlist all stakeholders in work of high quality learning for students and adults in schools.			
Development of Teacher Leader Standards with accompanying performance assessment, coursework and criteria for advancement. Consultant to work with UCSEE staff to guide process. Consultant to develop performance assessment and accompanying tools and coursework	$250,000 to existing assessment company with expertise in teacher leadership arena. Four year contract will include development, implementation, analysis and ongoing technical support.	Teacher Leader Program	$250,000
Implementation of "Keeping Learning on Track", enlisting teacher leaders as trainers for professional development model of formative assessment for learning.	Consultants from KLT to develop and provide four year trainer of trainers model. Fees include services and support materials @ $500,000	Keeping Learning on Track	$500,000
Total Contractual Support			**$4,100,000**

7) Training Stipends

Training Stipends: Costs for coursework associated with UCSEE projects as well as support for Resident and Alternative Route teachers in training.	Cost of Item	Item Description	Total
• Teacher Leader program participation is a two year process with coursework. Stipend would offset the cost of the coursework for initial pilot.	20 part.x $10,000	Coursework for initial Teacher Leader pilot coursework	$200,000
• Second phase of Teacher Leader participation for new candidates at a reduced stipend rate.	40 x $5000	Coursework for phase two of Teacher Leader pilot project	$200,000
Total Training Stipends			**$400,000**

8) Other

9) Total Direct Costs

See budget chart

10) Indirect Costs
See budget chart

11) Funding for Involved LEAs

12) Supplemental Funding for Participating LEAs
Reform Area Four Project One: System of Support for Low-Achieving Schools

Budget Part II: Project-Level Budget Table
Project One: System of Support for Low-Achieving Schools
Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area **Four: Turning around our lowest-achieving schools.**

Reform Area Four Goal: Ensure that all Utah children are proficient in reading and math, receive quality instruction every day, and participate in relevant and engaging coursework by turning around our lowest-achieving schools.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$62,256	$62,256	$62,256	$62,256	$249,024
2. Fringe Benefits	$27,392	$27,392	$27,392	$27,392	$109,568
3. Travel	$10,000	$10,000	$10,000	$10,000	$40,000
4. Equipment					
5. Supplies	$750	$750	$750	$750	$3,000
6. Contractual	$12,500	$12,500	$12,500	$12,500	$50,000
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	$112,898	$112,898	$112,898	$112,898	$451,592
10. Indirect Costs*	$12,102	$12,102	$12,102	$12,102	$48,408
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs					

13. Total Costs (lines 9-12)	$125,000	$125,000	$125,000	$125,000	**$500,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Four Project One: System of Support for Low-Achieving Schools
BUDGET NARRATIVE

Note: The funding for this project is to provide SEA support for the system of support for non-Title I schools in need of improvement. Title I, Part A School Improvement funds will be used to fund the system of support for Title I schools in need of improvement.

Additional Funds committed to school improvement	Estimated Amount
Title I, Part A 1003(a) Funds (for Title I schools only)	$2,318,000
Title I, Part A 1003(g) Funds (for Title I schools only)	$2,551,000
Title I ARRA School Improvement Grants (for Title I eligible schools only)	$14,000,000
Total	$18,869,000

1) Personnel

SEA Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Project School Improvement Specialists (I): New school improvement specialist will be responsible for the overall leadership and management of the School Improvement project in non-Title I s schools. The staff will be expert in the area of school improvement and have demonstrated educational leadership in the school improvement process. They will report to ESEA director and be responsible for coordinating research-based school improvement efforts in non-Title I schools.	50%	$43,579	$174,316
Project Support Staff School Improvement (1): Support staff for school improvement project.	50%	$18,677	$74,708
Total			**$249,024**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel ($10,000 in year 1; $10,000 per year in years 2-4) $40,000

SEA Travel	# Participants	$ per Conference participant	Consultant Travel	Total
Annual conferences will provide technical assistance to participating districts and schools. The conference will last two full days.	25 (2 conferences per year: year 1)	$100	$5,000	$10,000 (year 1)
	50 (2 conferences per year: years 2-4)	$100		$30,000 (years 2-4)
	Total			$40,000

4) Equipment $0

5) Supplies ($750 per year) $3,000

SEA Supplies & Materials	Quantity	$ per Item	Total
Training Materials from Publishers	25	$20	$500
Printing expenses	25	$5	$125
Office supplies, miscellaneous			$125
Per Year total			$750

6) Contractual ($12,500 per year) $50,000

SEA Contractual:	# Activities	$ per Activity	Total
Presenters for annual conference will provide training to our participating districts and schools. The conferences will last two full days. A more detailed justification for these conferences is explained in the narrative for selection criterion (A)(2).	1 Conference per year x 2 presenters	$4,500	$4,500
Training seminar on research-based school appraisal process	1	$4,000	$4,000
Training seminar on Instructional Audits for participating	1	$4,000	$4,000

schools			
Per Year Total			$12,250

8) Other (None)
9) Total Direct Costs
See Budget Table
10) Indirect Costs
See Budget Table
11) Funding for Involved LEAs (none)

12) Supplemental Funding for Participating LEAs none
Reform Area Four Project Two: Preventing Low-Achieving Schools

Budget Part II: Project-Level Budget Table

Project Name: Preventing Low-Achieving Schools

Associated with Criteria: Funds will be used to accomplish the State's plans and meet its targets in Reform Area **Four: Turning around our lowest-achieving schools.**

Reform Area Four Goal: Ensure that all Utah children are proficient in reading and math, receive quality instruction every day, and participate in relevant and engaging coursework by turning around our lowest-achieving schools.

(Evidence for selection criterion (A)(2)(i)(d))

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	$62,256	$62,256	$62,256	$62,256	$249,024
2. Fringe Benefits	$27,392	$27,392	$27,392	$27,392	$109,568
3. Travel	$7,500	$10,000	$10,000	$10,000	$37,500
4. Equipment	$2,500				$2,500
5. Supplies	$750	$750	$750	$750	$3,000
6. Contractual	$12,500	$12,500	$12,500	$12,500	$50,000
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	$112,898	$112,898	$112,898	$112,898	$451,592
10. Indirect Costs*	$12,102	$12,102	$12,102	$12,102	$48,408
11.Funding for Involved LEAs					

12. Supplemental Funding for Participating LEAs	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$4,000,000
13. Total Costs (lines 9-12)	$1,125,000	$1,125,000	$1,125,000	$1,125,000	**$4,500,000**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Reform Area Four Project Two: Preventing Low-Achieving Schools

BUDGET NARRATIVE

Note: The funding for this project is to provide SEA support for the system of support for non-Title I schools in need of improvement.

1) Personnel

SEA Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Project School Improvement Specialists (I): New school improvement specialist will be responsible for the overall leadership and management of projects related to school improvement in non-Title I schools. The staff will be expert in the area of school improvement and have demonstrated educational leadership in the school improvement process. They will report to the ESEA director and be responsible for coordinating research-based school improvement efforts in non-Title I schools.	50%	$43,579	$174,316
Project Support Staff School Improvement (1): Support staff for school improvement project.	50%	$18,676.75	$74,708
Total			**$249,024**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel ($7,500 in year 1; $10,000 per year in years 2-4) $40,000

SEA Travel	# Participants	$ per Conference participant	Consultant Travel	Total
Annual conferences will provide technical assistance to participating districts and schools. The conference will last two full days.	25 (2 conferences per year: year 1)	$100	$5,000	$10,000 (year 1)

	50 (2 conferences per year: years 2-4)	$100		$10,000 (years 2-4)
Total				$40,000

4) Equipment $2,500 in year one

SEA Equipment:	Quantity	$ per Item	Total
Computer for School Improvement Specialist and Support Staff	1	$1,750	$1,750
LCD Projector for Training	1	$750	$750
Total			$2,500

5) Supplies ($750 per year) $3,000

SEA Supplies & Materials	Quantity	$ per Item	Total
Training Materials from Publishers	25	$20	$500
Printing expenses	25	$5	$125
Office supplies, miscellaneous			$125
Per Year total			$750

6) Contractual ($12,500 per year) $50,000

SEA Contractual:	# Activities	$ per Activity	Total
Presenters for annual conference will provide training to our participating districts and schools. The conferences will last two full days. A more detailed justification for these conferences is explained in the narrative for selection criterion (A)(2).	1 Conference per year x 2 presenters	$4,500	$4,500
Training seminar on research-based school appraisal process	1	$4,000	$4,000
Training seminar on Instructional Audits for participating schools	1	$4,000	$4,000
Per Year Total			$12,500

8) Other (None)

9) Total Direct Costs
See Budget Table

10) Indirect Costs
See Budget Table

11) Funding for Involved LEAs (none)

12) Supplemental Funding for Participating LEAs $4,000,000

Eight schools identified for this grant will receive $500,000. The grant anticipates serving up to eight non-Title I low-performing schools that do not qualify for the Title I ARRA SIG. Four schools would be served in years 1 and 2; four different schools would be served in years 3 and 4.

Management of RTTT and Increasing LEA Capacity Project

Budget Part II: Project-Level Budget Table **Project:** Management of RTTT and Increasing LEA Capacity **Associated with Criteria:** (A)(2), Building Strong Statewide Capacity.					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	531,824	531,824	531,824	531,824	$2,127,296
2. Fringe Benefits	234,003	234,003	234,003	234,003	$936,012
3. Travel	28,750	28,750	28,750	28,750	$115,000
4. Equipment	21,000				$21,000
5. Supplies	62,000	62,000	62,000	62,000	$248,000
6. Contractual	272,694	272,694	272,694	272,694	$1,090,775
7. Training Stipends					
8. Other					
9. Total Direct Costs (lines 1-8)	1,150,271	1,129,271	1,129,271	1,129,271	$4,538,083
10. Indirect Costs*	103,387	103,387	103,387	103,388	$413,548
11.Funding for Involved LEAs					
12. Supplemental Funding for Participating LEAs	4,500,000	4,500,000	4,500,000	4,500,000	$18,000,000
13. Total Costs (lines 9-12)	$5,753,657	$5,732,657	$5,732,657	$5,732,658	**$22,951,631**

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 budget category.
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 section. Note that indirect costs are not allocated to lines 11-12.

Management of RTTT and Increasing LEA Capacity Project

BUDGET NARRATIVE

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	# part.	Salary	Total
Hire RTTT Oversight Director (1 FTE). This person will be responsible for the overall leadership and management of the Race To The Top Program.	100%	$148,000	592,000
Specialist (1 FTE): This person will be responsible for assisting the Oversight Director in carrying out specific financial tasks related to RTTT.	100%	$77,780	$311,120
Specialist (1 FTE): This person will be responsible for assisting the Oversight Director in carrying out specific data tasks related to RTTT.	100%	$77,780	$311,120
Specialist (1 FTE): This person will be responsible for assisting the Oversight Director in carrying our specific program review tasks related to RTTT.	100%	$77,780	$311,120
Fiscal Analyst II (1FTE): This person will be responsible for assisting with all accounts and finances associated with RTTT.	100%	$77,780	$311,120
Office Specialist II (1 FTE): This person will serve as clerical support for RTTT, and will be under the direct supervision of the Oversight Director.	100%	$36,352	$145,408
Office Specialist II (1 FTE): This person will serve as clerical support for RTTT, and will be under the direct supervision of the Oversight Director.	100%	$36,352	$145,408
Personnel Total			**$2,127,296**

2) Fringe Benefits

- Benefits for SEA are calculated at 44% of salaries.

3) Travel

Travel: Travel expenses include the average mile reimbursements of $100 each, in addition to an amount of per diem of $50.	# Trips	$ per Trip	Total
• mileage and per-diem for RTTT work	75 meetings	$200 (average)	$15,000
• travel (mileage, per diem, hotel) annual compliance monitoring of 110 LEAs during RTTT	440 trips	$200	$88,000
• technical assistance for LEAs during LEA development and implementation stages	60 trips	$200	$12,000
Travel Total			**$115,000**

4) Equipment

Equipment: Consistent with SEA policy, equipment is defined as tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of $1,000 or more per unit.	Cost of Item	Item Description	Total
Activity 1: Desktop Computers (7): Seven desktop computers will be needed to expand our current office and supply the needs of 6 new employees.	$3000	Computer including monitor	$21,000
Total Equipment:			**$21,000**

5) Supplies

SEA Supplies & Materials:	Total
Publications @$2,000 annually	$8,000
Printing expenses, Quarterly reports, Annual Reports @ $20,000per year	$80,000
Published materials for compliance, technical assistance @ 20,000per year	$80,000
Office supplies, copy expenses, miscellaneous @ $20,000per year	$80,000
Total Supplies:	**$248,000**

6) Contractual

Contractual: Professional services and products needed in order to implement the RTTT grant. The Utah State Office of Education has followed the contract procurement procedures under 34 CFR Parts 74.40 – 74.48 and Part 80.36 as well as adhering to Utah State Government procurement procedures.	Description of Services	Time/Cost of Services	Total
Contract with experts in evaluation of grant efforts.	Technical assistance to help Utah measure implementation and effectiveness of Utah's Comprehensive Reform Plan and the RTTT grant. Activities would include working with Utah and LEAs to ensure fidelity of implementation as an evaluation	Four year period with emphasis on research and evaluation costs	$1,090,775
Total Contractual Cost			**$1,090,775**

7) Training Stipends
None

8) Other
None

9) Total Direct Costs
- See Budget Table

10) Indirect Costs
- See Budget Table

11) Funding for Involved LEAs
None

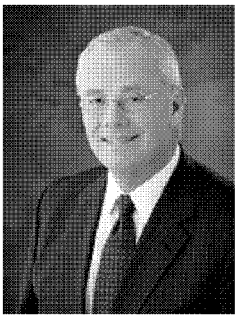
12) Supplemental Funding for Participating LEAs

Activity	Purpose	# LEAs involved	Total
LEA Capacity Building	Augment the work of	87	17,500,000

Additional Funding for LEAs to increase their ability to implement Utah's Comprehensive Reform Plan. LEAs will explain how they will use the funds in their detailed Scope of Work.	LEAs who have invested many years and dollars into developing and implementing reform, but lack the resources to proceed without additional funds.		
LEA Capacity Building Additional Funding for new charter LEAs that are chartered after the RTTT application is made. The funds will be used to increase their ability to implement Utah's Comprehensive Reform Plan. LEAs will explain how they will use the funds in their detailed Scope of Work.		Unknown	500,000
TOTAL:			**18,000,000**

Biographies of Project Managers

Utah State Office of Education Superintendent Dr. Larry Shumway



Dr. Shumway has held the post of Superintendent of Public Instruction since June 2009. Previous to this position, he served as Deputy Superintendent and Director of Education Licensing. Prior to coming to the State Office, Dr. Shumway was Superintendent of the Tooele School District and previously served as Director of Alternative Schools and Programs in the Davis School District. He earned his doctorate in education at the University of Nevada in Las Vegas, and his bachelors and masters degrees at Brigham Young University.

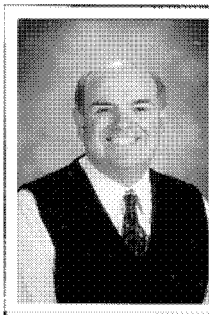
Utah State Office of Education Teaching and Learning Department Director Dr. Sydney Dickson

Dr. Sydnee Dickson has spent the past 30 years serving the children of Utah in public education. Her stellar career has including teaching, counseling, school-level and district administration. She currently serves as the Director of Teaching and Learning at the Utah State Office of Education. Dr. Dickson has a state and national reputation for leading school reform efforts; specifically focused on teacher and principal effectiveness. She recently served a four-year term on the Board of Trustees for the National Staff Development Council, was the 2006 Bennion Scholar at the University of Utah, and is currently working on two national consortiums to revise the Interstate New Teacher Assessment and Support Consortium teacher standards and develop a continuum of support for teachers throughout their career. Over the past decade Dr. Dickson has often been a keynote or presenter at state and national conferences, facilitating conversation on the important role that high quality professional development plays in student achievement. Her passions are ensuring that every student in Utah has access every day to an effective caring teacher and principal, and that educators have the support they need to make this happen.

Utah State Office of Education Teaching and Learning Department Literacy Coordinator Reed F. Spencer, Ph. D.

Dr. Reed Spencer received his Bachelor's Degree from Weber State College with a double major (Elementary Education and Psychology), Masters Degree from Utah State University in Elementary Education, and Doctorate from the University of Arizona. He has taught elementary school for nine years, taught one year full time at Utah State University, was a building principal for 15 years, supervised programs and schools at the district level for 11 years, and has coordinated literacy at the Utah State Office of Education for the last two years. He has taught graduate classes in reading, foundations, curriculum theory, and many others for 25 years. His areas of interest include literacy, school and system instructional improvement, and assessment and evaluation.

Utah State Office of Education Teaching and Learning Coordinator David Smith



David A. Smith holds a Bachelor of Arts degree in Elementary Education and Spanish from Weber State University and a Master of Education degree in Educational Administration from the University of Utah. In his thirty four year career in education he has taught second and fifth grade in elementary schools, and Reading, English, Computer Programming, and Social Studies on the middle school level. He served for twenty years as an elementary school principal. Mr. Smith then served for two years as the Assessment Development Coordinator in the Utah State Office of Education, directing the development of all of Utah's standardized assessments including the Criterion Referenced Tests in mathematics, English language arts and science, the Utah Basic Skills Competency Test, the Utah Academic Language Proficiency Assessment, and the Direct Writing Assessment. For the past year he has served as a curriculum coordinator over mathematics and science. In this capacity he has overseen development of a new kindergarten through second grade science curriculum, worked to expand professional development opportunities for elementary teachers in science, completed an extensive revision to the Elementary Mathematics Endorsement, and overseen the Math and Science Partnership grants in Utah. He was recognized as the National Distinguished Principal for the Murray City School District in 2006.

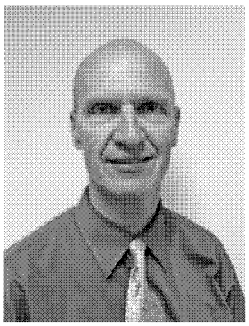
Utah State Office of Education Director for Career, Technical, and Adult Education Mary Monroe Shumway

Mary Monroe Shumway received her BS degree from Utah State University in Family and Consumer Sciences (FACS) Education and her Masters from Utah State University in Education. She received her administrative credential from Brigham Young University. She taught Family and Consumer Science in Idaho and worked as a government relations coordinator at the American Association of Family and Consumer Sciences (formerly AHEA) in Washington D.C. before returning to Utah in 1987. She has been at the State Office of Education for 20 years. She has been the state specialist for Family and Consumer Sciences, Tech Prep, School-to Careers, accreditation, and Applied Technology Curriculum and Instruction Coordinator. As director, she is responsible for leadership of secondary Career and Technical Education programs in the state. Mrs. Shumway oversees curriculum development, skill certification, guidance and counseling, work-based learning, in-service training, pathways regional coordination, and articulation with higher education. She is also responsible for student services, safe drug free behavior programs, youth in custody, along with high school completion, GED, and other adult education programs. She currently serves on the Workforce Education Economic Development Alliance, K16 Alliance Committee, Salt Lake City Chamber of Commerce Education Committee, and Math Steering Committee.

Utah State Office of Education Teaching and Learning Department Early College Specialist Moya Kessig

Moya Kessig has been a middle school teacher, curriculum specialist, principal, and an Executive Director for Jordan School District. She currently oversees Concurrent Enrollment, Advanced Placement, International Baccalaureate and Gifted and Talented programs K-12. She serves on the College Board's College Scholarship Service Assembly which serves as a forum for the consideration of policies, practices, and procedures designed to help students and families prepare to meet the costs of postsecondary education.

Utah State Office of Education Director of Assessment John Jesse

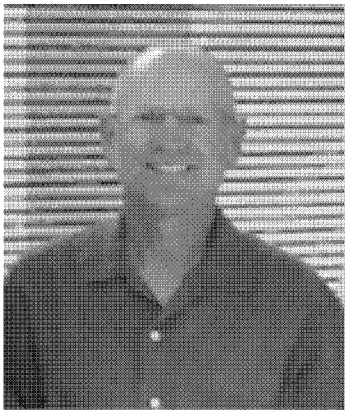


John Jesse is the current Director of Assessment and Accountability at the Utah State Office of Education. Previously he served for ten years as the Director of Research and Evaluation for Alpine School District, 10 years as an Elementary Principal, and as a teacher. Mr. Jesse has Endorsements in Mathematics, Journalism, ESL, and Reading Recovery.

Utah State Office of Education Associate Superintendent Assessment and Accountability Dr. Judy Park

Judy W. Park, Ed.D. has worked at the Utah State Office of Education for the past six years. Dr. Park is the co-chair of the SMARTER Balanced Assessment Consortium for the Race to the Top Assessment Competition. She regularly presents on the State and National level on assessment, accountability, and data systems. She was responsible for developing the Utah state accountability system, Utah Performance Assessment System for Students. She has implemented a data governance process for the Utah State Office of Education and serves as the Chief Information Officer. She regularly works with state legislators to develop and pass state education laws concerning assessment, accountability, and data issues.

Utah State Office of Education Information Technology Director John Brandt, Ph.D.



John Brandt, Ph.D. has a B.S. Math Education from Pennsylvania State University and a Ph.D. in Education Administration from the University of Utah. He spent three years as a secondary math teacher and was a graduate assistant in University of Utah's School of Education. He has been a programmer, IT analyst, IT manager, and is currently the Information Technology Director for the Utah State Office of Education. He has been instrumental in the development of Utah's AYP and EDFacts data collection and reporting systems, the USOE Data Warehouse Group and semi-annual USOE Data Conference, the Utah

Statewide Student Identifier (SSID) system, the UTREx longitudinal data system, and the Comprehensive Administration of Credentials for Teaches in Utah Schools (CACTUS). He is a member of the Utah Technology Coordinator Council (TCC), Council of Chief States School Officials/Education Information Management Advisory Committee (CCSSO/EIMAC0), and the Utah State Government Information Technology Leadership Council.

Utah State Office of Education Data and Statistics Coordinator
Jennifer Lambert has been working for the Utah State Office of Education since 2007. She began as a Data Steward for Curriculum and Instruction and is now the Data Quality Manager, heading up the Data and Statistics section. Before coming to the USOE, Jennifer worked as a Research Associate for a national research study funded by the Ford Foundation, the Gender and Multicultural Leadership Project. She has been an adjunct professor, teaching Political Analysis at the University of Utah. Jennifer has a BA in Political Science from Brigham Young University and an MA in Political Science from the University of Utah. She is nearly ABD for a Ph.D. in Political Science from the University of Utah.

Utah State Office of Education Instructional Quality Coordinator Linda Alder
After completing a B. S. Degree in Education at the University of Utah, Linda Alder began her career as an elementary teacher in Granite School District. She taught fifth and sixth grade for several years, had assignments as a professional developer, and held offices in the Granite Education Association. After completing a Master's Degree in Educational Administration at the University of Utah, she accepted a position at the State Office of Education where she has had several assignments. She has worked with Gifted and Talented programs, has participated in curriculum development, and has managed several other programs. Most recently, she has worked in the Educator Quality and Licensing Section with Out-of-State Licenses, the Visiting Teachers program, the EYE Mentoring and Induction program, and as the USOE representative to teacher education programs.

Utah State Office of Education Teaching and Learning Department Licensing Coordinator Travis Rawlings
Travis Rawlings began teaching in the Tooele School District in 1998 where he taught 8 years. His primary focus of instruction was mathematics, but he also taught computer science and drama. In 2003, Travis earned a Masters of Education in Secondary Education with an emphasis in Educational Leadership, and received his Administrative credential in 2005. Travis then joined the Utah State Office of Education, working in the Educator Quality and Licensing section, where he administered both the Basic Skills Education Program and the Carson Smith Special Needs Scholarship Program, and took on the role as Data Steward for that section. Currently, Travis is responsible for Educator Testing (including Praxis testing), HEOA Title II reporting, the Carson Smith Special Needs Scholarship Program, and maintaining and reporting Utah Teacher Data in the CACTUS database.