APPENDICES

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Appendix A1-1

A. Participating LEA Memorandum of Understanding

Illinois State Board of Education

100 North First Street • Springfield, Illinois 62777-0001
www.isbe.net

Jesse H. Ruiz
Chairman

Christopher A. Koch, Ed.D.
State Superintendent of Education

Dear Superintendent:

Illinois will be submitting a new application to the U.S. Department of Education for Phase II of the "Race to the Top" by the June 1 deadline. Our fifth place finish in Phase I beat the expectations of many, however, it was not good enough.

Reviewers noted that one of the shortcomings of our application was a lack of participation from our districts; only 42% returned a memorandum of understanding to partner with us. I am writing to you today to seek your partnership in our Phase II application.

If we are successful our schools stand to receive $400 million. Many Illinois districts need this funding to improve student outcomes and close the achievement gap but participation by as many districts as possible is needed to bring these funds to Illinois. We surveyed districts, conducted a focus group and have been listening to why districts chose to sign and why they did not. We have made changes to the application based on this feedback. These changes include:

1) Additional funding for districts to assist with the implementation of STEM programs of study in high schools and additional professional development for math and science instruction, including Advanced Placement courses.
2) In an effort to reduce paperwork, we are allowing the already developed district improvement plan to be the basis of the scope of work plan to be submitted for "Race to the Top".
3) Only Tier I and Tier II schools, as identified in ISBE's School Improvement Grant application, will have to use the four reform models introduced by the U.S. Department of Education which may require the replacement of a principal.

We understand the current fiscal crisis in the state has eroded your confidence in the state's ability to pay bills but the work that is underway needs this influx of funds to continue. There are several reasons why you should partner with us and sign the memorandum of understanding:

- Illinois has already set a course for strategic reforms that align with the four areas of "Race to the Top." If Illinois earns a "Race to the Top" grant, it could bring $400 million for the state and its schools to help implement reforms more quickly.

- Teachers and administrators will be pursuing many of these reforms regardless of what happens with the "Race to the Top".

- It will allow Illinois to more rapidly develop a statewide shared technology infrastructure providing teachers and administrators with real-time access to data and reducing duplicative reporting. This infrastructure will also allow districts to reduce Information Technology costs through a shared "cloud computing" platform.

- Teachers and principals will receive high quality induction and mentoring, including intensive training in the use of data to improve student growth.

- Districts will benefit from new statewide supports to bring relevance and practical application to more rigorous standards – steps that will help our students successfully compete on a global stage.

- The development of a Longitudinal Data System will reduce and simplify district reporting to the State and allow districts to follow students through their entire educational career, from preschool through college graduation.

We appreciate your further consideration and ask that you return a completed memorandum of understanding to show your interest.

We will be holding a series of webinars to answer questions and I encourage you to participate in these with your union leadership so that questions may be answered. The first of these is scheduled for Tuesday, April 27 at 11 a.m.

We ask that you return the memorandum of understanding as soon as possible, but no later than May 24, by emailing it to rt3mou@isbe.net.

Thank you for your consideration.

Sincerely,

Christopher A. Koch, Ed.D.
State Superintendent of Education

This Memorandum of Understanding ("MOU") is entered into by and between the State of Illinois ("State") 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.

The signatures of the LEA Superintendent and the President of the Local School Board set forth below indicate agreement to terms of this MOU, including Exhibits; provided, however, the signature of the LEA Superintendent must be set forth on Exhibit II to indicate agreement to the Super LEA Reform Commitments and for Exhibit II to be incorporated into this MOU.

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

The signature of the Local Teachers' Union Leader set forth below indicates support for the LEA's decision to be a Participating LEA; provided that such signature and the Local Teachers' Union Leader's indication of support does not constitute an agreement by the Local Union to reopen or otherwise modify any existing collective bargaining agreement or waive its rights and protections under the Illinois Educational Labor Relations Act; and provided further that the signature of the Local Teachers' Union Leader must also be set forth on Exhibit II for it to be incorporated into this MOU.

Local Teachers' Union Leader (if applicable):

_____
Signature/Date

_____
Print Name/Title

Authorized State Official - required:
By its signature below, the State indicates agreement to the terms of this MOU and hereby accepts the LEA as a Participating LEA.

_____
Christopher A. Koch, Ed.D, State Superintendent Date

I. Scope of Work and Nature of LEA Requirements and Commitments

A. Mandatory Requirements. Exhibit I, Preliminary Scope of Work, indicates which portions of the programs and initiatives outlined in the State's Race to the Top Application for Phase 2 Funding, due to the U.S. Department of Education on or before June 1, 2010 (the "Final State Application"), the Participating LEA is agreeing to implement.

B. Super LEA Reform Commitments. Exhibit II (Super LEA Reform Commitments), identifies commitments the LEA Superintendent and Local Teacher Union's Leader must make in order to receive the benefits identified on Exhibit II. **The Super LEA Reform Commitments are relevant only to Participating LEAs with one or more "Tier I" or "Tier II" schools, as identified by ISBE as part of its final 1003(g) School Improvement Grant application.**

C. LEA Plan. If the State's application is funded, the Participating LEA will prepare a Final Scope of Work in a timely fashion but no later than 90 days after a grant is awarded ("LEA Plan"). The LEA Plan must describe the LEA's specific goals, activities, timelines, budgets, key personnel, and annual targets for key performance measures in a manner that is consistent with the Preliminary Scope of Work (Exhibit I) and with the Final State Application. To the extent feasible and permitted by the U.S. Department of Education, the State agrees to incorporate the LEA Plan into the district improvement planning template and process. The Participating LEA agrees to develop the LEA Plan in cooperation with its Local Teachers' Union.

D. Subject to All Applicable Laws. The State and LEA commitments set forth in this MOU (including exhibits), the Final State Application, and the LEA Plan are subject to all applicable requirements and regulations of federal and State law, including without limitation the Illinois Educational Labor Relations Act, 115 ILCS 5/1 *et seq.*, laws and regulations applicable to the Race to the Top Program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99).

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 subgrantee will:

1. Implement the LEA Plan;
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, webinars, 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. Provide the State supports identified in the Final State Application;
2. Work collaboratively with, and support the Participating LEA in carrying out the LEA Plan;
3. 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;
4. Provide feedback on the LEA's status updates, annual reports, any interim reports, and project plans and products; and
5. Identify sources of technical assistance for the LEA Plan.

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 Final State Application 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. The State will terminate this MOU and the LEA's status as a Participating LEA, with no further remedy, if the LEA does not submit to the State an LEA Plan meeting the requirements of Section I.C by the date that is 90 days after a grant is awarded to the State.

III. Assurances

The Participating LEA hereby certifies and represents that:

1. It has all requisite power and authority to execute this MOU;

2. It is familiar with the initiatives and reforms described in this MOU and its exhibits, and is supportive of and committed to working on the initiatives set forth in this MOU;
3. It agrees to be a Participating LEA and will implement those portions of the Final State Application indicated in Exhibit I attached to this MOU, if the State application is funded;
4. It will comply with all of the terms of the Race to the Top Program and the State's subgrant; and
5. The baseline information set forth on Exhibit III is accurate and complete.

IV. Modifications

This MOU 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: (a) the State's termination of this MOU pursuant to Section II.D; (b) the expiration of the grant project period; or (c) upon mutual agreement of the parties (if occurs earlier than grant termination or expiration). If the State's application is not funded, this MOU shall be null and void.

EXHIBIT I
PRELIMINARY SCOPE OF WORK

The LEA agrees to all of the requirements described in this Preliminary Scope of Work. Commitments applicable exclusively to grades K-8 or high schools are not deemed applicable to LEAs that do not include such grade levels. However, commitments that require integrated and aligned activities between middle and high schools are deemed applicable to all LEAs.

I. STANDARDS AND ASSESSMENTS [RTTT Application Section (B)(3)]

A. Supporting the Transition to Enhanced Standards and High-Quality Assessments

1. Standards-Aligned Instructional Systems.

Illinois will adopt revised Learning Standards in English Language Arts and Math as part of its participation in the Common Core State Standards Initiative. Illinois will also be joining one or more consortia of states participating in the Common Core State Standards Initiative to jointly develop and implement common, high-quality assessments aligned with the Common Core K-12 standards.

To develop Standards-aligned instructional systems, the LEA will undertake a process during the 2010-11 and 11-12 school years that includes all of the following:

(a) Aligning curriculum to the revised Illinois Learning Standards.

(b) Implementing Assessments for Learning in at least grades K – 10 aligned to the learning benchmarks in English/language arts and math. As revised Learning Standards are adopted by the State in science, Assessments for Learning should be implemented in science as well. "Assessments for Learning" may include:

- Universal screening/benchmark assessment data collected periodically (e.g., fall, winter, and spring intervals) indicating whether most students are meeting benchmarks in a particular academic area, measuring student learning during the previous period of instruction that can help determine student progress toward year-end objectives and identifying areas requiring greater focus;
- Formative assessments that are more diagnostic in nature and provide teachers with information on how to teach specific curricular areas to address student learning needs;
- Native Language Assessment measuring student learning for English language learners; and

- Other assessments that yield descriptive data that can be used to improve instruction throughout the school year.

The State will collaborate with Participating LEAs to integrate Assessments for Learning into a statewide, comprehensive assessment system measuring student progress in a manner aligned to the revised Learning Standards.

(c) Ensuring the district's Response to Intervention (RtI) plan provides for targeted interventions and differentiated supports, aligned to the revised Learning Standards, for students that are not on pace to meet college- and career-ready expectations.

2. Developing and Scaling Science, Technology, Engineering and Math (STEM)-Related Programs of Study.

The Illinois Programs of Study model provides students with rigorous course sequences that integrate and apply academic and technical content, as well as valuable information and experiences to help them make better choices regarding their education and future career goals.[1] Generally, Programs of Study begin in the 9th grade and continue through post-secondary education including community colleges and universities.

Through the STEM Learning Exchanges and other related supports, the State will assist LEAs with the development of curricular resources, assessment tools, professional development systems, and IT infrastructure necessary to implement Programs of Study in the following critical STEM application areas:

- Agriculture and Natural Resources: development, production, processing, distribution, of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources;
- Energy: developing, planning and managing the production of energy including renewable energy and clean coal technology and its distribution through smart grid technologies;
- Manufacturing: product and process development and managing and performing the processing of materials into intermediate or final products and related support activities;
- Information Technology: designing, developing managing, supporting and integrating hardware and software system;
- Architecture and Construction: designing, planning, managing, building, and maintaining the built environment including the use of green technologies;
- Transportation, Distribution and Logistics: planning, management and movement of people, materials and goods across all transportation modes as well as maintaining and improving transportation technologies;

[1] A description of Programs of Study and the STEM Learning Exchanges is included in the State of Illinois Race to the Top Application for Initial Funding, pp. 51 – 61, available at: http://www.isbe.net/racetothetop/default.htm. The State's Race to the Top Application for Phase 2 Funding will include a consistent description of Programs of Study and the STEM Learning Exchanges.

- Research and Development: scientific research and professional and technical services including laboratory and testing services, and research and development services; and
- Health Sciences: planning, managing and providing therapeutic, diagnostic, health informatics, and support services as well as biomedical research and development.
- Financial Services: securities and investments, business finance, accounting, insurance, and banking services.

For LEAs serving grades 9 through 12

The LEA will establish a broad range of Programs of Study as a structural approach to high school reform based on the Illinois design principles. Subject to and following the establishment of statewide STEM Learning Exchanges, the LEA must establish two or more Programs of Study promoting critical STEM application areas supported by the STEM Learning Exchanges.

When establishing Programs of Study, the LEA will:

1. Develop Program of Study course sequences in a broad range of academic and career areas;
2. Strengthen academic integration within all Programs of Study to promote stronger linkages between academic disciplines as well as technical content;
3. Support professional development for academic and CTE instructors to implement these Programs of Study and provide opportunities for instructors to gain additional professional certifications;
4. Support real-world connections with adult mentors outside of the school building through strategies such as work-based learning opportunities, problem-based learning projects, and mentoring programs;
5. Implement education and career guidance systems, in coordination with feeder middle schools, to provide students with the opportunity to develop career and education plans; and
6. Form collaborative partnerships with postsecondary education to increase dual credit opportunities and develop structured programs to improve the transition to postsecondary education.

For LEAs serving grades 6 through 8

The LEA will:

1. Establish systems for educators to align curriculum with high schools into which the middle schools feed to support Programs of Study implementation; and

2. Implement education and career guidance systems to provide students with the opportunity to develop career and education plans starting in

middle school that align to a Programs of Study model at the high school level.

II. DATA SYSTEMS TO SUPPORT INSTRUCTION

A. Fully Implementing a Statewide Longitudinal Data System [RTTT Application Section (C)(1)]

The LEA will fully cooperate with ISBE on data collections necessary for the State's longitudinal education data system, including efforts by ISBE to ensure data quality.

B. Accessing and Using State Data [RTTT Application Section (C)(2)]

Illinois Collaborative for Education Policy Research.

To further guide the use of longitudinal data to support State policymaking and continuous improvement, the State will support the establishment of the Illinois Collaborative for Education Policy Research (ICEPR) as an independent organization with a governance structure linking it closely to State agencies, participating universities, and other educational stakeholders in Illinois.

The ICEPR will:

- Help identify and define the key policy issues in the State;
- Communicate research priorities and recruit researchers to develop specific projects addressing these priorities;
- Facilitate the data-sharing agreements and administrative aspects of these research projects;
- Communicate research findings and develop recommendations for policy and practice;
- Assist practitioners in developing their own research capacity for more detailed data collection and analysis; and
- Seek and secure external funding for additional projects aligned with State priorities.

The LEA will cooperate with the Illinois Collaborative for Education Policy Research (ICEPR) to build local capacity to support policy research and development activities and share data in a manner consistent with all State and federal privacy protection laws.

C. Using Data to Improve Instruction [RTTT Application Section (C)(3)]

A State-District Partnership for a Learning and Performance Management System.

With funding support through the Race to the Top program, Illinois will expand upon the State system vision set forth in the P-20 Longitudinal Education Data System Act to develop a centrally hosted education information exchange that provides powerful web-based interface tools to support a broad array of instructional and education support functions (referred to as the "Learning and Performance Management System", or

"System").[2] The System will enable the State to host an integrated set of data elements necessary for use by the State and any district wishing to participate, integrate that data with other information held outside of the System, deliver web-based software applications that can be accessed at no-cost or reduced cost to the end user, and allow customization at the user level. The System will provide longitudinal data to a broad range of stakeholders to inform instruction and improve student learning, and ensure these stakeholders have timely access to needed information while protecting student and educator privacy. With the development and implementation of the System, Illinois can move from the current landscape of fragmented data across a multitude of "siloed" district and State systems, to a common platform providing actionable data for every Illinois educator.

The State and participating districts will develop a governance structure for the System that clearly defines a partnership approach to data use and management. Professional development, training, and support will be provided to Participating LEAs as needed. Pilot implementation of the Learning and Performance Management System would occur during the 2012 – 2013 school year, with piloting focused on Participating LEAs. Full implementation of the System would commence during the 2013 – 2014 school year.

1. Subject to the State's timely development of a Learning and Performance Management System as described in this MOU and in the Final State Application, by no later than the start of the 2012-13 school year the LEA must either (a) directly rely on the Learning and Performance Management System as its primary platform for offering an instructional improvement system serving all teachers and principals, or (b) implement a locally developed instructional improvement system or systems serving all teachers and principals.

2. If the LEA is not directly relying on the Learning and Performance Management System as its primary platform for offering an instructional improvement system serving all teachers and principals, the LEA must integrate local systems with the Learning and Performance Management System to ensure teacher and principal access to key System features.

III. GREAT TEACHERS AND LEADERS

A. Improving Teacher and Principal Effectiveness Based on Performance (RTTT Application Section (D)(2))

The State will work with Participating LEAs on the development of redesigned local performance evaluation systems for principals and teachers. These new evaluation systems must be implemented by the beginning of the 2012 – 2013 school year and will be based on the following core principles and assumptions:

[2] A description of the Learning and Performance Management System is included in the State of Illinois Race to the Top Application for Initial Funding, pp. 76-83, available at: http://www.isbe.net/racetothetop/default.htm. The State's Race to the Top Application for Phase 2 Funding will include a consistent description of the Learning and Performance Management System.

- Summative and formative evaluations for teachers and principals should be based on measures of both professional practice and student growth.
    - Effective evaluation includes clear expectations for both professional practice and student growth, clear feedback on performance, and a clear plan for building on strengths and addressing short-comings.
    - Teacher practice can be measured by well-trained observers using observation-based frameworks that define and describe the elements of effective teaching practice; principal practice can also be measured by well-trained observers using observation-based frameworks that describe the elements of effective school leadership practice, school climate surveys and other tools.
    - Individual student growth can be measured over time with multiple measures that include standardized formative and summative tests, curriculum- and course-based assessments and individual student work.

Key components of principal and teacher evaluation systems include the following:

1. **At least 50% of teacher and principal performance evaluations will be based on student growth.**
    - Measures of student growth for both teachers and principals will be developed locally, within parameters set by the State to ensure validity and reliability. The process to establish these parameters will include extensive collaboration with school district management, teachers unions, other stakeholders, other states, and technical experts.
    - Teacher practice will be measured based on Danielson's "Framework for Teaching" or another comparable framework approved in advance by the State. Principal practice will be measured using a framework(s) to be identified by the State.
    - At least until a new State student assessment system aligned with the revised Learning Standards has been implemented, State assessments cannot be used as the **only** measure of student growth in teacher performance evaluations.
    - All teacher and principal evaluations must include a minimum of at least two student growth measures.

2. **All district evaluation systems for both tenured teachers and principals will include the rating categories of Excellent, Proficient, Needs Improvement, and Unsatisfactory.**
    - Participating LEAs do not have to use these specific rating categories for the final summative rating for non-tenured teachers, but must undertake an evaluation of non-tenured teachers using the State framework with four performance levels and must report data to the State based on the four performance levels.

3. **All principals and non-tenured teachers must be evaluated annually. Each tenured teacher must receive a summative evaluation at least once in the course of every 2 school years.** However:
   - For any tenured teacher rated as either "needs improvement" or "unsatisfactory," the teacher must be evaluated at least once in the school year following the receipt of such rating.
   - For all other tenured teachers in Participating LEAs, at minimum a non-summative assessment of student growth must be completed in any year during which a summative evaluation is not performed.

4. **The Participating LEA will use the results of local performance evaluation systems to inform decision-making in the areas of professional development, tenure, and possible dismissal of less effective teachers and principals.**

If the State receives a Race to the Top grant, the State will commit to developing all of these system components prior to September 30, 2011. The components of the State support system will include the following:

- Both a teacher and principal model evaluation template. The model template will incorporate the requirements established by the State, but allow customization by districts in a manner that does not conflict with such requirements.
- An evaluator pre-qualification program based on the model teacher evaluation template.
- An evaluator training program based on the model teacher evaluation template. The training program will provide multiple training options that account for the prior training and experience of the evaluator.
- A superintendent training program based on the model principal evaluation template.
- One or more instruments to provide feedback to principals on the instructional environment within a school, such as school climate surveys, "360 evaluations" providing a comprehensive assessment of the effectiveness of school leader behaviors, and parent surveys.
- A State Board-provided or approved technical assistance system that supports districts with the development and implementation of teacher and principal evaluation systems. This system will include assistance to ensure that measures of student growth are rigorous and comparable across classrooms and schools.
- Web-based systems and tools and video-based observation processes supporting implementation of the model templates and the evaluator pre-qualification and training programs. Many of these systems and tools can be hosted on the Learning and Performance Management System upon its development.
- A process for measuring and reporting correlations between local principal and teacher evaluations and (i) student growth in tested grades and subjects, and (ii) retention rates of teachers.

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Exhibit I Preliminary Scope of Work, p. 7

Subject to the development of State support systems, Participating LEAs will implement local evaluation systems meeting the requirements set forth herein by no later than the start of the 2012-13 school year. If the State does not develop all of these components by that date, the obligation of Participating LEAs to implement redesigned performance evaluation systems will be postponed for as long as it takes the State to implement these systems.

B. **Ensuring Equitable Distribution of Effective Teachers and Principals [RTTT Application Section (D)(3)]**

Addressing District Barriers and Providing Transparent Data on Within-District Disparities.

If the LEA has one or more high-poverty schools and/or high minority schools, as designated by ISBE consistent with federal requirements, the LEA must perform a comprehensive review of institutional policies and constraints that may prevent such schools from attracting top talent, and develop strategies to address these constraints over the course of the grant period. Commencing with the 2011-2012 school year, the review must consider human capital performance metrics reported by ISBE, which will include disparities in school-level average teacher salaries, teacher academic capital, and other useful performance metrics developed in consultation with stakeholders.

C. **Improving the Effectiveness of Teacher and Principal Preparation Programs [RTTT Application Section (D)(4)]**

The Final State Application will include a high quality plan to:

(i) Link student achievement and student growth data to students' teachers and principals, and link this information to the in-State programs where those teachers and principals were prepared for credentialing, and to publicly report the data for each credentialing program in the State.

(ii) Expand preparation credentialing options and programs that are successful at producing effective teachers and principals.

The LEA will cooperate with ISBE and IBHE to establish placement sites for pre-service teachers and principals from programs that are successful at producing effective teachers and leaders.

D. **Providing Effective Support to Teachers and Principals [RTTT Application Section (D)(5)]**

1. **Scaling Up Support for All Beginning Teachers and Principals.**

Subject to the availability of funding for programs, the LEA will:

- Establish induction and mentoring programs for all new teachers for at least two years in duration, with the programs meeting standards set forth in the School Code and administrative rule; and
- Participate in the State's technical assistance and accountability infrastructure to improve the quality of all new teacher induction and mentoring programs.

2. Intensive Educator Support for Critical P-20 Transition Points.

(a) **Early Learning to K-3** (*not applicable to high school districts*)

The State will provide targeted funding and assistance for implementation of a developmentally-appropriate kindergarten readiness assessment to identify students' skills and achievements at the beginning of kindergarten. Following the State's development and piloting of a statewide kindergarten readiness assessment program and subject to the availability of funding for the assessment and the professional development, the LEA will:

- Implement a kindergarten readiness assessment; and
- Integrate and align professional development across early learning and grades K-3.

(b) **Middle to High School**

Since the 2007 - 08 school year, the State has funded the cost for school districts to implement the EXPLORE test in 8th or 9th grade and the PLAN test in 10th grade. Collectively, EXPLORE, PLAN and ACT constitute the Educational Planning and Assessment System ("EPAS"). Commencing in the 2010-11 school year, the State will require that Participating LEAs administer EXPLORE during 8th grade to better address the transition from middle to high school. The State will also establish a consistent testing window for administration of the EXPLORE and PLAN by Participating LEAs so that the data can be used in a consistent way to measure student and subgroup growth during the middle to high school transition.

Subject to the continuation of State funding for EXPLORE and PLAN, the LEA will:

- Clearly communicate and create a common understanding among educators, parents, and students that a student's scores on 8th grade and high school assessments (including EPAS system assessments) are a predictor of the student's readiness for non-remedial coursework.
- Establish systems for educators to discuss patterns and instructional needs identified through the data, and establish a process for early identification of students who may need remedial assistance before transitioning to college. These systems must include communication and coordination between high schools and feeder elementary/middle schools regarding aligned school improvements activities and targeted interventions to address areas of deficiencies.

- Create intensive instructional programs, primarily in math and reading, and student support services during high school years that increase the numbers of students prepared for non-remedial coursework.

(c) **High School to Postsecondary** (*not applicable to elementary districts*)

In response to the high cost of remediation and its impact on students and families, the State of Illinois adopted the College and Career Readiness Act, Public Act 95-0694, which created a 3-year pilot project with the goal of increasing college readiness and decreasing the need for remedial classes through:

1) The alignment of high school and college curriculums;
2) Measuring college readiness through aligning ACT scores to specific community college courses;
3) Increasing the number of student enrolled in a college-prep curriculum;
4) Providing resources and academic support to students in their senior year of high school through remedial and advanced coursework and other interventions; and
5) Development of an evaluation process that measures the effectiveness of readiness intervention strategies.

Consistent with the objectives of the College and Career Readiness Act, the LEA will work with the primary community college(s) into which its high school or high schools feed to:

- Facilitate communication and collaboration between them, align curriculum goals and academic expectations;
- Establish a process for early identification of students who may need remedial assistance before transitioning to college using assessments administered to students in high schools, particularly in math; and
- Create programs that seek to address the needs of these students before high school graduation.

IV. TURNING AROUND THE LOWEST-ACHIEVING SCHOOLS

Note: This Section of the MOU is only applicable to Participating LEAs with one or more Tier I or Tier II Schools. Tier I and Tier II Schools have been identified by ISBE as part of its final 1003(g) School Improvement Grant application. A list of Tier I Schools and Tier II Schools is available at www.isbe.net/sfsf.

A. Turning Around the Lowest-Achieving Schools [RTTT Application Section (E)(2)]

Subject to the availability of funding through Race to the Top, the Section 1003(g) School Improvement Grant program, or targeted State funding, the LEA must participate in the Illinois Partnership Zone initiative or must separately undertake one of the four school intervention models identified by the U.S. Department of Education—turnaround model, restart model, school closure, or transformation model—in all Tier I and Tier II Schools within the LEA.[3] The interventions must be implemented during the first three years of the Race to the Top grant period (i.e., the 10 – 11, 11 – 12, or 12 – 13 school years), with no less than a proportionate cohort of schools initiating interventions in each year. If the LEA can demonstrate that a prior intervention substantially aligned to one of the four school intervention models is demonstrating significant student achievement gains, as determined by ISBE, the LEA may receive funding to continue with that intervention.

B. School District Reorganization to Improve Student Outcomes [RTTT Application Section (E)(1)]

If an LEA is identified by ISBE as a candidate for reorganization using metrics that include, but are not limited to, low student achievement outcomes, the LEA will agree to undertake a reorganization study funded by the State.

[3] A description of the Illinois Partnership Zone is included in the State of Illinois Race to the Top Application for Initial Funding, pp. 144 – 148, available at: http://www.isbe.net/racetothetop/default.htm. The State's Race to the Top Application for Phase 2 Funding will include a consistent description of the Illinois Partnership Zone. A description of the four school intervention models is included in the State of Illinois Race to the Top Application for Initial Funding, Appendix Volume I, pp. 27 – 30, available at the same link.

EXHIBIT II
SUPER LEA REFORM COMMITMENTS

Note: This Section of the MOU is only applicable to Participating LEAs with one or more Tier I or Tier II Schools. Tier I and Tier II Schools have been identified by ISBE as part of its final 1003(g) School Improvement Grant application. A list of Tier I Schools and Tier II Schools is available at www.isbe.net/sfsf.

A. DIRECT SUPPORT AND PRIORITY FUNDING

The State is establishing additional funding and funding priority committed to accelerating reform in Participating LEAs with one or more Tier I or Tier II Schools. These are LEAs in which dramatic acceleration of reforms will have the greatest impact on helping the State close the achievement gap. If the LEA Superintendent and the Local Teachers' Union Leader agree to all of the commitments described in Subsection (B) below, the State will:

1. Provide or fund the provision of technical assistance and support to the LEA for implementation of the reforms and systems described in this Exhibit II;
2. Establish funding at a level of at least 10% out of the 50% State Race to the Top allocation (*i.e.*, $20 million) that will be dedicated solely to LEAs that agree to make the commitments set forth in this Exhibit II;
3. Prioritize participation in the Illinois Partnership Zone Program for LEAs that make all of these commitments; and
4. Pursue significant foundation funding that will be directed to LEAs that make all of these commitments. The final Race to the Top application may also include new programs for LEAs that make all of the priority funding commitments.

B. COMMITMENTS

To receive these additional funds and funding priority, for each Participating LEA, the LEA Superintendent and the Local Teachers' Union Leader must commit to use their best efforts to develop implementation plans for all of the following and include such plans in the LEA Plan described in Section I.C of the MOU. The State Board of Education reserves the right to determine the sufficiency of the LEA Plan for purposes of additional funding or priority funding. In the event any of these commitments are not sufficiently included in such Plan, the Participating LEA will no longer be eligible for such additional funding and funding priority.

1. **Acceleration of Performance Evaluation Re-Design in Tier I and Tier II Schools**

- The Participating LEA will implement in Tier I and Tier II Schools new local performance evaluation systems that meet the requirement set forth in Exhibit I, Section III of this MOU by no later than the start of the 2011-2012 school year, with full District-wide scale-out of such evaluation systems no later than the following year.

- In its LEA Plan, the Participating LEA must set out in detail the plan and timeline for implementation of new performance evaluation systems.
- If the Participating LEA and the Local Teachers' Union are unable to reach an agreement regarding new performance evaluation systems at the time the LEA submits its LEA Plan, then the LEA will not be eligible for additional funding or funding priority under this Exhibit II.

2. **Autonomy for Site-based Leadership of Tier I and Tier II Schools**

[This item does not apply to school districts governed by Article 34 of the School Code, 105 ILCS 5/1-1 *et seq.*, due to their existing statutory autonomies.]

- To provide autonomy for the principals of Tier I and Tier II Schools to select and assign teachers to the school in order to establish an effective teaching staff as quickly as possible. Options for establishing an effective teaching staff include intensive professional development, filling of existing vacancies at the discretion of site-based leadership, relocation of staff through voluntary transfers, and involuntary transfers. As part of interventions in these schools, the LEA must use locally adopted competencies to measure the effectiveness of staff who can work within the new environment to meet the needs of students, screen all existing staff, and provide the principal with autonomy to determine which applicants will be accepted. If the LEA and the Local Teachers' Union cannot reach agreement on the foregoing issues by the time the LEA submits its LEA Plan, then the Participating LEA will not be eligible for additional funding or funding priority under this Exhibit II.
- In its LEA Plan, the LEA will specifically describe how such autonomy will be provided and include an agreed-upon negotiated waiver or other agreement providing flexibility from any inconsistent provisions in its collective bargaining agreement.

3. **Illinois Partnership Zone Participation**

- Participate in the Illinois Partnership Zone for one or more of the LEA's Tier I and Tier II Schools.
- In its LEA Plan, the LEA will specifically identify the schools to be included in the Illinois Partnership Zone and include an agreed-upon negotiated waiver or other agreement providing flexibility from any provisions in its collective bargaining agreement restricting the implementation of activities expected for participation in the Partnership Zone. If the LEA and the Local Teachers' Union cannot reach agreement on such a waiver or other agreement by the time the LEA submits its LEA Plan, the LEA will not be eligible for additional funding or funding priority under this Exhibit II.

[signatures on following page]

SIGNATURES

LEA Superintendent (or equivalent authorized signatory) - required:

_____

Signature/Date

_____

Print Name/Title

Local Teachers' Union Leader – required:

The signature of the Local Teachers' Union Leader set forth below indicates that the Local Teacher Union's Leader will use best efforts to develop a negotiated, mutually-agreed upon implementation plan in the areas identified in Subsection B above as part of the LEA Plan described in Section I.C of the MOU. The signature of the Local Teachers' Union Leader does not constitute an agreement by the Local Union to: (i) reopen or otherwise modify any existing collective bargaining agreement unless and until a subsequent negotiated waiver or other agreement has been mutually agreed upon by the LEA and Local Union; or (ii) limit or waive its rights and protections under the Illinois Educational Labor Relations Act and other applicable law.

_____

Signature/Date

_____

Print Name/Title

EXHIBIT III
BASELINE INFORMATION

1. Does the Participating LEA's teacher evaluation plan incorporate student growth as a component?

   ☐ Yes

   ☐ No

   If yes, please describe:

2. Does the Participating LEA's principal evaluation plan incorporate student growth as a component?

   ☐ Yes

   ☐ No

   If yes, please describe:

3. Please describe any efforts taken during the last 5 years to turn around Illinois Priority Schools (persistently lowest-achieving schools) that substantially conform to one of the four school intervention models identified by the U.S. Department of Education: turnaround model, restart model, school closure, or transformation model. Please provide information including (a) the approach used, and (b) results and lessons learned to date.

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Appendix A1-1

B. Acknowledgement and Agreement

Illinois State Board of Education

100 North First Street • Springfield, Illinois 62777-0001
www.isbe.net

Jesse H. Ruiz
Chairman

Christopher A. Koch, Ed.D.
State Superintendent of Education

Dear Superintendent:

First, I want to thank you for signing the memorandum of understanding for Illinois' Phase I "Race to the Top" application. I also want to thank the teacher union leaders and school board presidents who signed the memorandum. Our state placed fifth in this very competitive grant process, better than many people would have thought and we could not have scored so well or received the national recognition without your commitment to join with us in this endeavor.

Our fifth place finish was impressive, however, it was not good enough. We plan to apply for the maximum amount allowed in Phase II, $400 million. The deadline for Illinois to submit its application is June 1 and your partnership is once again needed. I ask that you sign the acknowledgement cover sheet only to renew your commitment to the MOU. You must also ensure the President of your school board and the president of the local teachers' union have an opportunity to sign, and please encourage them to do so. While their signatures are not required, they are important for us to have a winning application.

We understand the current fiscal crisis in the state has eroded your confidence in the state's ability to pay bills but the work that we have underway needs this influx of funds to continue. There are several reasons why you should again commit to the MOU:

- Illinois has already set a course for strategic reforms that align with the four areas of "Race to the Top." If Illinois earns a "Race to the Top" grant, it could bring $400 million, for the state and its schools to help implement reforms more quickly.
- Teachers and administrators will be pursuing many of these reforms regardless of what happens with the "Race to the Top".
- It will allow Illinois to more rapidly develop a statewide shared technology infrastructure providing teachers and administrators with real-time access to data and reducing duplicative reporting. This infrastructure will also allow districts to reduce Information Technology costs through a shared "cloud computing" platform.
- Teachers and principals will receive high quality induction and mentoring, including intensive training in the use of data to improve student growth.
- Districts will benefit from new statewide supports to bring relevance and practical application to more rigorous standards – steps that will help our students successfully compete on a global stage.
- The development of a Longitudinal Data System will reduce and simplify district reporting to the State and allow districts to follow students through their entire educational career, from preschool through college graduation.

Many Illinois districts need this funding to improve student outcomes and close the achievement gap but participation by as many districts as possible is needed to bring these funds to Illinois. We surveyed districts, conducted a focus group and have been listening to why districts chose to sign and why they did not. We have made changes to the application based on this feedback. These changes include:

1) Additional funding to assist with the implementation of STEM programs of study in high schools and additional professional development for math and science instruction, including Advanced Placement courses.
2) In an effort to reduce paperwork, we are allowing the already developed district improvement plan to be the basis of the scope of work plan to be submitted for "Race to the Top".
3) Only Tier I and Tier II schools, as identified in ISBE's School Improvement Grant application, will have to use the four reform models introduced by the U.S. Department of Education which may require the replacement of a principal.

We will be holding a series of webinars to answer questions and I encourage you to participate in these with your union leadership so that questions may be answered. The first of these is scheduled for Tuesday, April 27 at 11 a.m.

We ask that you return the acknowledgement cover sheet as soon as possible, but no later than May 24, by emailing it to rttt3mou@isbe.net.

Thank you for your continued consideration.

Sincerely,

Christopher A. Koch, Ed.D.
State Superintendent of Education

STATE OF ILLINOIS
RACE TO THE TOP APPLICATION FOR PHASE 2 FUNDING
ACKNOWLEDGEMENT AND AGREEMENT BY

_____

[Type or print school district name above] (the "***Participating LEA***")

On January 19, 2010, the State of Illinois ("*State*") submitted its Race to the Top Application for Initial Funding ("*Initial Application*"). In connection with the Initial Application, the State and the Participating LEA entered into a Memorandum of Understanding ("*MOU*"). The State did not receive funding for the Initial Application and intends to submit a Race to the Top Application for Phase 2 Funding ("*Phase 2 Application*") by June 1, 2010. The State, the Participating LEA, and any other signatories are executing this Acknowledgement in order to confirm their agreement that the MOU will apply to the State's Phase 2 Application.

The signatories to this Acknowledgement agree as follows:

1. To remain bound by the terms of the MOU with respect to the State's Phase 2 Application.[1]
2. To the extent that any signatory to this Acknowledgement did not sign the MOU, such additional signatory indicates agreement to the terms of the MOU and acknowledges that the MOU will apply to the State's Phase 2 Application.
3. To the extent feasible and permitted by the U.S. Department of Education, the State agrees to incorporate the LEA Plan, as defined in Section I of the MOU, into the district improvement planning template and process. The Participating LEA agrees to develop the LEA Plan in cooperation with its Local Teachers' Union.

LEA Superintendent [2] (or equivalent authorized signatory) - required:	**President of Local School Board** (or equivalent, if applicable):	**Local Teachers' Union Leader** [3] (if applicable):
_____ Signature	_____ Signature	_____ Signature
_____ Date	_____ Date	_____ Date
_____ Print Name/Title	_____ Print Name/Title	_____ Print Name/Title

1. For the State's Phase 2 application, the obligations relating to "Turning Around the Lowest-Achieving Schools" in Section IV.A of the Preliminary Scope of Work apply only to Tier I and Tier II Schools that have been identified by ISBE as part of its final 1003(g) School Improvement Grant application.

2. The signature of the LEA Superintendent must also be set forth on the following page of this Acknowledgement to indicate agreement to the Super LEA Reform Commitments set forth in Exhibit II of the MOU.

3. The signature of the Local Teachers' Union Leader set forth above indicates support for the LEA's decision to be a Participating LEA; provided that such signature and the Local Teachers' Union Leader's indication of support does not constitute an agreement by the Local Union to reopen or otherwise modify any existing collective bargaining agreement or waive its rights and protections under the Illinois Educational Labor Relations Act; and provided further that the signature of the Local Teachers' Union Leader must also be set forth on the following page of this Acknowledgement to indicate agreement to the Super LEA Reform Commitments set forth in Exhibit II of the MOU.

Authorized State Official - required:
By its signature below, the State indicates agreement to the terms of this MOU and hereby accepts the LEA as a Participating LEA for purposes of the State's Phase 2 Application.

_____

Christopher A. Koch, Ed.D. State Superintendent Date

EXHIBIT II SIGNATURES
SUPER LEA REFORM COMMITMENTS

In order for an eligible Participating LEA to become or remain a "Super LEA", the signatures of the LEA Superintendent and Local Teachers' Union Leader must be set forth below. The Phase 2 Application will dedicate $20 million of the State's Race to the Top allocation solely to eligible Participating LEAs that become or remain a "Super LEA."

- **For Participating LEAs that agreed to become a Super LEA as part of the Initial Application,** the Super LEA commitments:
  - will apply to Tier I Schools and Tier II Schools, and
  - may, at the election of the LEA, apply to other Illinois Priority Schools for which the Super LEA receives supplemental Race to the Top funding for participation in the Illinois Partnership Zone.
- **For Participating LEAs that did not agree to become a Super LEA as part of the Initial Application, but wish to become a Super LEA for the Phase 2 Application,** the LEA must have at least one Tier I or Tier II School. The Super LEA commitments will apply only to Tier I Schools and Tier II Schools.
- Tier I and Tier II Schools have been identified by ISBE as part of its final 1003(g) School Improvement Grant application. Illinois Priority Schools include other significantly underperforming schools that fall within the bottom 5% of student achievement statewide. A list of Tier I Schools, Tier II Schools, and Illinois Priority Schools is available at www.isbe.net/sif.

LEA Superintendent
(or equivalent authorized signatory) - required:

_____
Signature Date

_____
Print Name/Title

Local Teachers' Union Leader
- required:

_____
Signature Date

_____
Print Name/Title

The signature of the Local Teachers' Union Leader set forth above indicates that the Local Teacher Union's Leader will use best efforts as part of the LEA Plan to develop a negotiated, mutually-agreed upon implementation plan for the Super LEA commitments identified in Subsection B of Exhibit II of the MOU. The signature of the Local Teachers' Union Leader does not constitute an agreement by the Local Union to: (i) reopen or otherwise modify any existing collective bargaining agreement unless and until a subsequent negotiated waiver or other agreement has been mutually agreed upon by the LEA and Local Union; or (ii) limit or waive its rights and protections under the Illinois Educational Labor Relations Act and other applicable law.

To review the terms of the MOU, including the "Super LEA" Commitments set forth on Exhibit II of the MOU, please visit http://www.isbe.net/racetothetop/default.htm. The MOU is the first document in Appendix Volume I. The "Super LEA" Commitments are on pages 20 – 21 of Appendix Volume I.

Appendix A1-1

C. Variations Used in the Chicago Public Schools Participating LEA MOU

III. GREAT TEACHERS AND LEADERS

A. Improving Teacher and Principal Effectiveness Based on Performance [RTTT Application Section (D)(2)]

The State will work with Participating LEAs on the development of redesigned local performance evaluation systems for principals and teachers. **Except as otherwise provided in the Performance Evaluation Reform Act, SB 315 ("PERA"), these** new evaluation systems must be implemented by the beginning of the 2012 – 2013 school year ~~and~~**. The new evaluation systems** will be based on the following core principles and assumptions:

- Summative and formative evaluations for teachers and principals should be based on measures of both professional practice and student growth.
    - Effective evaluation includes clear expectations for both professional practice and student growth, clear feedback on performance, and a clear plan for building on strengths and addressing short-comings.
    - Teacher practice can be measured by well-trained observers using observation-based frameworks that define and describe the elements of effective teaching practice; principal practice can also be measured by well-trained observers using observation-based frameworks that describe the elements of effective school leadership practice, school climate surveys and other tools.
    - Individual student growth can be measured over time with multiple measures that include standardized formative and summative tests, curriculum- and course-based assessments and individual student work.

Key components of principal and teacher evaluation systems include the following:

At least 50% of teacher and principal performance evaluations will be based on student growth.

- Measures of student growth for both teachers and principals will be developed locally, within parameters set by the State to ensure validity and reliability. The process to establish these parameters will include extensive collaboration with school district management, teachers unions, other stakeholders, other states, and technical experts.
- Teacher practice will be measured based on Danielson's "Framework for Teaching" or another comparable framework approved in advance by the State. Principal practice will be measured using a framework(s) to be identified by the State.
- At least until a new State student assessment system aligned with the revised Learning Standards has been implemented, **and except as otherwise provided in PERA,** State

assessments cannot be used as the **only** measure of student growth in teacher performance evaluations.

- All teacher and principal evaluations must include a minimum of at least two student growth measures**, except as otherwise provided in PERA**.

* * *

Explanation for Variation:

PERA provides that CPS will implement teacher and principal evaluation systems that incorporate student growth as a significant factor in at least 300 schools by September 1, 2012 and in all remaining schools by September 1, 2013. This phase-in approach was proposed by the Chicago Teachers Union at a meeting with state political leaders on January 5, 2010. In that meeting, participants reached a compromise on the bifurcated schedule. Although it is the intention of CPS to implement the systems required by PERA as early as possible district-wide, both CPS and ISBE agreed that the MOU must accurately reflect the agreement reached on January 5, 2010 and the final draft of PERA.

PERA also provides that CPS may continue to use annual state assessments as the sole measure of student growth. After multiple years and a significant investment in development, CPS currently uses state assessments as the basis for existing value-added growth measures. For example, these growth models are used to determine teacher incentive awards in the Teacher Advancement Program pilot which now operates in 30 schools, with 10 additional schools projected by 2011. Value-added growth models are also incorporated into the district's existing principal evaluation process. The terms of the MOU were revised for consistency with PERA and current CPS practice.

Appendix A1-2

Detailed Table (A)(1): Participating LEAs

	LEA Demographics			Signatures on MOUs			Super LEA Signatures		MOU Terms	Preliminary Scope of Work – Participation in each applicable Plan Criterion															
Participating LEAs	# of Schools	# of K12 Students	# of K12 Students in Poverty	LEA Supt. (or equivalent)	President of Local School Board (if applicable)	President of Local Teachers' Union (if applicable)	Exhibit H Superintendent Signature	Exhibit H Local Teacher's Union Signature	Uses Standard Terms & Conditions?	(B)(3)	(C)(1)	(C)(2)	(C)(3)	(D)(2)	(D)(2)	(D)(2)	(D)(2)	(D)(2)	(D)(2)	(D)(3)	(D)(3)	(D)(5)	(D)(5)	(D)(8)	(E)(2)
Abingdon CUSD #217	3	725	363	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Addison School District 4	8	4161	2386	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Albers School #63	1	167	33	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Alden-Hebron School Dist. #19	3	426	83	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Allendale CCSD #7	1	95	48	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Altamont CUSD #10	2	718	316	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Alton CUSD #11	9	6348	3603	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Amboy CUSD #272	3	885	295	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Anna CCSD #37	3	650	199	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Anna Jonesboro Community HS #81	1	532	190	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Annawan CUSD #226	2	385	93	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Aptakisic-Tripp Consolidated School Dist. #102	4	1941	156	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Arbor Park School Dist. #145	4	1339	436	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Arlington Heights SD #25	9	5005	406	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Armstrong Township HS Dist. 225	1	163	38	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Armstrong-Ellis CSD #61	1	101	51	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Arthur CUSD No. 305	3	467	107	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ashley CCSD #15	1	126	82	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ashton – Franklin Center CUSD 275	3	601	175	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Atwood-Hammond CUSD #39	2	387	148	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Auburn CUSD #10	5	1368	384	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Aurora Dist. East #131	16	12937	9014	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Aurora West Dist. #129	15	12063	5421	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ball-Chatham CUSD #5	5	4237	566	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Barrington CUSD 220	11	9006	1457	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bartonville Dist. #66	1	240	97	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Batavia Public USD #101	8	6138	581	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Beach Park CCSD #3	5	2437	1078	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Beardstown CUSD 15	4	1464	1001	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Beecher Community School District 200U	3	1118	86	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Belleville Public School Dist. #118	11	3412	1967	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Belleville Twsp. HS Dist #201	2	4962	1710	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bellwood School Dist. #88	6	2620	2215	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Belvidere C.U.S.D. #100	11	8768	3750	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Benjamin Elementary School Dist. #25	2	781	37	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bensenville Dist. #2	5	1975	1011	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Berwyn South School Dist. #100	8	3491	2087	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Bethalto CUSD #8	6	2588	979	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Big Hollow School District #38	3	1637	224	X																						
Bismarck Henning CUSD #1	3	936	258	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bloomington Public Schools District 87	8	5250	2756	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Blue Ridge CUSD #18	4	799	314	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bond County CUSD 2	5	1860	680	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Braceville SD 75	1	177	63	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bradford CUSD #1	2	208	73	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bradley School Dist. #61	3	1435	679	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bradley-Bourbonnais Comm. HS Dist. #307	1	2069	579	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Brooklyn Unit Dist. 188	3	135	121	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Brookwood #167	4	1115	821	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Brown County CUSD #1	3	704	300	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Brownstown C.U.S.D. #201	3	363	188	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Buncombe Grade School #43	1	78	34	X		X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Burnham 154 1/2	1	175	158	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bushnell-Prairie City C.U.S.D. #170	3	728	348	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Butler School Dist. 53	2	412	10	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Byron C.U.S.D. #226	3	1597	263	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cairo School Dist. #1	3	518	518	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Calhoun CUSD #40	2	505	231	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Calumet City #155	3	1203	777	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Calumet Public School Dist. #132	3	1103	980	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carbon Cliff-Barstow #36	1	281	223	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carbondale E.S.D. No. 95	4	1239	880	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carlinville CUSD #1	5	1401	510	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carlyle CUSD #1	3	1160	429	X	X			X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carmi-White Co. CUSD #5	5	1343	533	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carrollton CUSD #1	2	620	221	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carterville CUSD #5	3	1806	566	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carthage ESD #317	2	415	161	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cary CCSD #26	6	3109	372	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cass School Dist. #63	2	773	102	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Catlin CUSD #5	2	512	96	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CCSD #204 (Pinckneyville)	1	163	48	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CCSD #93 (Bloomingdale)	8	3834	701	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Center Cass School Dist. 66	3	1146	72	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Central School Dist. #104	2	462	223	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Central School Dist. #4	3	1092	350	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Centralia City Schools #135	6	1263	964	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Centralia H.S. #200	1	989	508	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Century CUSD #100	2	414	335	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cerro Gordo CUSD #100	3	586	153	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Champaign Unit 4	16	8959	4465	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chaney-Monge SD #88	2	474	295	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Chester Community Unit School District No. 139	2	900	389	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chester Non-High District #122				X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chicago Heights School Dist. 170	10	3157	2897	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chicago Public Schools (The Board of Education of the City of Chicago)	610	383051	333513	X					N (See Appx. A1-1)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Christopher Unit SD #99	3	818	431	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CHSD #117 – Lake Villa	2	2815	356	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cicero District #99	16	13276	11012	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clay City CUSD #10	3	317	146	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clinton CUSD #15	6	1965	781	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cobden High School CUD #17	3	564	308	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Colona Grade School #190	1	415	193	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Consolidated School Dist. #180	2	656	500	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Consolidated School Dist. #181	9	3982	92	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Consolidated School Dist. #59	14	6043	2501	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Consolidated School Dist. #89	5	1953	278	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Consolidated School Dist. 62	11	4523	1858	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community H. S. Dist. #128	2	3300	212	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community H. S. Dist. #155	4	7137	556	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Community High School #94	1	2169	507	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community High School Dist. #218	3	5825	2838	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community High School Dist. 99	2	5182	877	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Unit Dist. #2	4	815	223	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Unit School Dist. #200	19	13329	3052	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Community Unit School Dist. #300	25	19449	6752	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Central Community Unit School Dist. #301	7	3348	241	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Consolidated School Dist. #158	8	8672	856	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cook County School Dist. #130	11	3499	2855	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cornell CCSD #426	1	98	37	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Coulterville Unit Dist #1	3	215	82	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Country Club Hills School Dist. #160	3	1428	748	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cowden-Herrick CUSD #3A	3	414	209	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Creston District #161	1	127	41	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Crete-Monee SD 201U	8	4999	3191	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Crystal Lake School Dist. #47	12	8540	19	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CUSD #201 – DuPage County	4	1540	457	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cypress Grade School Dist. #64	1	116	53	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Danville School Dist. #118	11	5930	4200	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Darien District #61	3	1574	340	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Decatur SD 61	21	8694	6082	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Deer Creek – Mackinaw – CUSD 701	3	1095	210	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Deerfield Schools #109	6	3130	13	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DeKalb CUSD #428	12	5745	2530	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Delavan CUSD #703	3	468	150	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DePue UCS #103	2	456	353	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Desoto CCSD #86	1	237	142	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Diamond Lake School Dist. #76	3	1050	505	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dieterich Unit 30	2	430	147	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dimmick C.C. Grade School District #175	1	101	8	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
District 50 Schools	2	747	377	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dixon Unit Schools #170	5	2690	1145	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dolton School District #148	10	2495	2209	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dongola Unit #66	3	268	99	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Donovan CUSD #3	3	409	153	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Downers Grove Grade School Dist. #58	13	4781	341	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DuPage H.S. Dist. #88	2	3994	1478	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DuQuoin CUSD #300	3	1453	634	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dwight Common S.D. #232	1	565	183	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Earlville CUSD #9	2	447	201	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East Alton Dist. #13	2	694	412	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East Maine School Dist. #63	7	3367	973	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East Peoria CHSD #309	1	1176	413	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

East Peoria Elementary Dist. #86	7	1772	667	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East Prairie Dist. #73	1	483	89	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East Richland CUSD #1	3	1972	898	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
East St. Louis School Dist. #189	19	7440	5870	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Eastland CUSD #308	3	658	238	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Edwardsville Dist. #7	13	7430	1225	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Egyptian CUSD #5	3	536	321	X		N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
El Paso Gridley CUSD #11	5	1215	374	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Elementary School Dist. #159	5	1963	992	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Elmhurst Dist. #205	12	7991	810	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Elmwood Park C.U.S.C. #401	5	2758	1055	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Elverado CUSD #196	4	481	155	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Elwood CCSD #203	1	434	40	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Emmons SD #33	1	344	22	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Eswood SD #269	1	113	33	X	X	N/A	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Eureka CUSD #140	5	1572	327	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Evanston Twsp. H.S. Dist. #202	1	2887	1177	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Evanston/Skokie Dist. #65	15	6379	2444	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Evergreen Park Elem. SD #124	5	1786	663	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Evergreen Park High School Dist. #231	1	898	157	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ewing-Northern C.C.S.D. #115	1	202	99	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fairfield P.S.D. #112	2	587	332	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Fairmont School District #89	1	248	231	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fairview School Dist. #72	1	603	110	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Farmington Central CUSD #265	3	1401	466	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fenton Community H S Dist. #100	1	1452	603	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fieldcrest CUSD #6	4	1186	352	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fisher CUSD #1	2	600	135	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Flossmoor School Dist. 161	5	2297	655	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ford Heights S D. #169	2	524	266	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Forest Ridge School Dist. #142	4	1569	422	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Forrestville Valley #221	3	855	187	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fox Lake Grade School D. 114	2	774	276	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fox River Grove SD #3	2	518	66	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Frankfort CC District 157-C	3	2372	50	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Franklin CUSD #1	3	298	101	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Franklin Park Dist. #84	4	1246	416	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Freeburg CHSD #77	1	663	60	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Freeport School Dist. #145	9	4087	2453	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fremont Dist. #79	3	2079	124	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gallatin County CUSD #7	3	675	272	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gardner-South Wilmington H S Dist. #73	1	209	47	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gavin School Dist. #37	2	869	362	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Geff C.C.D. #14	1	87	28	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Geneva CUSD #304	9	5923	233	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Genoa-Kingston CUSD #424	5	2002	603	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Georgetown-Ridge Farm CU#4	4	1105	657	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Germantown Hills #69	2	923	85	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Giant City SD #130	1	281	98	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gibson City Melvin Sibley Unit 5	3	1029	317	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gifford CCSD #188	1	194	61	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gillespie CUSD #7	3	1247	678	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Glenbard Dist. 87	4	8843	1722	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Glenview School Dist. #34	8	4420	774	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Golf ESD #67	2	542	90	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gower School Dist. #62	2	879	88	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Granite City CUSD #9	10	6680	3768	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Grant CHSD #124	1	1766	417	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Grant Park CUSD #6	2	526	101	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Grayslake CCSD #46	8	4056	718	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Grayslake H.S. Dist. #127	2	2766	339	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Grayville CUSD #1	2	291	134	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gumee School Dist. #56	4	2063	367	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hamilton County Schools CUSD #10	3	1209	544	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Harlem UD #122	11	7346	3245	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Harmony Emge SD #175	2	706	351	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Harrison School Dist. 36	1	433	153	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Havana School Dist. #126	3	1053	536	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Hawthorn District 73	6	3685	868	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Heritage CUSD #8	3	533	154	X	N/A				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Heyworth CUSD #4	2	887	151	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hiawatha CUSD #426	2	560	191	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Highland CUSD #5	7	2977	484	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hillsboro CUSD #3	5	1776	749	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hinckley-Big Rock CUSD #429	3	742	87	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hinsdale Township H.S. Dist. 86	2	4584	437	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Homewood SD #153	4	1869	542	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hononegah Dist. #207	1	2179	291	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hoopeston Area CUSD #11	5	1351	790	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hoover-Schrum SD 157	2	848	741	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Illini Central CUSD #189	3	794	342	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Illinois Valley Central Dist. #321	6	2165	480	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Indian Creek CUSD #425	4	813	163	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Indian Prairie School Dist. 204	31	28978	2815	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Iroquois West #10	5	885	447	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Itasca School Dist. #10	3	908	58	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jacksonville School District #117	9	3418	1680	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
J Sterling Morton A.S. 201	3	8474	5392	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jamaica CUSD #12	3	397	146	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jasper CCSD #17	1	155	65	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Jasper Co. CUSD #1	6	1353	545	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jersey CUSD #100	8	2685	1074	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Johnsburg Dist. #12	4	2388	334	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Joliet Public School Dist. #86	19	9588	5739	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kaneland School District #302	6	4668	432	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kankakee School Dist. #111	11	5064	4204	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kansas Unit #3	2	236	106	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Keeneyville School Dist. #20	3	1576	664	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kenilworth SD No. 38	1	547	0	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kewanee CUSD #229	5	1680	1210	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kildeer Countryside CCSD 96	7	3155	171	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Komarek Dist. 94	1	461	133	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
La Grange SD 102 a/k/a Cook County SD 102*	6	2901	343	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LaGrange South Dist. 105	5	1197	455	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lake Zurich CUSD #95	8	6173	497	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Laraway CCSD #70C	2	321	86	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LaSalle Elem. School Dist. #122	2	852	604	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LaSalle-Peru High School #120	1	1187	329	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lawrence Co. CUSD #20	3	1225	594	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lebanon CUSD #9	3	629	218	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lemont Twsp. H S Dist. #210	1	1501	65	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lena-Winslow CUSD #202	3	894	232	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LeRoy CUSD #2	3	767	145	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Lexington CUSD #7	3	510	101	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Libertyville Dist. 70	5	2562	120	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lincoln Community HS #404	1	895	314	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lincoln Elem. S.D. #156	1	1018	884	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lincoln-Way CHSD #210	4	7259	471	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lindop SD #92	1	444	156	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Litchfield CUSD #12	5	1365	621	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lockport Elementary School Dist. #91	2	647	112	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lockport THSD #205	1	3848	285	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lombard Elementary Dist. #44	7	2954	762	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lostant CUSD #425	1	87	32	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lovington CUSD #303	2	271	118	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lowpoint-Washburn CUSD #21	2	402	199	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ludlow CCSD #142	1	85	36	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lyons Elementary SD #103	6	2301	1520	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lyons Twsp HS Dist. #204	1	3812	249	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Macomb CUSD #185	4	1798	614	X		X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Madison CUSD #12	4	760	659	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Maercker School District #60	3	1268	326	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mahomet-Seymour CUSD #3	5	2763	286	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Maine Twsp HSD #207	3	6960	1557	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Manhattan School Dist. #114	3	1237	153	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Manteno C.U.S.D. #5	4	2136	493	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Marengo Community HS Dist. #154	1	869	160	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Marengo Union Elementary #165	2	1016	414	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Massac Unit #1	7	2165	1053	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Matteson School District 162	7	3127	1784	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mattoon CUSD #2	4	3353	1550	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Maywood-Melrose Park-Broadview District 89	10	5365	3903	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
McLean County Unit Dist. No. 5	21	12545	3117	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mendota CCSD #289	3	1213	685	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mendota Township High School #280	1	610	211	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mercer County SD 404	5	1299	433	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Meredosia Chambersburg Dist. 11	3	289	153	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Meridian CUSD #101	2	596	476	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Meridian CUSD #223	4	1903	341	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Midland CUSD #7	3	766	258	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Midlothian SD #143	4	1842	1042	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Midwest Central CUSD #191	3	1136	473	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Milford CCSD #280	2	431	241	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Milford THSD #233	1	199	81	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Millburn CC School Dist. #24	2	1606	63	X		X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Millstadt CCSD #160	2	855	137	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mokena S.D. #159	3	2032	176	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Moline School Dist. #40	15	7239	3199	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Momence CUSD #1	4	1097	636	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Monmouth-Roseville CUSD #238	6	1718	1044	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Monticello CUSD #25	5	1646	248	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Morris Community Dist. #101	1	953	0	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Morrison Comm. Unit Dist. #6	4	1082	310	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Morrisonville CUSD #1	3	325	127	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Morton CU Dist. #709	6	2728	296	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mt. Olive CUSD #5	2	538	212	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mt. Prospect School Dist. #57	4	2012	145	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mt. Vernon City Schools #80	3	1415	1104	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mt. Vernon Twsp. H.S. #201	1	1311	611	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mulberry Grove CUSD #1	3	418	179	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mundelein CHS Dist. #120	1	2203	563	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mundelein Elementary SD #75	4	1762	423	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Murphysboro CUSD #186	4	1996	1034	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Naperville CUSD #203	21	17669	1724	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Nelson 8 – Lee Co	1	31	13	X	N/A	N/A	X	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Neoga CUSD #3	4	749	285	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Neponset CCSD #307	1	65	41	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

New Berlin CUSD #16	3	766	176	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New Holland – Middletown #88	1	98	37	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New Lenox School Dist. #122	12	5564	673	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New Simpson Hill Dist. #32	1	258	147	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New Trier H S Dist. #203	2	4143	134	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Niles Elementary #71	1	534	13	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Niles Township HS Dist. 219	2	4665	1291	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Nokomis CUSD #22	3	624	241	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Norridge School Dist. #80	2	950	200	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Nonis City-Omaha-Enfield CUSD #3	3	680	228	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Boone CUSD #200	6	1711	553	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Chicago CUSD #187	10	3804	2321	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Mac CUSD 34 (f/k/a Virdian #4 and Girard #3)	5	2391	781	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Perkin Marquette Hts. #102	3	623	266	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Shore School District 112	11	4426	975	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
North Wayne Unit Dist. #200	4	417	161	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Northbrook Dist. #28	4	1689	33	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Northbrook School Dist. #27	4	1188	21	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Northbrook/ Glenview School Dist. #30	3	1110	20	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Northfield Twsp. H.S. Dist. #225	2	4790	530	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Northwestern C.U.S.D. #2	3	327	174	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oak Grove School Dist. #68	2	409	130	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oak Lawn Community H.S. Dist. #229	1	1884	481	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oak Lawn-Hometown SD #123	6	3015	1076	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oak Park Elementary Dist. #97	10	5273	1042	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oakland CUSD #5	2	293	152	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oakwood CUSD No. 76	3	1102	359	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Odell School Dist. #435	1	145	56	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Odin School Dist. #122	1	185	124	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Odin School Dist. 700	1	80	56	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
O'Fallon CCSD #90	7	3421	721	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
O'Fallon Twsp HS Dist. #203	1	2488	339	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oglesby School Dist. #125	2	473	198	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Okaw Valley CUSD #302	4	515	180	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Olympia CUSD #16	5	1802	539	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Opdyke-Bell Rive CCSD #5	2	189	98	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Orion CUSD #223	3	1035	147	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Orland School Dist. #135	10	5334	684	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oswego CUSD 308	19	15734	2917	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ottawa Township High School #140	1	1451	332	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Palatine CCSD. #15	19	11924	3457	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pana CUSD #8	5	1389	760	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Panhandle CUSD #2	4	504	209	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Paris CUSD #4	2	507	148	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Paris Union School Dist. #95	3	875	518	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Park Forest – Chicago Heights Dist. #163	6	1680	1404	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Park Ridge Niles Dist. #64	7	4236	116	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Patoka Comm. Unit #100	3	259	143	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Paxton-Buckley-Loda CUSD 10	4	1484	440	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pembroke CC Sch. Dist. #259	1	215	208	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Peoria SD #150	27	13149	9860	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Peru ESD 124	3	820	314	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pinckneyville District #50	2	583	218	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pinckneyville H.S. #101	1	458	118	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Plainfield CCSD #202	28	28243	3338	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Plano CUSD #88	5	2193	966	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pleasant Plains Schools #8	3	1307	123	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Polo CUSD #222	3	659	244	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pontiac Grade School Dist #429	4	1214	563	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Pontiac Township Dist. #90	1	828	243	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Posen Robbins SD #143 1/2	5	1638	1537	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Potomac CUSD #10	1	143	69	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prairie Central CUSD #8	7	1951	731	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prairie Grove Cons. Dist. #46	2	957	128	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prairie-Hills S.D. 144	8	2769	2379	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PrairieView-Ogden CCSD #197	3	249	39	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Prophetstown-Lyndon- Tampico CUSD #3	4	903	440	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prospect Hts. S.D. #23	4	1398	144	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Proviso Twsp H.S. Dist. #209	3	4925	2488	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Queen Bee Schools Dist. 16	3	1975	623	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Quincy School Dist. #172	10	6407	3373	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rankin School Dist. #98	1	222	66	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rantoul City Schools	5	1520	1185	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Reavis H.S. Dist. #220	1	1888	332	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Red Hill CUSD #10	4	1013	510	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rich Township HS Dist. #227	3	4032	4008	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Richland School District #88A	2	937	173	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ridgeview CUSD #19	3	570	199	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
River Bend CUSD #2	3	962	261	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
River Trails SD #26	3	1440	489	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Riverdale C.U.S.D. #100	3	1084	271	X			X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Riverdale SD #14	1	73	48	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Riverside Brookfield Twsp H.S. Dist. #208	1	1464	139	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Riverside School Dist. #96	5	1489	157	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Riverton CUSD #14	3	1406	512	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Roanoke-Benson CUSD #60	3	589	69	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rochelle CCSD #231	5	1633	774	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Rochelle Township HS Dist. #212	1	1026	243	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rock Island District #41	13	5881	3739	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rockdale School Dist. #84	1	276	174	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rockford Public Schools Dist. #205	49	26777	20147	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Roselle SD #12	2	676	139	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rossville-Alvin CUSD #7	1	239	142	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Salt Creek School Dist. #48	3	475	121	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sandoval CUSD #501	3	498	329	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sandridge SD #172	1	449	346	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sandwich CUSD #430	6	2354	624	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Saratoga CCSD #60C	1	755	214	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Saunemin CCSD #438	1	114	53	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Schaumburg CCSD Dist. #54	27	13571	2291	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Schiller Park Dist. #81	3	1082	702	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
School District #U-46	55	39982	19905	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sesser-Valier CUSD #196	3	727	340	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shawnee Unit #84	4	437	273	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shelbyville CUSD #4	4	1161	434	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sherrard CUSD #200	5	1564	316	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Silvis School Dist. #34	2	552	271	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skokie School District #68	4	1614	662	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skokie School District #73 1/2	3	973	253	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Skokie/Morton Grove Dist. #69	3	1573	665	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Smithton CCSD #130	1	499	34	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Somonauk CUSD #432	3	967	162	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
South Holland S.D. #151	4	1413	1062	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
South Holland SD #150	3	966	477	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
South Wilmington SD #74	1	89	9	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Southwestern #9	6	1691	510	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Spring Lake CCSD #606	1	55	11	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Springfield Public School Dist. 186	32	14180	9325	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Anne Elementary #256	1	325	170	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Anne High School #302	1	229	148	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Joe Ogden CHSD #305	1	453	49	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Joseph CCSD #169	2	883	104	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Libory CSD #30	1	87	8	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
St. Rose Dist. 14-15	1	159	13	X	X	N/A	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Staunton CUSD #6	4	1167	385	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Steeleville CUSD #138	2	412	110	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Steger School Dist. #194	4	1562	711	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sterling CUSD #5	6	3308	1659	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Steward ESD #220	1	81	1	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Stewardson-Strasburg CUSD 5A	2	398	111	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sullivan CUSD #300	3	1107	434	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Summit - Cook County School Dist. #104	5	1568	1152	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Summit Hill School Dist. #161	7	3546	229	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sycamore CUSD #427	7	3778	770	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Taft School District #90	1	321	43	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Taylorville CUSD #3	6	2662	1210	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Teutopolis CUSD #50	3	1160	97	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thomasboro CCSD #130	1	178	102	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thornton Fractional Twsp HS Dist. 215	2	3680	2427	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thornton SD #154	1	234	20	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thornton Township H.S. #205	3	6098	4008	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Township H.S. Dist. #113	2	3705	251	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Township High School Dist. #214	6	12113	2204	X		X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Township HS Dist 211	5	12639	2915	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tremont CUSD #702	3	995	98	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Triad CUSD #2	6	3605	539	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Trico CUSD #176	3	915	451	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Triopia CUSD #27	2	371	88	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tri-Point CUSD #6J	3	504	249	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tri-Valley CUSD #3	3	1034	107	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Union Ridge S.D. #86	1	507	148	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
United CUSD #304	4	869	313	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
United Twsp. HSD #30	1	1715	848	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Unity Point School Dist. #140	1	611	328	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Urbana School Dist. #116	8	3772	2382	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Valley View School Dist. 365U	19	17601	8841	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Valmeyer CUSD #3	3	259	40	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Vandalia CUSD #203	4	1563	778	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Venice CUSD #3	1	80	77	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Vienna High School Dist. #133	1	388	202	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Vienna Public School Dist. #55	1	396	199	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Virginia CUSD #64	3	325	139	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wabash CUSD #348	4	1654	598	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Waltham CCSD #185	1	239	17	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Warren CUSD #205	3	407	134	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Warren Township High School Dist. #121	1	4300	737	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Washington CHSD #308	1	1196	162	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Washington Grade School Dist. #52	2	805	181	X	X	N/A			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Waterloo CUSD 5	4	2703	452	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wauconda CUSD #118	6	4240	970	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Waukegan Public School Dist. #60	21	15907	11282	X	X	X	X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Waverly CUSD #6	2	327	133	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wayne City Unit #100	4	542	257	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Webber Twp. HS Dist. #204	1	151	41	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
West Carroll CUSD #314	4	1248	569	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
West Central CUSD #235	3	961	474	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

West Chicago Dist. 33	7	3925	2502	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
West Northfield SD #31	2	851	57	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
West Prairie CUSD #103	4	643	271	X		X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
West Washington Unit #10	2	534	120	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Western Springs Dist. #101	4	1533	1	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Westville School Dist. #2	3	1203	681	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wethersfield CUSD #230	2	621	224	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wheeling School Dist. #21	12	6408	2629	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Whiteside School Dist. #115	2	1329	565	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Will County School Dist. #92	4	1758	215	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Williamsfield CUSD #210	3	248	87	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wilmington CUSD #209U	4	1377	441	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Winchester CUSD #1	2	662	190	X					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Winfield School Dist. #34	2	312	46	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Winnebago CUSD 323	5	1569	264	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Winthrop Harbor School District #1	3	657	155	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wood Dale Dist. #7	3	1175	420	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wood River – Hartford ESD #15	3	737	396	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Woodland School Dist. #50	4	6695	1495	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Woodlawn CHSD #205	1	196	54	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Woodridge School Dist. #68	7	2782	1002	X	X				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Woodstock CUSD 200	11	6143	1792	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Yorkville CUSD #115	9	5020	394	X	X	X	X	X	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zion Elementary School Dist. #6	6	2434	1834	X	X	X			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zion-Benton Twp H S D 126	2	2758	1156	X	X		X		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
TOTAL	2691	1620865	778874	521	458	246	132	78																	
STATE TOTALS	3909	2003171	905312	869																					

Appendix A1-3

Key Reform Legislation

A. Performance Reform Evaluation Act

B. P-20 Longitudinal Education Data System Act

AN ACT concerning education.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 1. This amendatory Act may be referred to as the Performance Evaluation Reform Act of 2010.

Section 5. Findings; declarations. The General Assembly finds and declares all of the following:

(1) Effective teachers and school leaders are a critical factor contributing to student achievement.

(2) Many existing district performance evaluation systems fail to adequately distinguish between effective and ineffective teachers and principals. A recent study of evaluation systems in 3 of the largest Illinois districts found that out of 41,174 teacher evaluations performed over a 5-year period, 92.6% of teachers were rated "superior" or "excellent", 7% were rated "satisfactory", and only 0.4% were rated "unsatisfactory".

(3) Performance evaluation systems must assess professional competencies as well as student growth.

(4) School districts and the State must ensure that performance evaluation systems are valid and reliable and contribute to the development of staff and improved student achievement outcomes.

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Section 10. The School Code is amended by changing Sections 2-3.25g, 24A-3, 24A-4, 24A-5, 24A-7, 24A-8, 24A-15, 34-8, and 34-85c and by adding Sections 24A-2.5, 24A-7.1, and 24A-20 as follows:

(105 ILCS 5/2-3.25g) (from Ch. 122, par. 2-3.25g)

Sec. 2-3.25g. Waiver or modification of mandates within the School Code and administrative rules and regulations.

(a) In this Section:

"Board" means a school board or the governing board or administrative district, as the case may be, for a joint agreement.

"Eligible applicant" means a school district, joint agreement made up of school districts, or regional superintendent of schools on behalf of schools and programs operated by the regional office of education.

"Implementation date" has the meaning set forth in Section 24A-2.5 of this Code.

"State Board" means the State Board of Education.

(b) Notwithstanding any other provisions of this School Code or any other law of this State to the contrary, eligible applicants may petition the State Board of Education for the waiver or modification of the mandates of this School Code or of the administrative rules and regulations promulgated by the State Board of Education. Waivers or modifications of

administrative rules and regulations and modifications of mandates of this School Code may be requested when an eligible applicant demonstrates that it can address the intent of the rule or mandate in a more effective, efficient, or economical manner or when necessary to stimulate innovation or improve student performance. Waivers of mandates of the School Code may be requested when the waivers are necessary to stimulate innovation or improve student performance. Waivers may not be requested from laws, rules, and regulations pertaining to special education, teacher certification, teacher tenure and seniority, or Section 5-2.1 of this Code or from compliance with the No Child Left Behind Act of 2001 (Public Law 107-110). On and after the applicable implementation date, eligible applicants may not seek a waiver or seek a modification of a mandate regarding the requirements for (i) student performance data to be a significant factor in teacher or principal evaluations or (ii) for teachers and principals to be rated using the 4 categories of "excellent", "proficient", "needs improvement", or "unsatisfactory". On the applicable implementation date, any previously authorized waiver or modification from such requirements shall terminate.

(c) Eligible applicants, as a matter of inherent managerial policy, and any Independent Authority established under Section 2-3.25f may submit an application for a waiver or modification authorized under this Section. Each application must include a written request by the eligible applicant or

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Independent Authority and must demonstrate that the intent of the mandate can be addressed in a more effective, efficient, or economical manner or be based upon a specific plan for improved student performance and school improvement. Any eligible applicant requesting a waiver or modification for the reason that intent of the mandate can be addressed in a more economical manner shall include in the application a fiscal analysis showing current expenditures on the mandate and projected savings resulting from the waiver or modification. Applications and plans developed by eligible applicants must be approved by the board or regional superintendent of schools applying on behalf of schools or programs operated by the regional office of education following a public hearing on the application and plan and the opportunity for the board or regional superintendent to hear testimony from staff directly involved in its implementation, parents, and students. The time period for such testimony shall be separate from the time period established by the eligible applicant for public comment on other matters. If the applicant is a school district or joint agreement requesting a waiver or modification of Section 27-6 of this Code, the public hearing shall be held on a day other than the day on which a regular meeting of the board is held. If the applicant is a school district, the public hearing must be preceded by at least one published notice occurring at least 7 days prior to the hearing in a newspaper of general circulation within the school district that sets forth the

time, date, place, and general subject matter of the hearing. If the applicant is a joint agreement or regional superintendent, the public hearing must be preceded by at least one published notice (setting forth the time, date, place, and general subject matter of the hearing) occurring at least 7 days prior to the hearing in a newspaper of general circulation in each school district that is a member of the joint agreement or that is served by the educational service region, provided that a notice appearing in a newspaper generally circulated in more than one school district shall be deemed to fulfill this requirement with respect to all of the affected districts. The eligible applicant must notify in writing the affected exclusive collective bargaining agent and those State legislators representing the eligible applicant's territory of its intent to seek approval of a waiver or modification and of the hearing to be held to take testimony from staff. The affected exclusive collective bargaining agents shall be notified of such public hearing at least 7 days prior to the date of the hearing and shall be allowed to attend such public hearing. The eligible applicant shall attest to compliance with all of the notification and procedural requirements set forth in this Section.

(d) A request for a waiver or modification of administrative rules and regulations or for a modification of mandates contained in this School Code shall be submitted to the State Board of Education within 15 days after approval by

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the board or regional superintendent of schools. The application as submitted to the State Board of Education shall include a description of the public hearing. Following receipt of the request, the State Board shall have 45 days to review the application and request. If the State Board fails to disapprove the application within that 45 day period, the waiver or modification shall be deemed granted. The State Board may disapprove any request if it is not based upon sound educational practices, endangers the health or safety of students or staff, compromises equal opportunities for learning, or fails to demonstrate that the intent of the rule or mandate can be addressed in a more effective, efficient, or economical manner or have improved student performance as a primary goal. Any request disapproved by the State Board may be appealed to the General Assembly by the eligible applicant as outlined in this Section.

A request for a waiver from mandates contained in this School Code shall be submitted to the State Board within 15 days after approval by the board or regional superintendent of schools. The application as submitted to the State Board of Education shall include a description of the public hearing. The description shall include, but need not be limited to, the means of notice, the number of people in attendance, the number of people who spoke as proponents or opponents of the waiver, a brief description of their comments, and whether there were any written statements submitted. The State Board shall review the

applications and requests for completeness and shall compile the requests in reports to be filed with the General Assembly. The State Board shall file reports outlining the waivers requested by eligible applicants and appeals by eligible applicants of requests disapproved by the State Board with the Senate and the House of Representatives before each March 1 and October 1. The General Assembly may disapprove the report of the State Board in whole or in part within 60 calendar days after each house of the General Assembly next convenes after the report is filed by adoption of a resolution by a record vote of the majority of members elected in each house. If the General Assembly fails to disapprove any waiver request or appealed request within such 60 day period, the waiver or modification shall be deemed granted. Any resolution adopted by the General Assembly disapproving a report of the State Board in whole or in part shall be binding on the State Board.

(e) An approved waiver or modification (except a waiver from or modification to a physical education mandate) may remain in effect for a period not to exceed 5 school years and may be renewed upon application by the eligible applicant. However, such waiver or modification may be changed within that 5-year period by a board or regional superintendent of schools applying on behalf of schools or programs operated by the regional office of education following the procedure as set forth in this Section for the initial waiver or modification request. If neither the State Board of Education nor the

General Assembly disapproves, the change is deemed granted.

An approved waiver from or modification to a physical education mandate may remain in effect for a period not to exceed 2 school years and may be renewed no more than 2 times upon application by the eligible applicant. An approved waiver from or modification to a physical education mandate may be changed within the 2-year period by the board or regional superintendent of schools, whichever is applicable, following the procedure set forth in this Section for the initial waiver or modification request. If neither the State Board of Education nor the General Assembly disapproves, the change is deemed granted.

(f) On or before February 1, 1998, and each year thereafter, the State Board of Education shall submit a cumulative report summarizing all types of waivers of mandates and modifications of mandates granted by the State Board or the General Assembly. The report shall identify the topic of the waiver along with the number and percentage of eligible applicants for which the waiver has been granted. The report shall also include any recommendations from the State Board regarding the repeal or modification of waived mandates.
(Source: P.A. 94-198, eff. 1-1-06; 94-432, eff. 8-2-05; 94-875, eff. 7-1-06; 95-223, eff. 1-1-08.)

(105 ILCS 5/24A-2.5 new)

Sec. 24A-2.5. Definitions. In this Article:

"Evaluator" means:

(1) an administrator qualified under Section 24A-3; or

(2) other individuals qualified under Section 24A-3, provided that, if such other individuals are in the bargaining unit of a district's teachers, the district and the exclusive bargaining representative of that unit must agree to those individuals evaluating other bargaining unit members.

Notwithstanding anything to the contrary in item (2) of this definition, a school district operating under Article 34 of this Code may require department chairs qualified under Section 24A-3 to evaluate teachers in their department or departments, provided that the school district shall bargain with the bargaining representative of its teachers over the impact and effects on department chairs of such a requirement.

"Implementation date" means, unless otherwise specified and provided that the requirements set forth in subsection (d) of Section 24A-20 have been met:

(1) For school districts having 500,000 or more inhabitants, in at least 300 schools by September 1, 2012 and in the remaining schools by September 1, 2013.

(2) For school districts having less than 500,000 inhabitants and receiving a Race to the Top Grant or School Improvement Grant after the effective date of this amendatory Act of the 96th General Assembly, the date specified in those grants for implementing an evaluation system for teachers and principals incorporating student growth as a significant factor.

(3) For the lowest performing 20% percent of remaining school districts having less than 500,000 inhabitants (with the measure of and school year or years used for school district performance to be determined by the State Superintendent of Education at a time determined by the State Superintendent), September 1, 2015.

(4) For all other school districts having less than 500,000 inhabitants, September 1, 2016.

"Race to the Top Grant" means a grant made by the Secretary of the U.S. Department of Education pursuant to paragraph (2) of Section 14006(a) of the American Recovery and Reinvestment Act of 2009.

"School Improvement Grant" means a grant made by the Secretary of the U.S. Department of Education pursuant to Section 1003(g) of the Elementary and Secondary Education Act.

(105 ILCS 5/24A-3) (from Ch. 122, par. 24A-3)

Sec. 24A-3. Evaluation training and pre-qualification.

(e) School ~~Beginning January 1, 1986, school~~ boards shall require evaluators ~~those administrators, or - in school districts having a population exceeding 500,000 - assistant principals, who evaluate other certified personnel~~ to participate ~~at least once every 2 years~~ in an inservice training ~~workshop~~ on ~~either school improvement or~~ the

evaluation of certified personnel provided or approved by the State Board of Education prior to undertaking any evaluation and at least once during each certificate renewal cycle. Training provided or approved by the State Board of Education shall include the evaluator training program developed pursuant to Section 24A-20 of this Code.

(b) Any evaluator undertaking an evaluation after September 1, 2012 must first successfully complete a pre-qualification program provided or approved by the State Board of Education. The program must involve rigorous training and an independent observer's determination that the evaluator's ratings properly align to the requirements established by the State Board pursuant to this Article.

(Source: P.A. 86-1477; 87-1076.)

(105 ILCS 5/24A-4) (from Ch. 122, par. 24A-4)

Sec. 24A-4. Development ~~and submission~~ of evaluation plan.

(a) As used in this and the succeeding Sections, "teacher" means any and all school district employees regularly required to be certified under laws relating to the certification of teachers. Each school district shall develop, in cooperation with its teachers or, where applicable, the exclusive bargaining representatives of its teachers, an evaluation plan for all teachers.

(b) By no later than the applicable implementation date, each school district shall, in good faith cooperation with its

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teachers or, where applicable, the exclusive bargaining representatives of its teachers, incorporate the use of data and indicators on student growth as a significant factor in rating teaching performance, into its evaluation plan for all teachers, both those teachers in contractual continued service and those teachers not in contractual continued service. The plan shall at least meet the standards and requirements for student growth and teacher evaluation established under Section 24A-7, and specifically describe how student growth data and indicators will be used as part of the evaluation process, how this information will relate to evaluation standards, the assessments or other indicators of student performance that will be used in measuring student growth and the weight that each will have, the methodology that will be used to measure student growth, and the criteria other than student growth that will be used in evaluating the teacher and the weight that each will have.

To incorporate the use of data and indicators of student growth as a significant factor in rating teacher performance into the evaluation plan, the district shall use a joint committee composed of equal representation selected by the district and its teachers or, where applicable, the exclusive bargaining representative of its teachers. If, within 180 calendar days of the committee's first meeting, the committee does not reach agreement on the plan, then the district shall implement the model evaluation plan established under Section

24A-7 with respect to the use of data and indicators on student growth as a significant factor in rating teacher performance.

Nothing in this subsection (c) shall make decisions on the use of data and indicators on student growth as a significant factor in rating teaching performance mandatory subjects of bargaining under the Illinois Educational Labor Relations Act that are not currently mandatory subjects of bargaining under the Act.

(c) Notwithstanding anything to the contrary in subsection (b) of this Section, if the joint committee referred to in that subsection does not reach agreement on the plan within 90 calendar days after the committee's first meeting, a school district having 500,000 or more inhabitants shall not be required to implement any aspect of the model evaluation plan and may implement its last best proposal. ~~In contractual continued service. The district shall, no later than October 1, 1985, submit a copy of its evaluation plan to the State Board of Education, which shall review the plan and make public its comments thereon, and the district shall at the same time provide a copy to the exclusive bargaining representatives. Whenever any substantive change is made in a district's evaluation plan, the new plan shall be submitted to the State Board of Education for review and comment, and the district shall at the same time provide a copy of any such new plan to the exclusive bargaining representatives. The board of a school district operating under Article 34 of this Code and the~~

~~exclusive representative of the district's teachers shall submit a certified copy of an agreement entered into under Section 34-85c of this Code to the State Board of Education, and that agreement shall constitute the teacher evaluation plan for teachers assigned to schools identified in that agreement. Whenever any substantive change is made in an agreement entered into under Section 34-85c of this Code by the board of a school district operating under Article 34 of this Code and the exclusive representative of the district's teachers, the new agreement shall be submitted to the State Board of Education.~~

(Source: P.A. 95-510, eff. 8-28-07.)

(105 ILCS 5/24A-5) (from Ch. 122, par. 24A-5)

Sec. 24A-5. Content of evaluation plans. This Section does not apply to teachers assigned to schools identified in an agreement entered into between the board of a school district operating under Article 34 of this Code and the exclusive representative of the district's teachers in accordance with Section 34-85c of this Code.

Each school district to which this Article applies shall establish a teacher evaluation plan which ensures that each teacher in contractual continued service is evaluated at least once in the course of every 2 school years~~, beginning with the 1986-87 school year~~.

By no later than September 1, 2012, each school district shall establish a teacher evaluation plan that ensures that:

(1) each teacher not in contractual continued service is evaluated at least once every school year; and

(2) each teacher in contractual continued service is evaluated at least once in the course of every 2 school years. However, any teacher in contractual continued service whose performance is rated as either "needs improvement" or "unsatisfactory" must be evaluated at least once in the school year following the receipt of such rating.

Notwithstanding anything to the contrary in this Section or any other Section of the School Code, a principal shall not be prohibited from evaluating any teachers within a school during his or her first year as principal of such school.

The evaluation plan shall comply with the requirements of this Section and of any rules adopted by the State Board of Education pursuant to this Section.

The plan shall include a description of each teacher's duties and responsibilities and of the standards to which that teacher is expected to conform. ~~The plan may provide for evaluation of personnel whose positions require administrative certification by independent evaluators not employed by or affiliated with the school district. The results of the school district administrators' evaluations shall be reported to the employing school board, together with such recommendations for remediation as the evaluator or evaluators may deem appropriate. Evaluation of teachers whose positions do not require administrative certification shall be conducted by an administrator qualified under Section 24A-3, or in school districts having a population exceeding 500,000 by either an administrator qualified under Section 24A-3 or an assistant principal under the supervision of an administrator qualified under Section 24A-3~~, and shall include at least the following components:

(a) personal observation of the teacher in the classroom by the evaluator ~~for at least 2 different school days in school districts having a population exceeding 500,000 by a district administrator qualified under Section 24A-3, or in school districts having a population exceeding 500,000 by either an administrator qualified under Section 24A-3 or an assistant principal under the supervision of an administrator qualified under Section 24A-3~~, unless the teacher has no classroom duties.

(b) consideration of the teacher's attendance, planning, ~~and~~ instructional methods, classroom management, where relevant, and competency in the subject matter taught~~, where relevant~~.

(c) by no later than the applicable implementation date, consideration of student growth as a significant factor in the rating of the teacher's performance.

(d) prior to September 1, 2012, ~~(c)~~ rating of the ~~teacher's~~ performance of teachers in contractual continued service as either:

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(ii) "excellent", "satisfactory" or "unsatisfactory"; or

(iii) "excellent", "proficient", "needs improvement" or "unsatisfactory".

(e) on and after September 1, 2012, rating of the performance of teachers in contractual continued service as "excellent", "proficient", "needs improvement" or "unsatisfactory".

(f) ~~(d)~~ specification as to the teacher's strengths and weaknesses, with supporting reasons for the comments made.

(g) ~~(e)~~ inclusion of a copy of the evaluation in the teacher's personnel file and provision of a copy to the teacher.

(h) within 30 school days after the completion of an evaluation rating a teacher in contractual continued service as "needs improvement", development by the evaluator, in consultation with the teacher, and taking into account the teacher's on-going professional responsibilities including his or her regular teaching assignments, of a professional development plan directed to the areas that need improvement and any supports that the district will provide to address the areas identified as needing improvement.

(i) ~~(f)~~ within 30 days after completion of an evaluation rating a teacher in contractual continued service as "unsatisfactory", development and commencement

by the district~~, or by an administrator qualified under Section 24A-3 or an assistant principal under the supervision of an administrator qualified under Section 24A-3 in school districts having a population exceeding 500,000,~~ of a remediation plan designed to correct deficiencies cited, provided the deficiencies are deemed remediable. In all school districts the remediation plan for unsatisfactory, tenured teachers shall provide for 90 school days of remediation within the classroom, unless an applicable collective bargaining agreement provides for a shorter duration. In all school districts evaluations issued pursuant to this Section shall be issued within 10 days after the conclusion of the respective remediation plan. However, the school board or other governing authority of the district shall not lose jurisdiction to discharge a teacher in the event the evaluation is not issued within 10 days after the conclusion of the respective remediation plan.

(j) ~~(g)~~ participation in the remediation plan by the teacher in contractual continued service rated "unsatisfactory", an evaluator and ~~a district administrator qualified under Section 24A-3 (or -- in a school district having a population exceeding 500,000 -- an administrator qualified under Section 24A-3 or an assistant principal under the supervision of an administrator qualified under Section 24A-3), and~~ a

consulting teacher~~,~~ selected by the evaluator ~~by the participating administrator or by the principal, or in school districts having a population exceeding 500,000 by an administrator qualified under Section 24A-3 or by an assistant principal under the supervision of an administrator qualified under Section 24A-3,~~ of the teacher who was rated "unsatisfactory", which consulting teacher is an educational employee as defined in the Educational Labor Relations Act, has at least 5 years' teaching experience, and a reasonable familiarity with the assignment of the teacher being evaluated, and who received an "excellent" rating on his or her most recent evaluation. Where no teachers who meet these criteria are available within the district, the district shall request and the State Board of Education shall supply, to participate in the remediation process, an individual who meets these criteria.

In a district having a population of less than 500,000 with an exclusive bargaining agent, the bargaining agent may, if it so chooses, supply a roster of qualified teachers from whom the consulting teacher is to be selected. That roster shall, however, contain the names of at least 5 teachers, each of whom meets the criteria for consulting teacher with regard to the teacher being evaluated, or the names of all teachers so qualified if that number is less than 5. In the event of a dispute as to qualification, the State Board shall determine qualification.

(k) a mid-point and final evaluation by an evaluator during and at the end of the remediation period, immediately following receipt of a remediation plan provided for under subsections (i) and (j) of this Section. Each evaluation shall assess the teacher's performance during the time period since the prior evaluation; provided that the last evaluation shall also include an overall evaluation of the teacher's performance during the remediation period. A written copy of the evaluations and ratings, in which any deficiencies in performance and recommendations for correction are identified, shall be provided to and discussed with the teacher within 10 school days after the date of the evaluation, unless an applicable collective bargaining agreement provides to the contrary. ~~(k) evaluations and ratings once every 20 school days for the 90 school day remediation period immediately following receipt of a remediation plan provided for under subsections (i) and (j) of this Section; provided that in school districts having a population exceeding 500,000 there shall be monthly evaluations and ratings for the first 6 months and quarterly evaluations and ratings for the next 6 months immediately following completion of the remediation program of a teacher for whom a remediation plan has been developed.~~ These subsequent evaluations

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shall be conducted by an evaluator ~~the participating administrator, or -- in school districts having a population exceeding 500,000 -- by either the principal or by an assistant principal under the supervision of an administrator qualified under Section 24A-3~~. ~~The~~ consulting teacher shall provide advice to the teacher rated "unsatisfactory" on how to improve teaching skills and to successfully complete the remediation plan. The consulting teacher shall participate in developing the remediation plan, but the final decision as to the evaluation shall be done solely by the evaluator ~~administrator, or -- in school districts having a population exceeding 500,000 -- by either the principal or by an assistant principal under the supervision of an administrator qualified under Section 24A-3~~, unless an applicable collective bargaining agreement provides to the contrary. ~~Teachers in the remediation process in a school district having a population exceeding 500,000 are not subject to the annual evaluations described in paragraphs (a) through (c) of this Section.~~ Evaluations at the conclusion of the remediation process shall be separate and distinct from the required annual evaluations of teachers and shall not be subject to the guidelines and procedures relating to those annual evaluations. The evaluator may but is not required to use the forms provided for the annual evaluation of teachers in the district's evaluation plan.

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(l) ~~(i) in school districts having a population of less than 500,000,~~ reinstatement to the evaluation schedule set forth in the district's evaluation plan ~~a schedule of biennial evaluation~~ for any teacher in contractual continued service who achieves a rating equal to or better than "Satisfactory" or "proficient" in the school year following a rating of "needs improvement" or "unsatisfactory". ~~completes the 90 school day remediation plan with a "satisfactory" or better rating, unless the district's plan regularly requires more frequent evaluations; and in school districts having a population exceeding 500,000, reinstatement to a schedule of biennial evaluation for any teacher who completes the 90 school day remediation plan with a "satisfactory" or better rating and the one year intensive review schedule as provided in paragraph (k) of this Section with a "satisfactory" or better rating, unless such district's plan regularly requires more frequent evaluations.~~

(m) ~~(l)~~ dismissal in accordance with Section 24-12 or 34-85 of the School Code of any teacher who fails to complete any applicable remediation plan with a rating equal to or better than a "Satisfactory" or "proficient" ~~better~~ rating. Districts and teachers subject to dismissal hearings are precluded from compelling the testimony of consulting teachers at such hearings under Section 24-12 or 34-85, either as to the rating process or for opinions of

performances by teachers under remediation.

~~In a district subject to a collective bargaining agreement as of the effective date of this amendatory Act of 1997, any changes made by this amendatory Act to the provisions of this Section that are contrary to the express terms and provisions of that agreement shall go into effect in that district only upon expiration of that agreement. Thereafter, collectively bargained evaluation plans shall at a minimum meet the standards of this Article. If such a district has an evaluation plan, however, whether pursuant to the collective bargaining agreement or otherwise, a copy of that plan shall be submitted to the State Board of Education for review and comment, in accordance with Section 24A-4.~~

Nothing in this Section or Section 24A-4 shall be construed as preventing immediate dismissal of a teacher for deficiencies which are deemed irremediable or for actions which are injurious to or endanger the health or person of students in the classroom or school, or preventing the dismissal or non-renewal of teachers not in contractual continued service for any reason not prohibited by applicable employment, labor, and civil rights laws. Failure to strictly comply with the time requirements contained in Section 24A-5 shall not invalidate the results of the remediation plan.

(Source: P.A. 95-510, eff. 8-28-07.)

(105 ILCS 5/24A-7) (from Ch. 122, par. 24A-7)

Sec. 24A-7. Rules. The State Board of Education is authorized to adopt such rules as are deemed necessary to implement and accomplish the purposes and provisions of this Article, including, but not limited to, rules (i) relating to the methods for measuring student growth (including, but not limited to, limitations on the age of useable data; the amount of data needed to reliably and validly measure growth for the purpose of teacher and principal evaluations; and whether and at what time annual State assessments may be used as one of multiple measures of student growth), (ii) defining the term "significant factor" for purposes of including consideration of student growth in performance ratings, (iii) controlling for such factors as student characteristics (including, but not limited to, students receiving special education and English language learner services), student attendance, and student mobility so as to best measure the impact that a teacher, principal, school and school district has on students' academic achievement, (iv) establishing minimum requirements for district teacher and principal evaluation instruments and procedures, and (v) establishing a model evaluation plan for use by school districts in which student growth shall comprise 50% of the performance rating. Notwithstanding any provision in this Section, rules shall not preclude a school district having 500,000 or more inhabitants from using an annual State assessment as the sole measure of student growth for purposes of teacher or principal evaluations.

The rules shall be developed through a process involving collaboration with a Performance Evaluation Advisory Council, which shall be convened and staffed by the State Board of Education. Members of the Council shall be selected by the State Superintendent and include, without limitation, representatives of teacher unions and school district management, persons with expertise in performance evaluation processes and systems, as well as other stakeholders. The Performance Evaluation Advisory Council shall meet at least quarterly following the effective date of this amendatory Act of the 96th General Assembly until June 30, 2017.

Prior to the applicable implementation date, ~~except that~~ these rules shall not apply to teachers assigned to schools identified in an agreement entered into between the board of a school district operating under Article 34 of this Code and the exclusive representative of the district's teachers in accordance with Section 34-85c of this Code.

(Source: P.A. 95-510, eff. 8-28-07.)

(105 ILCS 5/24A-7.1 new)

Sec. 24A-7.1. Teacher, principal, and superintendent performance evaluations. Except as otherwise provided under this Act, disclosure of public school teacher, principal, and superintendent performance evaluations is prohibited.

(105 ILCS 5/24A-8) (from Ch. 122, par. 24A-8)

Sec. 24A-8. Evaluation of teachers not in contractual continued service. Each ~~Beginning with the 1983-84 school year each~~ teacher not in contractual continued service shall be evaluated at least once each school year.

(Source: P.A. 84-1419.)

(105 ILCS 5/24A-15)

Sec. 24A-15. Development ~~and submission~~ of evaluation plan for principals.

(a) Each ~~Beginning with the 2006-2007 school year and each school year thereafter, each~~ school district, except for a school district organized under Article 34 of this Code, shall establish a principal evaluation plan in accordance with this Section. The plan must ensure that each principal is evaluated as follows:

(1) For a principal on a single-year contract, the evaluation must take place by March ~~February~~ 1 of each year.

(2) For a principal on a multi-year contract under Section 10-23.8a of this Code, the evaluation must take place by March 1 ~~February 1~~ of the final year of the contract.

On and after September 1, 2012, the plan must:

(i) rate the principal's performance as "excellent", "proficient", "needs improvement" or "unsatisfactory"; and

(ii) ensure that each principal is evaluated at least

once every school year.

Nothing in this Section prohibits a school district from conducting additional evaluations of principals.

(b) The evaluation shall include a description of the principal's duties and responsibilities and the standards to which the principal is expected to conform.

(c) The evaluation must be performed by the district superintendent, the superintendent's designee, or, in the absence of the superintendent or his or her designee, an individual appointed by the school board who holds a registered Type 75 State administrative certificate.

Prior to September 1, 2012, the ~~The~~ evaluation must be in writing and must at least do all of the following:

(1) Consider the principal's specific duties, responsibilities, management, and competence as a principal.

(2) Specify the principal's strengths and weaknesses, with supporting reasons.

(3) Align with ~~the Illinois Professional Standards for School Leaders or~~ research-based standards established by administrative rule ~~district standards~~.

On and after September 1, 2012, the evaluation must, in addition to the requirements in items (1), (2), and (3) of this subsection (c), provide for the use of data and indicators on student growth as a significant factor in rating performance.

(d) One copy of the evaluation must be included in the

principal's personnel file and one copy of the evaluation must be provided to the principal.

(e) Failure by a district to evaluate a principal and to provide the principal with a copy of the evaluation at least once during the term of the principal's contract, in accordance with this Section, is evidence that the principal is performing duties and responsibilities in at least a satisfactory manner and shall serve to automatically extend the principal's contract for a period of one year after the contract would otherwise expire, under the same terms and conditions as the prior year's contract. The requirements in this Section are in addition to the right of a school board to reclassify a principal pursuant to Section 10-23.8b of this Code.

(f) Nothing in this Section prohibits a school board from ordering lateral transfers of principals to positions of similar rank and salary.

(Source: P.A. 94-1039, eff. 7-20-06.)

(105 ILCS 5/24A-20 new)

Sec. 24A-20. State Board of Education data collection and evaluation assessment and support systems.

(a) On or before the date established in subsection (b) of this Section, the State Board of Education shall, through a process involving collaboration with the Performance Evaluation Advisory Council, develop or contract for the development of and implement all of the following data

collection and evaluation assessment and support systems:

(1) A system to annually collect and publish data by district and school on teacher and administrator performance evaluation outcomes. The system must ensure that no teacher or administrator can be personally identified by publicly reported data.

(2) Both a teacher and principal model evaluation template. The model templates must incorporate the requirements of this Article and any other requirements established by the State Board by administrative rule, but allow customization by districts in a manner that does not conflict with such requirements.

(3) An evaluator pre-qualification program based on the model teacher evaluation template.

(4) An evaluator training program based on the model teacher evaluation template. The training program shall provide multiple training options that account for the prior training and experience of the evaluator.

(5) A superintendent training program based on the model principal evaluation template.

(6) One or more instruments to provide feedback to principals on the instructional environment within a school.

(7) A State Board-provided or approved technical assistance system that supports districts with the development and implementation of teacher and principal evaluation systems.

(8) Web-based systems and tools supporting implementation of the model templates and the evaluator pre-qualification and training programs.

(9) A process for measuring and reporting correlations between local principal and teacher evaluations and (A) student growth in tested grades and subjects and (B) retention rates of teachers.

(10) A process for assessing whether school district evaluation systems developed pursuant to this Act and that consider student growth as a significant factor in the rating of a teacher's and principal's performance are valid and reliable, contribute to the development of staff, and improve student achievement outcomes. By no later than September 1, 2014, a research-based study shall be issued assessing such systems for validity and reliability, contribution to the development of staff, and improvement of student performance and recommending, based on the results of this study, changes, if any, that need to be incorporated into teacher and principal evaluation systems that consider student growth as a significant factor in the rating performance for remaining school districts to be required to implement such systems.

(b) If the State of Illinois receives a Race to the Top Grant, the data collection and support systems described in subsection (a) must be developed on or before September 30,

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2011. If the State of Illinois does not receive a Race to the Top Grant, the data collection and support systems described in subsection (a) must be developed on or before September 30, 2012; provided, however, that the data collection and support systems set forth in items (3) and (4) of subsection (a) of this Section must be developed by September 30, 2011 regardless of whether the State of Illinois receives a Race to the Top Grant. By no later than September 1, 2011, if the State of Illinois receives a Race to the Top Grant, or September 1, 2012, if the State of Illinois does not receive a Race to the Top Grant, the State Board of Education must execute or contract for the execution of the assessment referenced in item (10) of subsection (a) of this Section to determine whether the school district evaluation systems developed pursuant to this Act have been valid and reliable, contributed to the development of staff, and improved student performance.

(c) Districts shall submit data and information to the State Board on teacher and principal performance evaluations and evaluation plans in accordance with procedures and requirements for submissions established by the State Board. Such data shall include, without limitation, (i) data on the performance rating given to all teachers in contractual continued service, (ii) data on district recommendations to renew or not renew teachers not in contractual continued service, and (iii) data on the performance rating given to all principals.

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(d) If the State Board of Education does not timely fulfill any of the requirements set forth in Sections 24A-7 and 24A-20, and adequate and sustainable federal, State, or other funds are not provided to the State Board of Education and school districts to meet their responsibilities under this Article, the applicable implementation date shall be postponed by the number of calendar days equal to those needed by the State Board of Education to fulfill such requirements and for the adequate and sustainable funds to be provided to the State Board of Education and school districts. The determination as to whether the State Board of Education has fulfilled any or all requirements set forth in Sections 24A-7 and 24A-20 and whether adequate and sustainable funds have been provided to the State Board of Education and school districts shall be made by the State Board of Education in consultation with the P-20 Council.

(105 ILCS 5/34-8) (from Ch. 122, par. 34-8)

Sec. 34-8. Powers and duties of general superintendent. The general superintendent of schools shall prescribe and control, subject to the approval of the board and to other provisions of this Article, the courses of study mandated by State law, textbooks, educational apparatus and equipment, discipline in and conduct of the schools, and shall perform such other duties as the board may by rule prescribe. The superintendent shall also notify the State Board of Education, the board and the

chief administrative official, other than the alleged perpetrator himself, in the school where the alleged perpetrator serves, that any person who is employed in a school or otherwise comes into frequent contact with children in the school has been named as a perpetrator in an indicated report filed pursuant to the Abused and Neglected Child Reporting Act, approved June 26, 1975, as amended.

The general superintendent may be granted the authority by the board to hire a specific number of employees to assist in meeting immediate responsibilities. Conditions of employment for such personnel shall not be subject to the provisions of Section 34-85.

The general superintendent may, pursuant to a delegation of authority by the board and Section 34-18, approve contracts and expenditures.

Pursuant to other provisions of this Article, sites shall be selected, schoolhouses located thereon and plans therefor approved, and textbooks and educational apparatus and equipment shall be adopted and purchased by the board only upon the recommendation of the general superintendent of schools or by a majority vote of the full membership of the board and, in the case of textbooks, subject to Article 28 of this Act. The board may furnish free textbooks to pupils and may publish its own textbooks and manufacture its own apparatus, equipment and supplies.

In addition, in January of each year, the general

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superintendent of schools shall report to the State Board of Education the number of high school students in the district who are enrolled in accredited courses (for which high school credit will be awarded upon successful completion of the courses) at any community college, together with the name and number of the course or courses which each such student is taking.

The general superintendent shall also have the authority to monitor the performance of attendance centers, to identify and place an attendance center on remediation and probation, and to recommend to the board that the attendance center be placed on intervention and be reconstituted, subject to the provisions of Sections 34-8.3 and 8.4.

The general superintendent, or his or her designee, shall conduct an annual evaluation of each principal in the district pursuant to guidelines promulgated by the Board and the Board approved principal evaluation form. The evaluation shall be based on factors, including the following: (i) student academic improvement, as defined by the school improvement plan; (ii) student absenteeism rates at the school; (iii) instructional leadership; (iv) effective implementation of programs, policies, or strategies to improve student academic achievement; (v) school management; and (vi) other factors, including, without limitation, the principal's communication skills and ability to create and maintain a student-centered learning environment, to develop opportunities for

professional development, and to encourage parental involvement and community partnerships to achieve school improvement.

Effective no later than September 1, 2012, the general superintendent or his or her designee shall develop a written principal evaluation plan. The evaluation plan must be in writing and shall supersede the evaluation requirements set forth in this Section. The evaluation plan must do at least all of the following:

(1) Provide for annual evaluation of all principals employed under a performance contract by the general superintendent or his or her designee, no later than July 1st of each year.

(2) Consider the principal's specific duties, responsibilities, management, and competence as a principal.

(3) Specify the principal's strengths and weaknesses, with supporting reasons.

(4) Align with research-based standards.

(5) Use data and indicators on student growth as a significant factor in rating principal performance.

(Source: P.A. 95-496, eff. 8-28-07.)

(105 ILCS 5/34-85c)

Sec. 34-85c. Alternative procedures for teacher evaluation, remediation, and removal for cause after

remediation.

(a) Notwithstanding any law to the contrary, the board and the exclusive representative of the district's teachers are hereby authorized to enter into an agreement to establish alternative procedures for teacher evaluation, remediation, and removal for cause after remediation, including an alternative system for peer evaluation and recommendations; provided, however, that no later than September 1, 2012: (i) any alternative procedures must include provisions whereby student performance data is a significant factor in teacher evaluation and (ii) teachers are rated as "excellent", "proficient", "needs improvement" or "unsatisfactory". Pursuant exclusively to that agreement, teachers assigned to schools identified in that agreement shall be subject to an alternative performance evaluation plan and remediation procedures in lieu of the plan and procedures set forth in Article 24A of this Code and alternative removal for cause standards and procedures in lieu of the removal standards and procedures set forth in Sections 34-85 and 34-85b of this Code. To the extent that the agreement provides a teacher with an opportunity for a hearing on removal for cause before an independent hearing officer in accordance with Sections 34-85 and 34-85b or otherwise, the hearing officer shall be governed by the alternative performance evaluation plan, remediation procedures, and removal standards and procedures set forth in the agreement in making findings of fact and a recommendation.

(b) The board and the exclusive representative of the district's teachers shall submit a certified copy of an agreement as provided under subsection (a) of this Section to the State Board of Education.
(Source: P.A. 95-510, eff. 8-28-07.)

(105 ILCS 5/24A-6 rep.)

Section 20. The School Code is amended by repealing Section 24A-6.

Section 99. Effective date. This Act takes effect upon becoming law.

AN ACT concerning education.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 1. Short title. This Act may be cited as the P-20 Longitudinal Education Data System Act.

Section 5. Findings; declarations. The General Assembly finds and declares all of the following:

(1) Sound data collection, reporting, and analysis are critical to building a State education system capable of ensuring all Illinois students are adequately prepared for college and the global workforce. School districts and institutions of higher learning can improve instructional and educational decision-making using data that is collected and made available by this State.

(2) Reliable and sufficient education data is necessary to ensure that this State bases education policy decisions on valid, objective measures of student outcomes. Publicly accessible data on State, school district, and school performance allows the citizens of this State to assess local and statewide investments in education.

(3) A national collaborative effort among State education officials, national education organizations, and

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state and federal policymakers has defined the essential elements a State longitudinal data system should contain. Public Law 110-69, the America COMPETES Act, requires state longitudinal data systems to include all 10 elements identified by this national, collaborative effort for states to qualify for federal funding opportunities. The federal American Recovery and Reinvestment Act of 2009 requires states to establish longitudinal data systems with all 10 elements to qualify for federal funding for education, public safety, and other government services.

(4) Public Law 110-134 requires the Illinois Early Learning Council to develop recommendations regarding the establishment of a unified data collection system for public early childhood education and development programs and services throughout this State, and those efforts should be coordinated with the development of this State's longitudinal data system.

(5) State education policymaking benefits from partnerships between State education agencies and entities with expertise in education research, including school districts, institutions of higher learning, and research organizations. This State should establish systems and processes to permit qualified researchers to assist with State evaluation and research functions in a manner consistent with privacy protection laws.

(6) State education systems and national policymaking

benefit from multi-state collaborations that are informed by high quality data collection systems.

(7) This State is committed to establishing and maintaining a longitudinal student unit record data system that educators and policymakers can use to analyze and assess student progress from early learning programs through postsecondary education and into employment. The State Board of Education, the Illinois Community College Board, and the Board of Higher Education have designed, built, and deployed some of the fundamental components of a longitudinal data system and have engaged in extensive efforts to effectively link and use available education data. However, the various education data components maintained by this State must be integrated and managed in a cooperative manner to establish a data-driven, decision-making environment for this State's education system.

(8) The longitudinal data system established by this Act is intended, among other purposes, to link student test scores, length of enrollment, and graduation records over time, as permitted by Section 1111(b)(3)(B) of the federal Elementary and Secondary Education Act (20 U.S.C. 6311(b)(3)(B)).

(9) Students will achieve improved learning outcomes as a result of the longitudinal data system established by this Act through instruction and educational programs

informed by valid and reliable data.

(10) State use and management of education data must be in accordance with all legal requirements protecting student privacy and must protect personal information from intentional or accidental release to unauthorized persons and from intentional or accidental use for unauthorized purposes.

Section 10. Definitions. In this Act:

"Community College Board" means the Illinois Community College Board.

"Community colleges" has the meaning ascribed to that term in Section 1-2 of the Public Community College Act.

"Early learning" means any publicly funded education and care program supporting young children not yet enrolled in kindergarten.

"Elementary" means kindergarten through eighth grade.

"Institution of higher learning" has the meaning ascribed to that term in Section 10 of the Higher Education Student Assistance Act.

"Longitudinal data system" means a student unit record data system that links student records from early learning through the postsecondary level, which may consist of separate student unit record systems integrated through agreement and data transfer mechanisms.

"Privacy protection laws" means the federal Family

Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g), the Illinois School Student Records Act, the Personal Information Protection Act, and any other State or federal law relating to the confidentiality and protection of personally identifiable information.

"Research organization" means a governmental entity, institution of higher learning, public policy or advocacy organization, or other person or entity conducting educational research that (i) is qualified to perform educational research and protect the privacy of student data, (ii) is seeking to perform research for a non-commercial purpose authorized by privacy protection laws, and (iii) agrees to perform the research pursuant to a written agreement meeting the requirements of privacy protection laws and this Act.

"School" means any elementary or secondary educational institution, charter school, vocational school, special education facility, or any other elementary or secondary educational agency or institution, but does not include a non-public school.

"Secondary" means ninth through twelfth grade.

"State Board" means the State Board of Education.

"State Education Authorities" means the State Board, Community College Board, and Board of Higher Education.

Section 15. Establishment of the longitudinal data system and data warehouse.

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(a) The State Education Authorities shall jointly establish and maintain a longitudinal data system by entering into one or more agreements that link early learning, elementary, and secondary school student unit records with institution of higher learning student unit records. To the extent authorized by this Section and Section 20 of this Act:

(1) the State Board is responsible for collecting and maintaining authoritative enrollment, completion, and student characteristic information on early learning, public school (kindergarten through grade 12), and non-public school (kindergarten through grade 12) students;

(2) the Community College Board is responsible for collecting and maintaining authoritative enrollment, completion, and student characteristic information on community college students; and

(3) the Board of Higher Education is responsible for collecting and maintaining authoritative enrollment, completion, and student characteristic information on students enrolled in institutions of higher learning, other than community colleges.

(b) On or before June 30, 2013, subject to the availability of funding through appropriations made specifically for the purposes of this Act, the State Education Authorities shall improve and expand the longitudinal data system to enable the State Education Authorities to perform or cause to be performed

all of the following activities and functions:

(1) Reduce, to the maximum extent possible, the data collection burden on school districts and institutions of higher learning by using data submitted to the system for multiple reporting and analysis functions.

(2) Provide authorized officials of early learning programs, schools, school districts, and institutions of higher learning with access to their own student-level data, summary reports, and data that can be integrated with additional data maintained outside of the system to inform education decision-making.

(3) Link data to instructional management tools that support instruction and assist collaboration among teachers and postsecondary instructors.

(4) Enhance and expand existing high school-to-postsecondary reporting systems to inform school and school district officials, education policymakers, and members of the public about public school students' performance in postsecondary education.

(5) Provide data reporting, analysis, and planning tools that assist with financial oversight, human resource management, and other education support functions.

(6) Improve student access to educational opportunities by linking data to student college and career planning portals, facilitating the submission of electronic transcripts and scholarship and financial aid

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applications, and enabling the transfer of student records to officials of a school or institution of higher learning where a student enrolls or seeks or intends to enroll.

(7) Establish a public internet web interface that provides non-confidential data reports and permits queries so that parents, the media, and other members of the public can more easily access information pertaining to statewide, district, and school performance.

(8) Provide research and reports to the General Assembly that assist with evaluating the effectiveness of specific programs and that enable legislators to analyze educational performance within their legislative districts.

(9) Allow the State Education Authorities to efficiently meet federal and State reporting requirements by drawing data for required reports from multiple State systems.

(10) Establish a system to evaluate teacher and administrator preparation programs using student academic growth as one component of evaluation.

(11) In accordance with a data sharing agreement entered into between the State Education Authorities and the Illinois Student Assistance Commission, establish procedures and systems to evaluate the relationship between need-based financial aid and student enrollment and success in institutions of higher learning.

(12) In accordance with data sharing agreements entered into between the State Education Authorities and health and human service agencies, establish procedures and systems to evaluate the relationship between education and other student and family support systems.

(13) In accordance with data sharing agreements entered into between the State Education Authorities and employment and workforce development agencies, establish procedures and systems to evaluate the relationship between education programs and outcomes and employment fields, employment locations, and employment outcomes.

(c) On or before June 30, 2013, subject to the availability of funding through appropriations made specifically for the purposes of this Act, the State Board shall establish a data warehouse that integrates data from multiple student unit record systems and supports all of the uses and functions of the longitudinal data system set forth in this Act. The data warehouse must be developed in cooperation with the Community College Board and the Board of Higher Education and must have the ability to integrate longitudinal data from early learning through the postsecondary level in accordance with one or more data sharing agreements entered into among the State Education Authorities. The data warehouse, as integrated with the longitudinal data system, must include, but is not limited to, all of the following elements:

(1) A unique statewide student identifier that

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connects student data across key databases across years. The unique statewide student identifier must not be derived from a student's social security number and must be provided to institutions of higher learning to assist with linkages between early learning through secondary and postsecondary data.

(2) Student-level enrollment, demographic, and program participation information, including information on participation in dual credit programs.

(3) The ability to match individual students' elementary and secondary test records from year to year to measure academic growth.

(4) Information on untested students in the elementary and secondary levels, and the reasons they were not tested.

(5) A teacher and administrator identifier system with the ability to match students to early learning, elementary, and secondary teachers and elementary and secondary administrators. Information able to be obtained only as a result of the linkage of teacher and student data through the longitudinal data system may not be used by a school district for decisions involving teacher pay or teacher benefits unless the district and the exclusive bargaining representative of the district's teachers, if any, have agreed to this use. Information able to be obtained only as a result of the linkage of teacher and student data through the longitudinal data system may not

be used by a school district as part of an evaluation under Article 24A of the School Code unless, in good faith cooperation with the school district's teachers or, where applicable, the exclusive bargaining representative of the school district's teachers, the school district has developed an evaluation plan or substantive change to an evaluation plan that specifically describes the school district's rationale for using this information for evaluations, how this information will be used as part of the evaluation process, and how this information will relate to evaluation standards. However, nothing in this subdivision (5) or elsewhere in this Act limits or restricts (i) a district's use of any local or State data that has been obtained independently from the linkage of teacher and student data through the longitudinal data system or (ii) a charter school's use of any local or State data in connection with teacher pay, benefits, or evaluations.

(6) Student-level transcript information, including information on courses completed and grades earned, from middle and high schools. The State Board shall establish a statewide course classification system based upon the federal School Codes for Exchange of Data or a similar course classification system. Each school district and charter school shall map its course descriptions to the statewide course classification system for the purpose of

State reporting. School districts and charter schools are not required to change or modify the locally adopted course descriptions used for all other purposes. The State Board shall establish or contract for the establishment of a technical support and training system to assist schools and districts with the implementation of this item (6) and shall, to the extent possible, collect transcript data using a system that permits automated reporting from district student information systems.

(7) Student-level college readiness test scores.

(8) Student-level graduation and dropout data.

(9) The ability to match early learning through secondary student unit records with institution of higher learning student unit record systems.

(10) A State data audit system assessing data quality, validity, and reliability.

(d) Using data provided to and maintained by the longitudinal data system, the State Education Authorities may, in addition to functions and activities specified elsewhere in this Section, perform and undertake the following:

(1) research for or on behalf of early learning programs, schools, school districts, or institutions of higher learning, which may be performed by one or more State Education Authorities or through agreements with research organizations meeting all of the requirements of this Act and privacy protection laws; and

(2) audits or evaluations of federal or State-supported education programs and activities to enforce federal or State legal requirements with respect to those programs. Each State Education Authority may assist another State Education Authority with audit, evaluation, or enforcement activities and may disclose education records with each other for those activities relating to any early learning through postsecondary program. The State Education Authorities may disclose student information to authorized officials of a student's former early learning program, school, or school district to assist with the evaluation of federal or State-supported education programs.

(e) In establishing, operating, and expanding the longitudinal data system, the State Education Authorities shall convene stakeholders and create opportunities for input and advice in the areas of data ownership, data use, research priorities, data management, confidentiality, data access, and reporting from the system. Such stakeholders include, but are not limited to, public and non-public institutions of higher learning, school districts, charter schools, non-public elementary and secondary schools, early learning programs, teachers, professors, parents, principals and administrators, school research consortiums, education policy and advocacy organizations, news media, the Illinois Student Assistance Commission, the Illinois Education Research Council, the

Department of Commerce and Economic Opportunity, the Illinois Early Learning Council, and the Legislative Research Unit.

(f) Representatives of the State Education Authorities shall report to and advise the Illinois P-20 Council on the implementation, operation, and expansion of the longitudinal data system.

(g) Appropriations made to the State Education Authorities for the purposes of this Act shall be used exclusively for expenses for the development and operation of the longitudinal data system. Authorized expenses of the State Education Authorities may relate to contracts with outside vendors for the development and operation of the system, agreements with other governmental entities or research organizations for authorized uses and functions of the system, technical support and training for entities submitting data to the system, or regular or contractual employees necessary for the system's development or operation.

Section 20. Collection and maintenance of data.

(a) The State Board is authorized to collect and maintain data from school districts, schools, and early learning programs and disclose this data to the longitudinal data system for the purposes set forth in this Act. The State Board shall collect data from charter schools with more than one campus in a manner that can be disaggregated by campus site. The State Board may also disclose data to the longitudinal data system

that the State Board is otherwise authorized by law to collect and maintain.

On or before July 1, 2010, the State Board shall establish procedures through which State-recognized, non-public schools may elect to participate in the longitudinal data system by disclosing data to the State Board for one or more of the purposes set forth in this Act.

Subject to the availability of funding through appropriations made specifically for the purposes of this Act, the State Board shall establish or contract for the establishment of a technical support and training system to assist school districts, schools, and early learning programs with data submission, use, and analysis.

(b) The Community College Board is authorized to collect and maintain data from community college districts and disclose this data to the longitudinal data system for the purposes set forth in this Act. The Community College Board may also disclose data to the longitudinal data system that the Community College Board is otherwise authorized by law to collect and maintain.

Subject to the availability of funding through appropriations made specifically for the purposes of this Act, the Community College Board shall establish or contract for the establishment of a technical support and training system to assist community colleges with data submission, use, and analysis.

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(c) The Board of Higher Education is authorized to collect and maintain data from any public institution of higher learning, other than community colleges, and disclose this data to the longitudinal data system for the purposes set forth in this Act. The Board of Higher Education may also disclose data to the longitudinal data system that the Board of Higher Education is otherwise authorized by law to collect and maintain.

Beginning on July 1, 2012, the Board of Higher Education is authorized to collect and maintain data from any non-public institution of higher learning enrolling one or more students receiving Monetary Award Program grants, pursuant to Section 35 of the Higher Education Student Assistance Act, and disclose this data to the longitudinal data system for the purposes set forth in this Act. Prior to July 1, 2012, any non-public institution of higher learning may elect to participate in the longitudinal data system by disclosing data for one or more of the purposes set forth in this Act to the Board of Higher Education or to a consortium that has contracted with the Board of Higher Education pursuant to this subsection (c).

The Board of Higher Education may contract with one or more voluntary consortiums of non-public institutions of higher learning established for the purpose of data sharing, research, and analysis. The contract may allow the consortium to collect data from participating institutions on behalf of the Board of Higher Education. The contract may provide for consultation

with a representative committee of participating institutions and a representative of one or more organizations representing the participating institutions prior to the use of data from the consortium for a data sharing arrangement entered into with any party other than a State Education Authority pursuant to Section 25 of this Act. The contract may further provide that individual institutions of higher learning shall have the right to opt out of specific uses of their data or portions thereof for reasons specified in the contract. Student-level data submitted by each institution of higher learning participating in a consortium that has contracted with the Board of Higher Education pursuant to this paragraph shall remain the property of that institution. Upon notice to the consortium and the Board of Higher Education, any non-public institution of higher learning shall have the right to remove its data from the consortium if the institution has reasonable cause to believe that there is a threat to the security of its data or its data is used in a manner that violates the terms of the contract between the consortium and the Board of Higher Education. In the event data is removed from a consortium pursuant to the preceding sentence, the data must be returned by the institution to the consortium after the basis for removal has been corrected. The data submitted from the consortium to the Board of Higher Education must be used only for agreed-upon purposes, as stated in the terms of the contract between the consortium and the Board of Higher Education. Non-public

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institutions of higher learning submitting student-level data to a consortium that has contracted with the Board of Higher Education pursuant to this paragraph shall not be required to submit student-level data to the Board of Higher Education.

Subject to the availability of funding through appropriations made specifically for the purposes of this Act, the Board of Higher Education shall establish or contract for the establishment of a technical support and training system to assist institutions of higher learning, other than community colleges, with data submission, use, and analysis. The Board of Higher Education may make available grant funding to a consortium of non-public institutions of higher learning to provide assistance in the development of a data collection system. The Board of Higher Education shall engage in a cooperative planning process with public and non-public institutions of higher learning and statewide higher education associations in connection with all of the activities authorized by this subsection (c).

(d) The State Education Authorities shall establish procedures and requirements relating to the submission of data authorized to be collected pursuant to this Section, including requirements for data specifications, quality, security, and timeliness. All early learning programs, schools, school districts, and institutions of higher learning subject to the data collection authority of a State Education Authority pursuant to this Section shall comply with the State Education

Authority's procedures and requirements for data submissions. A State Education Authority may require that staff responsible for collecting, validating, and submitting data participate in training and technical assistance offered by this State if data is not submitted in accordance with applicable procedures and requirements.

Section 25. Data sharing.

(a) The State Education Authorities may disclose data from the longitudinal data system collected pursuant to Section 20 of this Act only in connection with a data sharing arrangement meeting the requirements of this Section.

(b) Any State agency, board, authority, or commission may enter into a data sharing arrangement with one or more of the State Education Authorities to share data to support the research and evaluation activities authorized by this Act. State Education Authorities may also enter into data sharing Arrangements with other governmental entities, institutions of higher learning, and research organizations that support the research and evaluation activities authorized by this Act.

(c) Any data sharing arrangement entered into pursuant to this Section must:

(1) be permissible under and undertaken in accordance with privacy protection laws;

(2) be approved by the following persons:

(A) the State Superintendent of Education or his or her designee for the use of early learning, public school, and non-public school student data;

(B) the chief executive officer of the Community College Board or his or her designee for the use of community college student data; and

(C) the executive director of the Board of Higher Education or his or her designee for the use of student data from an institution of higher learning, other than a community college;

(3) not permit the personal identification of any person by individuals other than authorized representatives of the recipient entity that have legitimate interests in the information;

(4) ensure the destruction or return of the data when no longer needed for the authorized purposes under the data sharing arrangement; and

(5) be performed pursuant to a written agreement with the recipient entity that does the following:

(A) specifies the purpose, scope, and duration of the data sharing arrangement;

(B) requires the recipient of the data to use personally identifiable information from education records to meet only the purpose or purposes of the data sharing arrangement stated in the written agreement;

(C) describes specific data access, use, and

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security restrictions that the recipient will undertake; and

(b) includes such other terms and provisions as the State Education Authorities deem necessary to carry out the intent and purposes of this Act.

Section 30. Subject to privacy protection laws. The collection, use, maintenance, disclosure, and sharing of data authorized by this Act must be conducted in accordance with privacy protection laws. The State Education Authorities shall each develop security measures and procedures that protect personal information from intentional or accidental release to unauthorized persons and from intentional or accidental use for unauthorized purposes.

Section 35. No impact on existing authority. This Act does not modify or diminish any responsibilities or authority that a State Education Authority or the State Education Authorities collectively may otherwise have under law with respect to the collection, use, maintenance, disclosure, and sharing of data.

Section 40. Evaluation. Subject to the availability of funding through appropriations made specifically for the purposes of this Act, the State Education Authorities shall contract with an independent outside evaluator for oversight of the development and operation of the longitudinal data system. The independent outside evaluator shall annually submit a report to the State Education Authorities, the Illinois P-20 Council, the Speaker and Minority Leader of the House of Representatives, and the President and Minority Leader of the Senate. The report shall include without limitation (i) an evaluation of the extent to which the system is being developed and operated to achieve the purposes, objectives, and requirements of this Act; (ii) an evaluation of the oversight and governance of the system by the State Education Authorities and any recommendations to improve the oversight and governance of the system; and (iii) an evaluation of the security measures and procedures developed by the State Education Authorities to protect personally identifiable information and any recommendations to further ensure the privacy of personally identifiable information.

Section 500. The School Code is amended by changing Section 27A-5 as follows:

(105 ILCS 5/27A-5)

Sec. 27A-5. Charter school; legal entity; requirements.

(a) A charter school shall be a public, nonsectarian, nonreligious, non-home based, and non-profit school. A charter school shall be organized and operated as a nonprofit corporation or other discrete, legal, nonprofit entity authorized under the laws of the State of Illinois.

(b) A charter school may be established under this Article by creating a new school or by converting an existing public school or attendance center to charter school status. Beginning on the effective date of this amendatory Act of the 93rd General Assembly, in all new applications submitted to the State Board or a local school board to establish a charter school in a city having a population exceeding 500,000, operation of the charter school shall be limited to one campus. The changes made to this Section by this amendatory Act of the 93rd General Assembly do not apply to charter schools existing or approved on or before the effective date of this amendatory Act.

(c) A charter school shall be administered and governed by its board of directors or other governing body in the manner provided in its charter. The governing body of a charter school shall be subject to the Freedom of Information Act and the Open Meetings Act.

(d) A charter school shall comply with all applicable health and safety requirements applicable to public schools under the laws of the State of Illinois.

(e) Except as otherwise provided in the School Code, a charter school shall not charge tuition; provided that a charter school may charge reasonable fees for textbooks, instructional materials, and student activities.

(f) A charter school shall be responsible for the management and operation of its fiscal affairs including, but not limited to, the preparation of its budget. An audit of each charter school's finances shall be conducted annually by an outside, independent contractor retained by the charter school.

(g) A charter school shall comply with all provisions of this Article and its charter. A charter school is exempt from all other State laws and regulations in the School Code governing public schools and local school board policies, except the following:

(1) Sections 10-21.9 and 34-18.5 of the School Code regarding criminal history records checks and checks of the Statewide Sex Offender Database of applicants for employment;

(2) Sections 24-24 and 34-84A of the School Code regarding discipline of students;

(3) The Local Governmental and Governmental Employees Tort Immunity Act;

(4) Section 108.75 of the General Not For Profit Corporation Act of 1986 regarding indemnification of officers, directors, employees, and agents;

(5) The Abused and Neglected Child Reporting Act;

(6) The Illinois School Student Records Act; ~~and~~

(7) Section 10-17a of the School Code regarding school report cards; ~~and~~

(8) The P-20 Longitudinal Education Data System Act.

(h) A charter school may negotiate and contract with a

school district, the governing body of a State college or university or public community college, or any other public or for-profit or nonprofit private entity for: (i) the use of a school building and grounds or any other real property or facilities that the charter school desires to use or convert for use as a charter school site, (ii) the operation and maintenance thereof, and (iii) the provision of any service, activity, or undertaking that the charter school is required to perform in order to carry out the terms of its charter. However, a charter school that is established on or after the effective date of this amendatory Act of the 93rd General Assembly and that operates in a city having a population exceeding 500,000 may not contract with a for-profit entity to manage or operate the school during the period that commences on the effective date of this amendatory Act of the 93rd General Assembly and concludes at the end of the 2004-2005 school year. Except as provided in subsection (i) of this Section, a school district may charge a charter school reasonable rent for the use of the district's buildings, grounds, and facilities. Any services for which a charter school contracts with a school district shall be provided by the district at cost. Any services for which a charter school contracts with a local school board or with the governing body of a State college or university or public community college shall be provided by the public entity at cost.

(i) In no event shall a charter school that is established by converting an existing school or attendance center to charter school status be required to pay rent for space that is deemed available, as negotiated and provided in the charter agreement, in school district facilities. However, all other costs for the operation and maintenance of school district facilities that are used by the charter school shall be subject to negotiation between the charter school and the local school board and shall be set forth in the charter.

(j) A charter school may limit student enrollment by age or grade level.

(Source: P.A. 93-3, eff. 4-16-03; 93-909, eff. 8-12-04; 94-219, eff. 7-14-05.)

Section 505. The Illinois School Student Records Act is amended by changing Section 6 as follows:

(105 ILCS 10/6) (from Ch. 122, par. 50-6)

Sec. 6. (a) No school student records or information contained therein may be released, transferred, disclosed or otherwise disseminated, except as follows:

(1) To a parent or student or person specifically designated as a representative by a parent, as provided in paragraph (a) of Section 5;

(2) To an employee or official of the school or school district or State Board with current demonstrable educational or administrative interest in the student, in

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furtherance of such interest;

(3) To the official records custodian of another school within Illinois or an official with similar responsibilities of a school outside Illinois, in which the student has enrolled, or intends to enroll, upon the request of such official or student;

(4) To any person for the purpose of research, statistical reporting, or planning, provided that such research, statistical reporting, or planning is permissible under and undertaken in accordance with the federal Family Educational Rights and Privacy Act (20 U.S.C. 1232g) ~~no student or parent can be identified from the information released and the person to whom the information is released signs an affidavit agreeing to comply with all applicable statutes and rules pertaining to school student records~~;

(5) Pursuant to a court order, provided that the parent shall be given prompt written notice upon receipt of such order of the terms of the order, the nature and substance of the information proposed to be released in compliance with such order and an opportunity to inspect and copy the school student records and to challenge their contents pursuant to Section 7;

(6) To any person as specifically required by State or federal law;

(6.5) To juvenile authorities when necessary for the discharge of their official duties who request information prior to adjudication of the student and who certify in writing that the information will not be disclosed to any other party except as provided under law or order of court. For purposes of this Section "juvenile authorities" means: (i) a judge of the circuit court and members of the staff of the court designated by the judge; (ii) parties to the proceedings under the Juvenile Court Act of 1987 and their attorneys; (iii) probation officers and court appointed advocates for the juvenile authorized by the judge hearing the case; (iv) any individual, public or private agency having custody of the child pursuant to court order; (v) any individual, public or private agency providing education, medical or mental health service to the child when the requested information is needed to determine the appropriate service or treatment for the minor; (vi) any potential placement provider when such release is authorized by the court for the limited purpose of determining the appropriateness of the potential placement; (vii) law enforcement officers and prosecutors; (viii) adult and juvenile prisoner review boards; (ix) authorized military personnel; (x) individuals authorized by court;

(7) Subject to regulations of the State Board, in connection with an emergency, to appropriate persons if the knowledge of such information is necessary to protect the

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health or safety of the student or other persons;

(8) To any person, with the prior specific dated written consent of the parent designating the person to whom the records may be released, provided that at the time any such consent is requested or obtained, the parent shall be advised in writing that he has the right to inspect and copy such records in accordance with Section 5, to challenge their contents in accordance with Section 7 and to limit any such consent to designated records or designated portions of the information contained therein;

(9) To a governmental agency, or social service agency contracted by a governmental agency, in furtherance of an investigation of a student's school attendance pursuant to the compulsory student attendance laws of this State, provided that the records are released to the employee or agent designated by the agency;

(10) To those SHOCAP committee members who fall within the meaning of "state and local officials and authorities", as those terms are used within the meaning of the federal Family Educational Rights and Privacy Act, for the purposes of identifying serious habitual juvenile offenders and matching those offenders with community resources pursuant to Section 5-145 of the Juvenile Court Act of 1987, but only to the extent that the release, transfer, disclosure, or dissemination is consistent with the Family Educational Rights and Privacy Act; or

(11) To the Department of Healthcare and Family Services in furtherance of the requirements of Section 2-3.131, 3-14.29, 10-28, or 34-18.26 of the School Code or Section 10 of the School Breakfast and Lunch Program Act.

(12) To the State Board or another State government agency or between or among State government agencies in order to evaluate or audit federal and State programs or perform research and planning, but only to the extent that the release, transfer, disclosure, or dissemination is consistent with the federal Family Educational Rights and Privacy Act (20 U.S.C. 1232g ~~1221 et seq.~~).

(b) No information may be released pursuant to subparagraphs (3) or (6) of paragraph (a) of this Section 6 unless the parent receives prior written notice of the nature and substance of the information proposed to be released, and an opportunity to inspect and copy such records in accordance with Section 5 and to challenge their contents in accordance with Section 7. Provided, however, that such notice shall be sufficient if published in a local newspaper of general circulation or other publication directed generally to the parents involved where the proposed release of information is pursuant to subparagraph 6 of paragraph (a) in this Section 6 and relates to more than 25 students.

(c) A record of any release of information pursuant to this Section must be made and kept as a part of the school student record and subject to the access granted by Section 5. Such

record of release shall be maintained for the life of the school student records and shall be available only to the parent and the official records custodian. Each record of release shall also include:

(1) The nature and substance of the information released;

(2) The name and signature of the official records custodian releasing such information;

(3) The name of the person requesting such information, the capacity in which such a request has been made, and the purpose of such request;

(4) The date of the release; and

(5) A copy of any consent to such release.

(d) Except for the student and his parents, no person to whom information is released pursuant to this Section and no person specifically designated as a representative by a parent may permit any other person to have access to such information without a prior consent of the parent obtained in accordance with the requirements of subparagraph (B) of paragraph (A) of this Section.

(e) Nothing contained in this Act shall prohibit the publication of student directories which list student names, addresses and other identifying information and similar publications which comply with regulations issued by the State Board.

(Source: P.A. 95-331, eff. 8-21-07; 95-793, eff. 1-1-09.)

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Section 999. Effective date. This Act takes effect upon becoming law.

Appendix A1-4

Student Outcome Goals

The Student Outcome Goals table below details data from recent years and goals for future improvement in student performance on state and national assessments, high school graduation rates, and college enrollment rates, overall and by subgroup. In addition to requested data and goals for performance on the NAEP, ISAT, and PSAE assessments, the table also presents information on student performance relative to the ACT College Readiness Benchmarks. The ACT College Readiness Benchmarks will provide a consistent measure of college readiness over the course of the RTTT grant period. Annual targets are shown for the NAEP to demonstrate the trajectory of the State's student outcome goals, although the NAEP is not administered every year.

Overall Student Outcome Goals								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**
NAEP: Grade 4 Mathematics	30.72	NA	30.93		34.00	38.00	44.00	50.93
NAEP: Grade 4 Reading Language Arts (% at proficient level)	24.19	NA	NA		27.00	30.50	34.50	39.19
NAEP: Grade 8 Mathematics	23.81	NA	25.89		28.50	31.50	36.00	40.89
NAEP: Grade 8 Reading Language Arts	27.46	NA	NA		30.00	33.00	37.50	42.46
NAEP: Grade 8 Mathematics Without RTTT	23.81	NA	25.89		27.00	28.00	29.00	31.00
NAEP: Grade 8 Reading Language Arts Without RTTT	27.46	NA	NA		29.00	30.00	31.00	33.00
ISAT: Grade 3 Math (% at meets and exceeds)	86.8	85.1	85.2		86.0	87.0	90.0	93.0
ISAT: Grade 3 Reading	73.0	71.7	72.2		74.0	77.0	84.0	91.0
ISAT: Grade 4 Math	86.4	84.6	85.7		87.0	88.0	90.0	92.0
ISAT: Grade 4 Reading	73.7	73.2	73.8		76.0	79.0	85.0	91.0

ISAT: Grade 5 Math	82.5	81.4	82.4		85.0	87.0	89.0	92.0
ISAT: Grade 5 Reading	69.7	73.5	73.5		76.0	79.0	85.0	91.0
ISAT: Grade 6 Math	81.4	82.6	82.4		84.0	86.0	89.0	92.0
ISAT: Grade 6 Reading	73.4	79.0	79.9		82.0	84.0	87.0	91.0
ISAT: Grade 7 Math	79.4	80.4	82.8		85.0	87.0	90.0	93.0
ISAT: Grade 7 Reading	73.4	77.7	77.5		80.0	82.0	87.0	92.0
ISAT: Grade 8 Math	81.3	80.4	81.7		83.0	85.0	89.0	93.0
ISAT: Grade 8 Reading	81.8	81.4	83.6		85.0	87.0	90.0	93.0
ISAT: Grade 8 Math Without RTTT	81.3	80.4	81.7		83.0	84.0	85.0	86.0
ISAT: Grade 8 Reading Without RTTT	81.8	81.4	83.6		85.0	86.0	87.0	88.0
PSAE: Math (% at meets & exceeds)	52.7	53.0	51.6		58.0	63.0	70.0	76.0
PSAE: Reading	54.1	53.3	56.9		61.0	66.0	72.0	78.0
PSAE: Math Without RTTT	52.7	53.0	51.6		54.0	56.0	58.0	60.0
PSAE: Reading Without RTTT	54.1	53.3	56.9		59.0	61.0	63.0	65.0
ACT CRB: Math (% meets CRB)	37	37	37		40	44	49	55
ACT CRB: Reading	42	43	45		48	51	56	62
ACT CRB: Math Without RTTT	37	37	37		39.0	41.0	43.0	45.0
ACT CRB: Reading Without RTTT	42	43	45		47.0	49.0	51.0	52.0
High School Graduation Rate	85.9	83.1	88.8		78.8	82.0	86.0	90.0

High School Graduation Rate Without RTTT	85.9	83.1	88.8		78.8	80.0	82.0	84.0
Total College Enrollment [1] (% of students who entered 9th grade)[2]			42		45	49	54	60
Students Completing at Least One Year of College Credit Applicable to a Degree (% of students who entered 9th grade)[3]			28		32	37	43	50
College Enrollment Without RTTT			42		44	46	48	50
Students Completing at Least One Year of College Credit Applicable to a Degree Without RTTT			28		32	34	36	38
Black Subgroup								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**
NAEP: Grade 4 Mathematics	**9.04**	**NA**	**10.30**		**14.00**	**18.00**	**24.00**	**30.30**
NAEP: Grade 4 Reading Language Arts	**12.55**	**NA**	**NA**		**16.50**	**21.00**	**26.50**	**32.55**

[1] This data disaggregated by subgroup is not currently available. Upon implementation of programs under the State Fiscal Stabilization Fund, data disaggregated by subgroup will be available.

[2] This data is based on information analyzed by the Illinois Board of Higher Education in its Illinois Public Agenda Report and represents the most recent data currently available but is not based solely on 2009 data. This information disaggregated by year and by subgroup is not currently available. Upon implementation of programs under the State Fiscal Stabilization Fund, this data will be available.

[3] This data is based on information analyzed by the Illinois Board of Higher Education in its Illinois Public Agenda Report and represents the most recent data currently available but is not based solely on 2009 data. This information disaggregated by year and by subgroup is not currently available. Upon implementation of programs under the State Fiscal Stabilization Fund, this data will be available.

NAEP: Grade 8 Mathematics	**6.29**	**NA**	**8.13**		**12.00**	**16.00**	**22.00**	**28.13**
NAEP: Grade 8 Reading Language Arts	**9.70**	**NA**	**NA**		**13.00**	**17.00**	**23.00**	**29.7**
NAEP: Grade 8 Mathematics Without RTTT	**6.29**	**NA**	**8.13**		**11.0**	**14.0**	**17.0**	**20.0**
NAEP: Grade 8 Reading Language Arts Without RTTT	**9.70**	**NA**	**NA**		**14.0**	**17.0**	**20.0**	**23.0**
ISAT: Grade 3 Math	**68.1**	**68.3**	**69.9**		**72.0**	**75.0**	**81.0**	**88.0**
ISAT: Grade 3 Reading	**50.5**	**55.3**	**56.9**		**60.0**	**65.0**	**74.0**	**86.0**
ISAT: Grade 4 Math	**68.0**	**69.0**	**71.0**		**73.0**	**76.0**	**81.0**	**87.0**
ISAT: Grade 4 Reading	**50.3**	**56.2**	**55.8**		**60.0**	**66.0**	**75.0**	**85.0**
ISAT: Grade 5 Math	**60.2**	**63.1**	**65.7**		**69.0**	**73.0**	**79.0**	**87.0**
ISAT: Grade 5 Reading	**44.8**	**55.8**	**55.6**		**60.0**	**66.0**	**75.0**	**85.0**
ISAT: Grade 6 Math	**60.8**	**63.6**	**65.4**		**68.0**	**72.0**	**79.0**	**87.0**
ISAT: Grade 6 Reading	**53.4**	**63.4**	**64.9**		**68.0**	**72.0**	**78.0**	**86.0**
ISAT: Grade 7 Math	**58.2**	**59.7**	**64.7**		**68.0**	**72.0**	**79.0**	**87.0**
ISAT: Grade 7 Reading	**54.6**	**63.7**	**63.1**		**67.0**	**72.0**	**79.0**	**87.0**
ISAT: Grade 8 Math	**61.5**	**60.9**	**63.6**		**68.0**	**72.0**	**79.0**	**87.0**
ISAT: Grade 8 Reading	**69.8**	**68.7**	**70.7**		**73.0**	**76.0**	**81.0**	**89.0**
ISAT: Grade 8 Math Without RTTT	**61.5**	**60.9**	**63.6**		**66.0**	**68.0**	**70.0**	**73.0**
ISAT: Grade 8 Reading Without RTTT	**69.8**	**68.7**	**70.7**		**73.0**	**76.0**	**79.0**	**82.0**
PSAE: Math	**19.4**	**20.6**	**18.6**		**26.0**	**35.0**	**50.0**	**65.0**
PSAE: Reading	**28.0**	**24.9**	**28.0**		**33.0**	**40.0**	**54.0**	**69.0**

PSAE: Math Without RTTT	**19.4**	**20.6**	**18.6**		**24.0**	**29.0**	**35.0**	**41.0**
PSAE: Reading Without RTTT	**28.0**	**24.9**	**28.0**		**32.0**	**37.0**	**41.0**	**45.0**
ACT CRB: Math	**9**	**10**	**9**		**16**	**26**	**38**	**50**
ACT CRB: Reading	**15**	**16**	**17**		**23**	**30**	**39**	**50**
ACT CRB: Math Without RTTT	**9**	**10**	**9**		**12**	**14**	**17**	**20**
ACT CRB: Reading Without RTTT	**15**	**16**	**17**		**19**	**20**	**21**	**22**
High School Graduation Rate	**73.8**	**74.9**	**76.7**		**66.7**	**72.0**	**79.0**	**86.0**
High School Graduation Rate Without RTTT	**73.8**	**74.9**	**76.7**		**66.7**	**69.0**	**72.0**	**75.0**
Hispanic Subgroup								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**
NAEP: Grade 4 Mathematics	**17.60**	**NA**	**18.82**		**22.00**	**26.00**	**32.00**	**38.82**
NAEP: Grade 4 Reading Language Arts	**14.68**	**NA**	**NA**		**17.50**	**22.00**	**27.50**	**34.68**
NAEP: Grade 8 Mathematics	**11.81**	**NA**	**15.91**		**19.50**	**23.50**	**29.50**	**35.91**
NAEP: Grade 8 Reading Language Arts	**15.20**	**NA**	**NA**		**18.50**	**22.00**	**28.00**	**35.20**
NAEP: Grade 8 Mathematics Without RTTT	**11.81**	**NA**	**15.91**		**18.0**	**20.0**	**22.0**	**25.0**
NAEP: Grade 8 Reading Language Arts Without RTTT	**15.20**	**NA**	**NA**		**18.0**	**20.0**	**23.0**	**26.0**
ISAT: Grade 3 Math	**84.8**	**78.1**	**77.7**		**80.0**	**82.0**	**86.0**	**91.0**
ISAT: Grade 3 Reading	**65.7**	**55.2**	**54.9**		**60.0**	**67.0**	**75.0**	**86.0**
ISAT: Grade 4 Math	**85.6**	**76.8**	**79.5**		**81.0**	**83.0**	**86.0**	**90.0**
ISAT: Grade 4 Reading	**68.5**	**59.4**	**60.1**		**64.0**	**68.0**	**76.0**	**87.0**

ISAT: Grade 5 Math	**81.6**	**74.0**	**75.5**		**78.0**	**81.0**	**85.0**	**90.0**
ISAT: Grade 5 Reading	**64.3**	**58.2**	**59.8**		**64.0**	**69.0**	**76.0**	**87.0**
ISAT: Grade 6 Math	**77.4**	**77.1**	**75.9**		**78.0**	**80.0**	**85.0**	**90.0**
ISAT: Grade 6 Reading	**62.2**	**67.9**	**69.4**		**73.0**	**76.0**	**82.0**	**88.0**
ISAT: Grade 7 Math	**75.0**	**75.4**	**78.1**		**80.0**	**82.0**	**87.0**	**92.0**
ISAT: Grade 7 Reading	**64.4**	**67.6**	**66.8**		**70.0**	**75.0**	**82.0**	**89.0**
ISAT: Grade 8 Math	**76.8**	**74.5**	**76.3**		**78.0**	**81.0**	**86.0**	**91.0**
ISAT: Grade 8 Reading	**76.2**	**73.5**	**77.4**		**79.0**	**82.0**	**86.0**	**91.0**
ISAT: Grade 8 Math Without RTTT	**76.8**	**74.5**	**76.3**		**78.0**	**79.0**	**80.0**	**81.0**
ISAT: Grade 8 Reading Without RTTT	**76.2**	**73.5**	**77.4**		**79.0**	**80.0**	**81.0**	**82.0**
PSAE: Math	**33.0**	**32.6**	**31.6**		**38.0**	**46.0**	**58.0**	**70.0**
PSAE: Reading	**33.0**	**30.9**	**36.5**		**42.0**	**50.0**	**60.0**	**72.0**
PSAE: Math Without RTTT	**33.0**	**32.6**	**31.6**		**36.0**	**41.0**	**46.0**	**53.0**
PSAE: Reading Without RTTT	**33.0**	**30.9**	**36.5**		**40.0**	**45.0**	**50.0**	**56.0**
ACT CRB: Math	**18**	**18**	**17**		**23**	**30**	**39**	**50**
ACT CRB: Reading	**20**	**21**	**25**		**30**	**35**	**42**	**50**
ACT CRB: Math Without RTTT	**18**	**18**	**17**		**21**	**24**	**27**	**30**
ACT CRB: Reading Without RTTT	**20**	**21**	**25**		**28**	**30**	**33**	**35**
High School Graduation Rate	**73.4**	**75.7**	**76.8**		**66.8**	**72.0**	**79.0**	**86.0**
High School Graduation Rate Without RTTT	**73.4**	**75.7**	**76.8**		**66.8**	**69.0**	**71.0**	**74.0**
Low-Income Subgroup								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**

NAEP: Grade 4 Mathematics	**16.10**	**NA**	**16.84**		**20.00**	**24.00**	**30.00**	**36.84**
NAEP: Grade 4 Reading Language Arts	**13.55**	**NA**	**NA**		**17.00**	**21.00**	**27.00**	**33.55**
NAEP: Grade 8 Mathematics	**11.34**	**NA**	**12.77**		**16.00**	**19.50**	**25.00**	**31.34**
NAEP: Grade 8 Reading Language Arts	**14.18**	**NA**	**NA**		**17.50**	**22.00**	**28.00**	**34.18**
NAEP: Grade 8 Mathematics Without RTTT	**11.34**	**NA**	**12.77**		**14.0**	**17.0**	**20.0**	**23.0**
NAEP: Grade 8 Reading Language Arts Without RTTT	**14.18**	**NA**	**NA**		**17.0**	**20.0**	**23.0**	**26.0**
ISAT: Grade 3 Math	**76.2**	**75.2**	**75.9**		**78.0**	**81.0**	**85.0**	**90.0**
ISAT: Grade 3 Reading	**57.2**	**56.8**	**57.6**		**62.0**	**67.0**	**76.0**	**87.0**
ISAT: Grade 4 Math	**76.4**	**74.6**	**76.7**		**79.0**	**81.0**	**85.0**	**89.0**
ISAT: Grade 4 Reading	**58.0**	**58.7**	**59.3**		**63.0**	**67.0**	**75.0**	**86.0**
ISAT: Grade 5 Math	**70.6**	**70.0**	**72.0**		**74.0**	**77.0**	**82.0**	**89.0**
ISAT: Grade 5 Reading	**53.1**	**58.0**	**58.6**		**63.0**	**67.0**	**75.0**	**86.0**
ISAT: Grade 6 Math	**69.6**	**71.6**	**71.9**		**74.0**	**77.0**	**82.0**	**89.0**
ISAT: Grade 6 Reading	**57.9**	**66.3**	**68.0**		**70.0**	**74.0**	**80.0**	**87.0**
ISAT: Grade 7 Math	**66.5**	**68.4**	**72.4**		**74.0**	**77.0**	**83.0**	**90.0**
ISAT: Grade 7 Reading	**59.0**	**65.3**	**65.1**		**68.0**	**73.0**	**80.0**	**88.0**
ISAT: Grade 8 Math	**69.0**	**68.2**	**70.6**		**73.0**	**76.0**	**82.0**	**90.0**
ISAT: Grade 8 Reading	**71.8**	**70.4**	**73.6**		**76.0**	**78.0**	**84.0**	**90.0**
ISAT: Grade 8 Math Without RTTT	**69.0**	**68.2**	**70.6**		**72.0**	**74.0**	**76.0**	**79.0**

ISAT: Grade 8 Reading Without RTTT	**71.8**	**70.4**	**73.6**		**77.0**	**79.0**	**81.0**	**83.0**
PSAE: Math	**27.2**	**27.5**	**26.3**		**31.0**	**39.0**	**52.0**	**68.0**
PSAE: Reading	**31.4**	**28.5**	**33.2**		**37.0**	**43.0**	**55.0**	**70.0**
PSAE: Math Without RTTT	**27.2**	**27.5**	**26.3**		**30.0**	**34.0**	**39.0**	**45.0**
PSAE: Reading Without RTTT	**31.4**	**28.5**	**33.2**		**38.0**	**42.0**	**46.0**	**50.0**
ACT CRB: Math	**14**	**14**	**14**		**39**	**44**	**50**	**56**
ACT CRB: Reading	**19**	**19**	**22**		**39**	**44**	**50**	**56**
ACT CRB: Math Without RTTT	**14**	**14**	**14**		**16**	**17**	**18**	**20**
ACT CRB: Reading Without RTTT	**19**	**19**	**22**		**23**	**24**	**25**	**25**
High School Graduation Rate	**74.9**	**78.2**	**76.6**		**66.6**	**72.0**	**79.0**	**86.0**
High School Graduation Rate Without RTTT	**74.9**	**78.2**	**76.6**		**66.6**	**70.0**	**74.0**	**78.0**

LEP Subgroup (English Language Learners)[4]								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**
NAEP: Grade 4 Mathematics	**7.89**	**NA**	**9.82**		**13.0**	**17.0**	**24.0**	**31.0**
NAEP: Grade 4 Reading Language Arts	**3.09**	**NA**	**NA**		**6.0**	**11.0**	**18.0**	**25.0**
NAEP: Grade 8 Mathematics	**9.05**	**NA**	**7.14**		**12.0**	**16.0**	**23.0**	**30.0**
NAEP: Grade 8 Reading Language Arts	**2.56**	**NA**	**NA**		**5.0**	**10.0**	**17.0**	**25.0**

[4] Prior to 2008, Limited English Proficient (LEP) students in Illinois took the Illinois Measure of Annual Growth in English (IMAGE) test. After several years of analyses, modifications, and negotiations with the federal government, Illinois determined that a state accountability test for LEP students cannot be built using the IMAGE platform. Therefore, starting in 2008, LEP students took the ISAT or PSAE (with accommodations) instead of the IMAGE test. Therefore, comparisons between pre- and post-2008 achievement levels for LEP students and Hispanic subgroup performance must account for this change in assessment approach.

NAEP: Grade 8 Mathematics Without RTTT	**9.05**	**NA**	**7.14**		**11.0**	**14.0**	**17.0**	**20.0**
NAEP: Grade 8 Reading Language Arts Without RTTT	**2.56**	**NA**	**NA**		**6.0**	**8.0**	**10.0**	**12.0**
ISAT: Grade 3 Math	**84.8**	**72.9**	**73.2**		**75.0**	**79.0**	**83.0**	**87.0**
ISAT: Grade 3 Reading	**66.8**	**42.5**	**43.4**		**50.0**	**58.0**	**68.0**	**79.0**
ISAT: Grade 4 Math	**90.1**	**64.8**	**68.3**		**71.0**	**74.0**	**78.0**	**83.0**
ISAT: Grade 4 Reading	**77.7**	**38.4**	**39.3**		**45.0**	**51.0**	**62.0**	**76.0**
ISAT: Grade 5 Math	**81.6**	**58.9**	**58.2**		**62.0**	**67.0**	**74.0**	**82.0**
ISAT: Grade 5 Reading	**65.1**	**32.5**	**33.4**		**40.0**	**49.0**	**62.0**	**75.0**
ISAT: Grade 6 Math	**62.9**	**57.9**	**55.8**		**60.0**	**66.0**	**74.0**	**81.0**
ISAT: Grade 6 Reading	**36.6**	**37.0**	**41.1**		**46.0**	**54.0**	**66.0**	**79.0**
ISAT: Grade 7 Math	**58.0**	**54.3**	**56.8**		**61.0**	**67.0**	**74.0**	**82.0**
ISAT: Grade 7 Reading	**39.8**	**34.9**	**33.7**		**40.0**	**49.0**	**62.0**	**75.0**
ISAT: Grade 8 Math	**57.3**	**52.7**	**54.4**		**60.0**	**66.0**	**74.0**	**81.0**
ISAT: Grade 8 Reading	**52.0**	**40.4**	**46.8**		**51.0**	**57.0**	**68.0**	**80.0**
ISAT: Grade 8 Math Without RTTT	**57.3**	**52.7**	**54.4**		**58.0**	**60.0**	**62.0**	**65.0**
ISAT: Grade 8 Reading Without RTTT	**52.0**	**40.4**	**46.8**		**50.0**	**53.0**	**55.0**	**58.0**
PSAE: Math	**32.3**	**19.5**	**17.7**		**22.0**	**28.0**	**38.0**	**50.0**
PSAE: Reading	**26.9**	**7.7**	**8.1**		**13.0**	**18.0**	**23.0**	**28.0**
PSAE: Math Without RTTT	**32.3**	**19.5**	**17.7**		**20.0**	**23.0**	**26.0**	**29.0**
PSAE: Reading Without RTTT	**26.9**	**7.7**	**8.1**		**12.0**	**16.0**	**20.0**	**24.0**
ACT CRB: Math	**21**	**12**	**13**		**18**	**25**	**35**	**48**

ACT CRB: Reading	**21**	**4**	**6**		**10**	**14**	**17**	**20**
ACT CRB: Math Without RTTT	**21**	**12**	**13**		**15**	**17**	**19**	**21**
ACT CRB: Reading Without RTTT	**21**	**4**	**6**		**8**	**10**	**12**	**14**
High School Graduation Rate	**69.1**	**57.2**	**63.1**		**53.1**	**60.0**	**71.0**	**83.0**
High School Graduation Rate Without RTTT	**69.1**	**57.2**	**63.1**		**53.1**	**56.0**	**59.0**	**62.0**
IEP Subgroup								
	SY06-07	**SY07-08**	**SY08-09**	**SY09-10**	**SY10-11**	**SY11-12**	**SY12-13**	**SY13-14**
NAEP: Grade 4 Mathematics	**NA**	**NA**	**18.98**		**23.0**	**27.0**	**33.0**	**40.0**
NAEP: Grade 4 Reading Language Arts	**10.50**	**NA**	**NA**		**13.0**	**17.0**	**24.0**	**31.0**
NAEP: Grade 8 Mathematics	**NA**	**NA**	**6.44**		**10.0**	**15.0**	**22.0**	**30.0**
NAEP: Grade 8 Reading Language Arts	**7.45**	**NA**	**NA**		**10.0**	**14.0**	**21.0**	**28.0**
NAEP: Grade 8 Mathematics Without RTTT	**NA**	**NA**	**6.44**		**8.0**	**10.0**	**13.0**	**16.0**
NAEP: Grade 8 Reading Language Arts Without RTTT	**7.45**	**NA**	**NA**		**10.0**	**12.0**	**15.0**	**18.0**
ISAT: Grade 3 Math	**70.0**	**67.8**	**66.2**		**69.0**	**73.0**	**78.0**	**84.0**
ISAT: Grade 3 Reading	**42.9**	**42.8**	**41.7**		**45.0**	**50.0**	**64.0**	**79.0**
ISAT: Grade 4 Math	**64.5**	**63.8**	**64.0**		**67.0**	**71.0**	**76.0**	**82.0**
ISAT: Grade 4 Reading	**41.1**	**41.2**	**40.4**		**44.0**	**49.0**	**62.0**	**77.0**
ISAT: Grade 5 Math	**55.9**	**54.5**	**54.8**		**59.0**	**65.0**	**72.0**	**81.0**
ISAT: Grade 5 Reading	**33.6**	**38.5**	**37.6**		**41.0**	**48.0**	**60.0**	**77.0**

ISAT: Grade 6 Math	**49.2**	**52.0**	**50.7**		**55.0**	**62.0**	**70.0**	**81.0**
ISAT: Grade 6 Reading	**34.2**	**43.0**	**43.9**		**48.0**	**54.0**	**65.0**	**79.0**
ISAT: Grade 7 Math	**41.9**	**45.2**	**47.7**		**51.0**	**56.0**	**67.0**	**80.0**
ISAT: Grade 7 Reading	**31.7**	**38.0**	**38.3**		**42.0**	**49.0**	**62.0**	**77.0**
ISAT: Grade 8 Math	**42.0**	**43.2**	**44.7**		**49.0**	**55.0**	**66.0**	**80.0**
ISAT: Grade 8 Reading	**40.8**	**42.4**	**46.2**		**50.0**	**56.0**	**68.0**	**80.0**
ISAT: Grade 8 Math Without RTTT	**42.0**	**43.2**	**44.7**		**47.0**	**49.0**	**52.0**	**55.0**
ISAT: Grade 8 Reading Without RTTT	**40.8**	**42.4**	**46.2**		**48.0**	**50.0**	**53.0**	**56.0**
PSAE: Math	**14.4**	**13.3**	**12.2**		**19.0**	**28.0**	**42.0**	**61.0**
PSAE: Reading	**19.3**	**18.8**	**16.8**		**22.0**	**31.0**	**43.0**	**64.0**
PSAE: Math Without RTTT	**14.4**	**13.3**	**12.2**		**14.0**	**17.0**	**20.0**	**23.0**
PSAE: Reading Without RTTT	**19.3**	**18.8**	**16.8**		**19.0**	**22.0**	**25.0**	**28.0**
ACT CRB: Math	**8**	**8**	**7**		**11**	**16**	**22**	**28**
ACT CRB: Reading	**16**	**14**	**16**		**20**	**26**	**32**	**38**
ACT CRB: Math Without RTTT	**8**	**8**	**7**		**9**	**12**	**15**	**17**
ACT CRB: Reading Without RTTT	**16**	**14**	**16**		**18**	**21**	**23**	**26**
High School Graduation Rate	**71.9**	**81.2**	**78.1**		**68.1**	**73.0**	**79.0**	**85.0**
High School Graduation Rate Without RTTT	**71.9**	**81.2**	**78.1**		**68.1**	**71.0**	**74.0**	**78.0**

Appendix A2-1

Description of Multi-State Collaborations

The State of Illinois is a leading participant in the Common Core State Standards Initiative, involving 48 states and 3 territories, that is collaboratively developing and adopting a core set of academic standards in mathematics and English language arts. In addition, the State will participate in the related multi-state common assessment effort to jointly develop and implement common, high-quality assessments aligned with the Common Core K-12 standards. The State's participation in two other multi-state networks will inform its revision of the Learning Standards and implementation of new state assessments—its participation in the American Diploma Project, and its membership in the Partnership for 21st Century Skills State Leadership Network.

In addition, the State has joined three other multi-state collaborations that will help provide technical expertise, capacity, and insights from other states' experiences to assist with the implementation of the human capital and turnaround components of the State's plan as set forth in this application.

State Collaborative for Great Teachers and Leaders

Putting a great teacher in every classroom and a great leader in every school is an incredibly challenging task. Recent decades have been marked by a number of well-intentioned efforts that were ultimately unsuccessful. The American Recovery and Reinvestment Act, as well as other federal initiatives, create a unique opportunity for states to address these issues boldly. To succeed in the future where we have often failed in the past, states must think bigger and act with greater focus and consistency. Recognizing that states will accomplish more in collaboration than in isolation, Illinois has joined a small group of states and leading national organizations will explore a partnership to accelerate the pace of change while maintaining high quality standards.

Benefits of the Collaborative

The goal of the State Collaborative for Great Teachers and Leaders is to provide a network for states to lead the nation on improving key policies related to teacher and leader effectiveness. Members of the Collaborative will seek logistical and technical support from organizations with extensive experience in the design and implementation of teacher and leader education reform, such as EducationCounsel, the Joyce Foundation, New Leaders for New Schools, and The New Teacher Project.

Race to the Top and other federal leverage points create new momentum toward bold reform, open powerful new federal funding streams, and set the stage for re-prioritizing existing federal programs. The State Collaborative will capitalize on these opportunities, initially, by providing participating states with relevant content for and guidance on the Great Teachers and Leaders sections of their Race to the Top proposals, as well as organizing and facilitating phone and in-person working sessions during which participants will discuss strategies and local challenges.

Moving forward after the Race to the Top proposal submission, members of the Collaborative will continue to benefit through:

- **Joint problem solving and mutual assistance.** States that move in bold policy directions will be engaged for a period of years in building new capacity at the state and local level. In many areas, states will find few useful precedents and best practices and will be required to start from scratch in building and implementing systems to drive and monitor teacher and leader

effectiveness. States working toward the same goals will progress more quickly and with greater success if they pool intellectual resources and design capacity. States in the Collaborative will meet regularly to share plans and strategies related to teachers and leaders.

- **Open sharing of programs, plans, and results.** No state will achieve all its goals in the initial implementation of its reforms. There will be many pilots and iterations that lead, over time, to refined learnings and more efficient systems. States will attain the best outcomes by benefiting from the experiences of fellow states, including valuable data and research. In this way, states will not be competitors but partners.

Mass Insight Education Partnership Zone Initiative

Illinois and six other states have been chosen by Mass Insight Education & Research Institute to participate in a three-year, $70-million effort to create scalable and sustainable strategies for turning around clusters of their lowest-performing schools, starting with a selected group of one or two proof point districts in each state. A two-year extension is slated to follow the three-year initial effort. Mass Insight was founded in 1997, and is an independent non-profit that organizes public schools, higher education, business, and state government to significantly improve student performance, with a focus on closing achievement gaps. The State of Illinois will maximize the planning, policy, budgetary, communications, and other support activities available through this multi-state project to support the Illinois Partnership Zone, described in the narrative for Criterion (E)(2).

The proof point states initially will establish Partnership Zones in at least one or two districts with clusters of three to five low-performing schools. (In Illinois, the Partnership Zone is the organizing framework for a much larger set of districts and schools.) Each cluster of schools will be supported by a Lead Partner – an organization that directly supports principals in turning around schools. Lead Partners provide academic and student support services to schools as well as coordinate and focus the turnaround efforts within the schools, helping to overcome the chaotic "program-itis" that has undermined previous reform efforts. Lead Partners, staffed by experienced school staff and engaged by districts and states, can either be independent organizations or autonomous units created by the district central office.

The Partnership Zone is a hybrid model that combines the benefits of a district with the operating flexibility of charter schools. Because Zone schools remain inside the district, they can continue to tap into the scale efficiencies of many central office services. However, Zone schools also afford principals and Lead Partners the freedom to make staffing, scheduling, curriculum and salary decisions in return for being held accountable for dramatic student achievement gains within two years. These flexible conditions empower educators to be more innovative, more dynamic, and more responsive to the needs of their students.

Since early 2009, Mass Insight has organized a network of 14 states committed to investing new federal funds in effective and innovative strategies required to turn around the bottom 5% of their schools. Mass Insight's State Development Group has participated in monthly conference calls to share lessons learned and promising practices for turn around strategies and examine the feasibility of establishing strong Partnership Zones.

The six proof point states were selected from this group based on:

- A commitment to the Partnership Zone framework set forth in 2007 report, *The Turnaround Challenge*;
- A commitment to investing the resources necessary for successful turnaround; and,

- Alignment and support of state leadership.

Mass Insight staff and a leading group of National Collaborators will assist states and districts in planning, state policy analysis, human capital analysis, district and school budget audits, communications/outreach, and other critical turnaround activities. National Collaborators include: Education Counsel, Education First, Education Resource Strategies, The New Teacher Project, and the Parthenon Group.

States plan to launch Partnership Zones on a flexible but aggressive timeline with some states implementing Zones as early as the 2010-11 school year and others the following year.

Planning and development for the Partnership Zone Initiative has been funded with a $1.5 million, two-year grant from the Carnegie Corporation of New York, along with a partial match from the Bill & Melinda Gates Foundation. Mass Insight and its partners are committed to raising an additional $30 million of private funding for the three-year initial program and further funding for a two-year extension; however, the majority of the school level funding for the initiative will come from targeted 1003g School Improvement Grants. Most of those funds will go toward increased teacher compensation to support extended learning time in Partnership Zone schools.

Multi-State Teacher Performance Assessment Consortium

The Teacher Performance Assessment Consortium

A partnership to create the launching pad for such a continuum has been formed by the Council of Chief State School Officers (CCSSO), the American Association of Colleges of Teacher Education (AACTE), and a team of researchers at Stanford University and the University of Washington that has worked on assessments at every juncture of the continuum. In partnership with CCSSO and AACTE, this team has undertaken to develop, pilot, and validate two nationally available Teacher Performance Assessments (TPA), which will be made available to states and programs that wish to improve their capacity to evaluate teachers for initial licensure (Tier 1) and professional licensure (Tier 2, following the probationary period) based on concrete evidence of effectiveness, not just grades or paper-and-pencil tests.

States that have thus far indicated interest in participating in the Teacher Performance Assessment Consortium include: California, Colorado, Illinois, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, South Carolina, Tennessee, Virginia, Washington, West Virginia, and Wisconsin.

Based on the highly successful Performance Assessment for California Teachers (PACT), the first of these assessments will support teacher development and evaluation for the initial license across the wide variety of routes into teaching, and will also increase the consistency with which teacher licensure decisions are made across states. Used as information for the accreditation process, the assessment results can leverage improvements in preparation programs. Used as information for induction programs, it can also guide more effective mentoring for beginning teachers.

A related assessment will support states in evaluating and supporting teacher development further along the teaching career continuum, at the point at which a professional

license is issued, typically 3 to 5 years into the career. Success at this juncture might be associated with additional compensation in a state or district with a career ladder program.

These two assessments could form the first two steps in a continuum of development and recognition, with a third step represented by an advanced certification, such as the National Board for Professional Teaching Standards or a state-specific assessment. These more advanced measures might be part of a process used to identify teachers for additional compensation and for roles as mentors, lead teachers, or demonstration teachers.

Appendix A2-2

RTTT Outcomes Measurement Plan:

Description and Critical Components

This document outlines key features of Illinois' RTTT Outcomes Measurement Plan as described in Section (A)(2) of the application. Leadership for development and implementation of the RTTT Outcomes Measurement Plan will be provided by the Director of Performance Management, also as described in Section (A)(2) of the application.

I. Illinois' Outcomes-Based Measurement Objectives

Outcomes-based measurement is an approach to traditional measurement and evaluation activities that is primarily focused on learning "how well" a particular set of interventions are working and collecting, analyzing and reporting data on a frequent enough basis in order to make data-informed decisions. While the Illinois plan includes and requires Participating LEA process indicators in order to understand what activities and structural changes Participating LEAs and the State have accomplished, the outcomes lens allows all stakeholders to focus their performance lens tightly on student, teacher, principal and school outcomes. Within the Measurement Plan, the term outcome means: *a desired change in status, condition or behavior that results from particular set of programs or activities.*

Illinois' objectives for the incorporation of outcomes-based measurement include:

- **Build a State Measurement System and Culture:** The Measurement Plan will seek to ingrain an outcomes-based performance measurement culture into ISBE, its key partners, and Participating LEAs. While typical performance measurement in education describes 'what did happen', the Measurement Plan will focus, on a frequent and consistent basis, on how well the plan's interventions are working.
- **A State Measurement System that Persists:** The Measurement Plan and related systems are intended to persist beyond the grant period. The overall increase in data appreciation and application across Participating LEAs and the State will have a spillover effect statewide.
- **The State Measurement System and Public Engagement:** The Measurement Plan will support stakeholder engagement through the sharing of valuable data with the public and other interested parties. For the State Required and Recommended indicators, the Measurement Plan focuses on those data that will inform practice and policy and that can be aggregated and shared with the public in meaningful and powerful ways.
- **The State Measurement System and Continuous Learning:** An outcomes-based performance measurement approach, unlike traditional evaluation methods, allows the State and LEAs to adeptly respond to both process and outcomes data as they are occurring rather than well after the fact. In addition to the Performance Measures required by the U.S. Department of Education, the State Required and Recommended Indicators are built with a lens of helping LEAs and the State understand how best to accomplish the Key Goals of the State's application.

II. Components of the Illinois Outcomes-Based Measurement Plan

The Measurement Plan will clearly identify the overall outcomes framework, incorporate the Performance Measures included throughout the Illinois RTTT application, and include indicators to help determine that meaningful progress is being made on process and outcomes. The Outcomes Framework set forth on Attachment A to this Appendix was used as the basis for the performance measures identified in this application. The Outcomes Framework articulates (a) the key outcomes that Illinois will accomplish with Race to the Top support as the result of State and Participating LEA action in accordance with this plan, (b) how these key outcomes will advance teacher and principal effectiveness, and (c) how key outcomes and increased teacher and principal effectiveness ultimately translate into student achievement, including high levels of student growth and student readiness at key student transition points in the P-20 spectrum. In essence, the Outcomes framework highlights the overarching theory of change in this plan.

The Measurement Plan will include outcome indicators that flow from the Outcomes Framework and that are tied to the key objectives of this plan, including:

- % of students meeting key "readiness" benchmarks including:
  - Kindergarten readiness based on a statewide kindergarten readiness assessment
  - High school readiness based on 8th grade EXPLORE benchmarks aligned to college readiness indicators
  - College and career readiness based on ACT College Readiness Benchmarks
  - Preparation for non-remedial coursework upon entering postsecondary

- % of students demonstrating:
  - high rates of growth (e.g., one and one-half grade levels in academic year)
  - acceptable rates of growth (e.g., at least one level in an academic year)

- % of teachers and principals rated in the highest two categories in summative evaluations, based on the four practice performance levels defined in this plan

The Measurement Plan will also include process indicators to measure whether key policy, structures and systems are in place to support progress on these outcomes, as shown on the bottom tier of the Outcomes Framework and consistent with the MOU. As described in Section (D)(5), Goal III, required indicators will include measures to assess the extent to which teacher and principal professional development resources are targeted and continuously improved..

The outcome and process indicators will track both State and Participating LEA performance, as follows:

- Tier 1 State Level – Indicators that represent overall State performance on key outcomes. These indicators will be reported through State and/or Participating LEA data systems.

- Tier 2 Participating LEA Level – Indicators that represent Participating LEA progress on putting the capacities, policies, and structures in place to achieve critical student, teacher, principal and district outcomes.
- The Tier 1 and Tier 2 indicators will be further divided into Required Indicators (data that Participating LEAs will be required to define, source, collect, and report) and Recommended Indicators (data that Participating LEAs may choose to report, and which provide additional means to measure success). As described in the proposed timeline for implementation set forth in the table below, ISBE will convene focus groups with representatives of Participating LEAs and other stakeholders to define both Required and Recommended Indicators for implementation of this plan. For example, Attachment A to this Appendix includes an initial set of Recommended Indicators to supplement the Performance Measures for Section (B)(3) of the Plan, Supporting the Transition to Enhanced Standards and High Quality Assessments. It is expected that over time, more Participating LEAs will adopt the Recommended Indicators as they master the collection and reporting of Required Indicators.

The process of implementing the Measurement Plan will include:

- Participating LEA Capacity Building – Early in the grant period, the Measurement Plan will focus on building LEA capacity to collect, analyze and report performance data. Integrated within the Statewide System of Support (SSOS) and aligned with the Quality Assurance Review process (see Section (A)(2) of the plan), Participating LEA Capacity Building will address how best to collect, analyze and report data not only for the grant and grant period, but for future public engagement and strategic decision making.
- State Capacity Building – Capacity building efforts will also focus on the State Board of Education's leadership and data teams to build their comfort with applying performance data to their work and to ensure that the data collected through the grant period is valuable and useful to decision making throughout the grant period and beyond. Similar to LEA Capacity Building, State Capacity Building will focus on training those individuals that are closest to the data and closest to the decisions that come from the data.
- Metrics Definition and Sourcing – As noted throughout the State's proposal, there are a variety of State Required and Recommended indicators the State is proposing in addition to those required by the U.S. Department of Education. A key step in this process is building consistent and replicable definitions for performance measures. Due to the local nature of much of the required data collection, the SSOS will work with Participating LEAs to accurately define the performance measures to increase the likelihood of accurate and meaningful performance data.
- Confirm Benchmarks –Participating LEAs will need to establish benchmarks for Required Indicators and have a clear process for developing baselines and benchmarks for Recommended Indicators as well.
- Performance Analysis Specifications – With the variety of data the State is proposing to collect, analyze and report, it is important to prioritize what types of analysis are important to a variety of stakeholders. Beyond the full set of performance measures included in this

application, the State recognizes that analysis of particular key populations, schools and LEAs will be most important to achieving the State's objectives. Priority will be given to the Super LEAs and other Participating LEAs with Illinois Priority Schools.

- State Level Reporting, Communications and Dissemination Plan – The State is committed to sharing results of Race to the Top funded initiatives with broad groups of stakeholders including the general public. Specifically, the State will develop a Race to the Top scorecard as well as produce meaningful reporting back to Participating LEAs and schools that summarize their performance on key process and outcome indicators throughout the course of the grant period. The plan is for scorecards to not only report current performance on key indicators, but also demonstrate Participating LEA and school growth and state growth on key indicators related to narrowing the achievement gap, equitable distribution of highly-effective teachers and school leaders, and overall improvement in state educational outcomes across all of the plan's key goals.

III. Implementation of Illinois Outcomes-Based Measurement Plan: SY 2010-11 - 2013-14

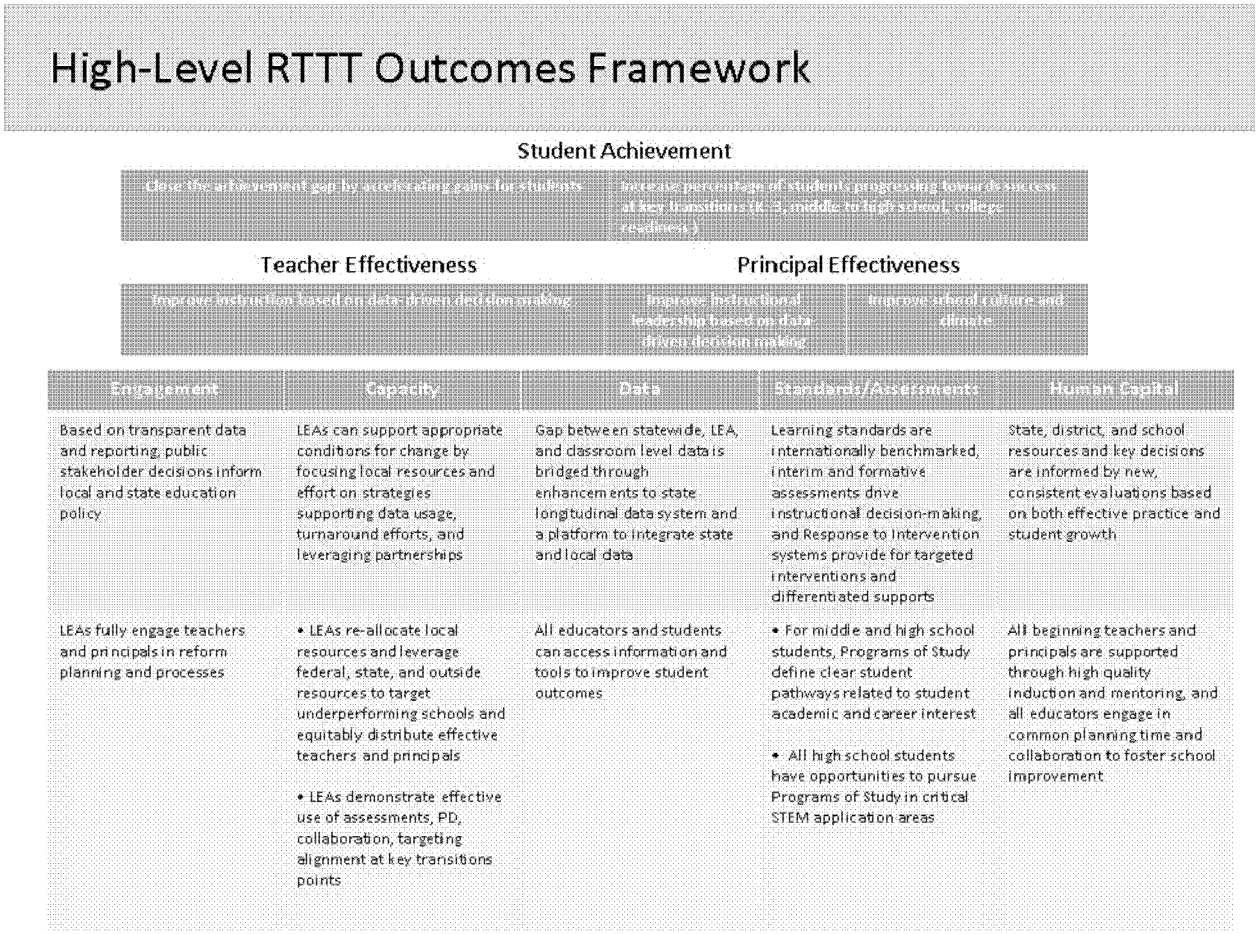
The table below outlines the overall Measurement Plan, including planned major activities and their intended outcomes, consistent with the State's recommended activities as part of this application. Following is a tentative timeline for implementation of an outcomes-based measurement plan that commences in October 2010.

	Illinois Measurement Plan: Proposed Timeline	
Phase	**Key Processes and Deliverables**	**Proposed Timeframe**
Define Success	• Kick off meeting with ISBE leadership and staff • Project planning	October 2010
	• Recommend internal and external stakeholders for interviews and focus groups • Complete internal and external stakeholder interviews and strategy review • Through the SSOS, provide professional development regarding outcomes-based performance measurement • Develop Participating LEA outcomes-based measurement plan including reporting and measurement priorities consistent with federal required Performance Measures, and State Required and Recommended Indicators	November – December 2010
Align Strategies	• Review existing Participating LEA strategies and planned refinements to ensure local approach is designed to accomplish required processes and drive outcomes for	January 2011

	Illinois Measurement Plan: Proposed Timeline	
Phase	**Key Processes and Deliverables**	**Proposed Timeframe**
	LEA, State and federal requirements • Complete strategy alignment discussion with Participating LEA stakeholder focus groups and develop measurement plan consistent with existing and planned capacity	
Measure Results – Design Data Collection Process	• Develop roadmap for data collection, reporting and analysis that is consistent with existing and planned ISBE and Participating LEA capabilities and other reporting requirements • Define, source and verify all federal Required Performance Measures, State Required Indicators and State Recommended Indicators with Participating LEAs • Design performance reports (scorecards) for all identified stakeholders for Participating LEA review and adoption; work with Participating LEA focus group through the process of report specification	February 2011- March 2011
Measure Results – Implement Data Collection	• Coordinate data collection process across ISBE and Participating LEA data sources • Verify availability and quality of data based on defined federal Required Performance Measures, State Required Indicators and State Recommended Indicators • Collect and analyze data based on federal, State and LEA specifications	April 2011 – June 2011
Measure Results - Report and Analyze Results	• Coordinate regular data review sessions with Participating LEA focus groups to collectively analyze and learn from results • Benchmark performance across Participating LEAs to identify best practices and areas of needed professional development or structure intervention	July 2011 – Ongoing

Appendix A2-2
Attachment A: Outcomes Framework

The following graphic illustrates the outcomes framework upon which the Illinois Measurement Plan is based.



The following table identifies preliminary outcome indicators related to Criterion (B)(3) of the State's Race to the Top application. Indicators tracked as part of the Measurement Plan, including the indicators listed in this Attachment A, flow from the Outcomes Framework and are tied to the key objectives of the State's Race to the Top plan.

B. Standards and Assessments (Tier I State-Level)				
Section	**Area of Commitment**	**Associated Key Goal**	**Required Indicators**	**Recommended Indicators**
(B3) Supporting the Transition to Enhanced Standards and High-Quality Assessments	A. Standards-Aligned Instructional Systems	Close the achievement gap by accelerating gains for students	% of students in Participating LEAs meeting or exceeding PLAN/Explore/ISAT benchmarks in reading/math/science	**NA**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs demonstrating readiness on Kindergarten Readiness assessment (disaggregated by subgroup)	**NA**
			% of students in Participating LEAs demonstrating high school readiness in 8th Grade EXPLORE Assessment, based on benchmarks aligned to college-readiness indicators (disaggregated by subgroup)	NA
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs meeting or exceeding ACT college readiness benchmarks (disaggregated by subgroup)	NA
		Close the achievement gap by accelerating gains for students	**NA**	% of Participating LEAs meeting or exceeding graduation rate benchmarks (to be set by State/Participating LEAs)
		Close the achievement gap by accelerating gains for students	**NA**	% of Participating LEAs meeting or exceeding attendance benchmarks (to be set by State/Participating LEAs)
		Close the achievement gap by accelerating gains for students	**NA**	% of Participating LEAs reporting adoption of new common core standards Fall of SY10

B. Standards and Assessments (Tier I State-Level)				
Section	**Area of Commitment**	**Associated Key Goal**	**Required Indicators**	**Recommended Indicators**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs taking AP coursework	**NA**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs taking dual-credit coursework	**NA**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs taking AP exams (disaggregated by # and type of exam)	**NA**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs scoring 3 or better on AP exams (disaggregated by # and type of exam)	**NA**
		Close the achievement gap by accelerating gains for students	% of students in Participating LEAs not required to complete remedial coursework in postsecondary	**NA**
(B3) Supporting the Transition to Enhanced Standards and High-Quality Assessments	A. Standards-Aligned Instructional Systems			% of Participating LEAs with a student-growth metric in place to track progress year to year
	C. Developing and Scaling STEM-Related Programs of Study	Increase percentage of students progressing towards success at key transitions (preK -3, middle to high school, high school to postsecondary and careers)	**NA**	% of teachers credentialed in STEM coursework teaching STEM courses
		Increase percentage of students progressing towards success at key transitions (preK -3, middle to high school, high school to postsecondary and careers)	**NA**	% of Participating LEAs with identified community partners (and type) to support Program of Study and STEM opportunities (gr. 9-12 LEAs only)
		Increase percentage of students progressing towards success at key transitions (preK -3, middle to high school, high school to postsecondary and careers)	**NA**	% of Participating LEAs with 2 or more Programs of Study in critical STEM application areas (gr. 9-12 LEAs only)

Appendix A2-3

Budget Summary and Project-Level Budgets

Budget Part I: Summary Budget Table (Evidence for selection criterion (A)(2)(i)(d))					
Budget Categories	**Project Year 1**	**Project Year 2**	**Project Year 3**	**Project Year 4**	**Total**
1. Personnel	1,190,910	1,194,126	1,197,455	1,147,782	4,730,273
2. Fringe Benefits	452,348	453,763	455,228	433,372	1,794,711
3. Travel	45,800	46,600	46,600	43,600	182,600
4. Equipment	11,000	0	0	0	11,000
5. Supplies	55,690	55,690	43,630	43,630	198,640
6. Contractual	36,969,740	40,460,431	33,020,403	26,535,572	136,986,146
7. Training Stipends	594,000	1,188,000	1,782,000	1,782,000	5,346,000
8. Other	4,923,900	10,217,045	5,571,320	2,528,365	23,240,630
9. Total Direct Costs (lines 1-8)	44,243,388	53,615,655	42,116,636	32,514,321	172,490,000
10. Indirect Costs*	0	0	0	0	0
11.Funding for Involved LEAs	5,307,500	7,307,500	5,307,500	3,307,500	21,230,000
12. Supplemental Funding for Participating LEAs	1,195,000	1,695,000	1,695,000	1,695,000	6,280,000
13. Total Costs (lines 9-12)	50,745,888	62,618,155	49,119,136	37,516,821	200,000,000
14. Funding Subgranted to Participating LEAs (50% of Total Grant)	50,000,000	70,000,000	50,000,000	30,000,000	200,000,000
15. Total Budget (lines 13-14)	100,745,888	132,618,155	99,119,136	67,516,821	400,000,000

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.

Budget Part I: Budget Summary Narrative

The State's budget for the projects set forth in its Race to the Top Application is divided into five cost categories. Category I costs will be paid out of the 50% LEA allocation of Race to the Top funds. Costs in Categories II through V will be paid out of the 50% State allocation of Race to the Top funds.

- **Category I (LEA Allocation):** ISBE will distribute the Category I Race to the Top funds to Participating LEAs by formula, as required under ARRA and directed by the U.S. Department of Education. ISBE will monitor and periodically audit to ensure that any funding provided to Participating LEAs will only be spent on Race to the Top Plan programs and projects.
- **Category II (Supplemental Funding for Participating LEAs):** Category II costs include supplemental funding to Participating LEAs for various targeted initiatives.
- **Category III (Grant Funding for Non-LEA Partners):** Category III costs include funding support for non-LEA partners through a competitive grant process or formula funding.
- **Category IV (State Project Management and Contractual):** Category IV costs include State project management expenses and funding for Illinois State Board of Education (ISBE) contractual services in support of the Plan.

Each funding category contains certain Race to the Top plan projects and programs. For an outline of the projects and programs in each funding category, see Budget Overview, Projects Summary within this Appendix. While funding categories II-IV involve direct payments to LEAs, LEA partners, foundational systems and ISBE contractors, these funding categories will include, as further outlined in the project level budgets and budget narratives, certain state administrative costs.

In addition, Category II contains a specific set aside for Super LEAs for implementing plans to attract and retain highly effective teachers and principals. Super LEAs are provided a specific line item due to the commitments made by these LEAs and required of these LEAs under the MOU. Super LEAs, under the MOU and as further described in Section A(1) of the Application, have committed to 1) implementing new teacher and principal evaluation systems by no later than the start of the 2011-12 school year, 2) providing staffing autonomy to Illinois Priority Schools within the district, and 3) the agreement of the district superintendent and teachers' union leader to participate in the comprehensive State intervention framework.

The Super LEA line item will be proportionately distributed among the Super LEAs based upon the number of priority schools in each Super LEA, as the programs to be funded under this budget line item are primarily school-based projects (although they must be integrated with district-level activities). In order to receive Category II funds, the Super LEA must include, in its final plan, necessary collective bargaining waivers agreed to between the LEA and the local teachers' union to carry out the commitments. If the LEA is not able to obtain these waivers, the LEA will not be provided funding under Category II and ISBE will retain discretion to apply this funding to other programs included in its Race to the Top plan.

The State's theory of funding allocation, as is demonstrated throughout the plan level and individual project level budget summaries, is as follows:

- 2010-2011: Planning and establishment of Race to the Top plan projects, programs and activities, including development of the state infrastructure needed to support these projects, programs and activities.

- 2011-2012: Intensive implementation of Race to the Top plan projects, programs and activities. This largest allocation of Race to the Top funds will be allocated during this period.

- 2012-2013: Continuation of Race to the Top plan projects, programs and activities implemented during the 2010-2011 and 2011-2012 school year. These projects, programs, and activities will begin to see a deceleration in the amount of Race to the Top funds flowing to the projects. The programs and activities must begin to focus on self-sustainment after the 2014 school year using other federal, State, and local sources.

- 2013-2014: Projects, programs and activities funded through Race to the Top will transition to non-ARRA funding sources and will implement self-sustaining strategies.

In addition, the State will leverage other federal, State and local funds to further support the Race to the Top education reform plans as further described in Section (A)(3)(i) of the Narrative.

BUDGET OVERVIEW, PROJECTS SUMMARY

CATEGORY I COSTS: LEA ALLOCATION					
	10-11 School Year	**11-12 School Year**	**12-13 School Year**	**13-14 School Year**	**Total**
Participating LEAs receive 50% of RTTT award	50,000,000	70,000,000	50,000,000	30,000,000	200,000,000
Category I Subtotal					**200,000,000**
CATEGORY II COSTS: SUPPLEMENTAL FUNDING FOR PARTICIPATING LEAS					
Project (see Project-Level Budget Narrative for details)	**10-11 School Year**	**11-12 School Year**	**12-13 School Year**	**13-14 School Year**	**Total**
National Career Readiness Certificate Program and Statewide Contract and Supports for Assessments for Learning (*Plan Section (B)(3)*)	433,750	713,750	713,750	713,750	2,575,000
Kindergarten Readiness Assessment to Promote PreK – 3 Instructional Alignment (*Plan Section (B)(3)*)	569,400	2,276,400	2,276,400	2,276,400	7,398,600
Super LEA Supplemental Funding for implementing plans to attract and retain highly effective teachers and principals (*Plan Section (D)(3)(i)*)	5,000,000	7,000,000	5,000,000	3,000,000	20,000,000
Category II Subtotal					**$29,973,600**
CATEGORY III COSTS: GRANT FUNDING FOR NON-LEA PARTNERS					
Project (see Project-Level Budget Narrative for details)	**10-11 School Year**	**11-12 School Year**	**12-13 School Year**	**13-14 School Year**	**Total**
Regional Superintendent RTTT Oversight and Technical Assistance *(Plan Section (A)(2))*	2,105,500	3,801,700	7,957,400	7,957,400	21,822,000
STEM Learning Exchanges (*Plan Section (B)(3)*)	10,836,800	6,787,600	1,437,800	1,437,800	20,500,000
College and Career Readiness (Community Colleges)	1,177,348	1,173,303	1,149,349	0	3,500,000

(*Plan Section (B)(3)*)					
Special Education Scholarship Program (*Plan Section (D)(3)(ii)*)	457,500	457,500	457,500	457,500	1,830,000
Transitional Bilingual Education Scholarships (*Plan Section (D)(3)(ii)*)	312,500	312,500	312,500	312,500	1,250,000
School Leadership Consortium/Regional Pipeline Coordination Budget *(Plan Section (D)(3)(ii))*	2,182,400	3,987,200	5,791,200	5,791,200	17,752,000
Dropout Prevention & Reenrollment (*Plan Section (E)(2)*)	4,000,000	8,500,000	0	0	12,500,000
Category III Subtotal					**$79,154,000**
CATEGORY IV COSTS: STATE PROJECT MANAGEMENT AND CONTRACTUAL					
State Monitoring, Data Collection, Measurement, and Reporting (*Plan Section (A)(2)*)	2,453,750	2,448,750	2,298,750	2,298,750	9,500,000
Interactive Illinois Report Card (IIRC) (*Plan Section (C)(2)*)	500,000	500,000	500,000	500,000	2,000,000
Illinois Collaborative for Education Policy Research (*Plan Section (C)(3)(iii)*)	965,750	965,750	784,250	784,250	3,500,000
Learning & Performance Mgmt System (*Plan Section (C)(3)*)	12,592,249	15,596,137	4,246,405	4,250,638	36,685,429
State Performance Evaluation Support Systems (*Plan Section (D)(2)*)	1,943,271	1,909,151	9,592,571	2,578,091	16,023,084
State Superintendent Certification Actions (*Plan Section (D)(2)*)	500,000	500,000	500,000	500,000	2,000,000
Illinois Math and Science Partnership Program Expansion (*Plan Section (D)(3)(ii)*)	1,629,269	1,928,012	1,442,719	0	5,000,000
Educator Preparation Content Area Advisory Groups (*Plan Section (D)(3)(ii)*)	135,200	135,200	135,200	135,200	540,800
Teacher Performance Assessments	250,000	250,000	0	0	500,000

Development of high quality performance assessments of teaching practice (*Plan Section (D)(4)*)					
Technical Assistance and Program Accountability for Beginning Teacher Induction Programs in Illinois (*Plan Section (D)(5)*)	1,101,030	1,101,030	998,970	998,970	4,200,000
Illinois Partnership Zone Administration and Direct State Interventions (*Plan Section (E)(2)*)	1,600,171	2,274,172	3,524,372	3,524,372	10,923,087
Category IV Subtotal					**$90,872,400**
TOTAL (Category I)					**$200,000,000**
TOTAL (Category II-IV)					**$200,000,000**
TOTAL RTTT BUDGET					**$400,000,000**

BUDGET PART II: PROJECT-LEVEL BUDGET TABLES AND NARRATIVES

Budget Part II: Project-Level Budget Table
Project Name: National Career Readiness Certificate Program and Statewide Contract and Supports for Assessments for Learning
Associated with Criteria: Evidence for selection criterion (B)(3)

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	$433,750	$713,750	$713,750	$713,750	$2,575,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	$433,750	$713,750	$713,750	$713,750	$2,575,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	$433,750	$713,750	$713,750	$713,750	$2,575,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
National Career Readiness Certificate Program and Statewide Contract and Supports for Assessments for Learning

The National Career Readiness Certificate Program and Statewide Contract and Supports for Assessments for Learning are described in Section (B)(3) of the Application. Both of these projects are contractual in nature.

1) **Personnel**
No personnel will be hired as employees of these projects. Current Illinois State Board of Education (ISBE) employees will be responsible for any administrative matters associated with these projects and any project activities undertaken by ISBE employees will not be funded through Race to the Top funds.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel**
There are no travel expenses associated with this project.

4) **Equipment**
There are no equipment expenses associated with this project.

5) **Supplies**
There are no supply expenses associated with this project.

6) **Contractual**
- National Career Readiness Certificate Program, Statewide Contract and Supports for Assessments for Learning:
    - The State will directly contract with ACT for implementation of the Career Readiness Certificate Program. There are three tests used by ACT in awarding National Career Readiness Certificates. Two of those are administered as part of the PSAE. The third is the Locating Information test. As ACT is the sole distributor of the WorkKeys Locating Information assessment, the procurement procedures do not apply. As part of this contract, ACT will provide the WorkKeys Locating Information assessment to 12th grade students who met the minimum score requirements to receive at least a silver certificate on the other two tests during their junior year. At $5 per student, this project is budgeted for 40,000 students to participate in its first year and then scale up to 100,000 for years 2, 3 and 4.
    Total Cost: $1,700,000 ($200,000 in grant year 1 and $500,000 in grant years 2-4

    - A statewide licensing fee of $100,000 is also included in costs for all years.
    Total Cost: $400,000 ($100,000 in each grant year)

- These numbers are based on the State's current contract with ACT for implementation of the WorkKeys Locating Information assessment in other LEAs. If the demand for the National Career Readiness Certificate project exceeds the current budget, the State may reallocate funds or supplement this project with other state funds.

- Consulting Services relating to implementation of the Career Readiness Certificate Program.
  Total Cost: $55,000 ($13,750 per year)

- Cost of one full-time individual who will work in the Center for School Improvement focusing on formative assessment implementation and managing the vendors under the statewide contract.
  Total Cost: $400,000 ($100,000 per year)

- In addition, the state will form a working group team, consisting of technical experts and practitioners, to assist ISBE with defining minimum criteria for validity, reliability and usability of Assessments for Learning. This group will meet four times during the first grant year.
  Total Cost (only grant year 1): $20,000 ($5,000 per meeting, 4 meetings of 20 participants, at $250 per person per meeting).

Total Contractual: $2,575,000

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

7) Training Stipends
There are no training stipends associated with this project.

8) Other
There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$433,750	$713,750	$713,750	$713,750	**$2,575,000**

10) Indirect Costs
There are no indirect costs associated with this project.

11) Funding for Involved LEAs
The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs
There is no supplemental funding for Participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$433,750	$0	$0	$	$433,750
Year 2	$713,750	$0	$0	$	$713,750
Year 3	$713,750	$0	$0	$	$713,750
Year 4	$713,750	$0	$	$	$713,750
Total					**$2,575,000**

Budget Part II: Project-Level Budget Table
Project Name: Kindergarten Readiness Assessment to Promote Pre-K -3 Instructional Alignment
Associated with Criteria: Evidence for selection criterion (B)(3)

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	569,400	2,276,400	2,276,400	2,276,400	7,398,600
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	569,400	2,276,400	2,276,400	2,276,400	7,398,600
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	569,400	2,276,400	2,276,400	2,276,400	7,398,600

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Kindergarten Readiness Assessment to Promote Pre-K -3 Instructional Alignment

The Kindergarten Readiness Assessment to Promote Pre-K - 3 Instructional Alignment project is described in Section (B)(3) of the Application, Goal II. The state will focus its efforts during the first two years of the RTTT grant period on developing and implementing a kindergarten readiness measure to promote the alignment of PreK – 3 instruction and student supports. This project will be developed, managed and implemented by an outside contractor.

1) Personnel
There are no personnel expenses associated with this project.

2) Fringe Benefits
There are no fringe benefit expenses associated with this project.

3) Travel
There are no travel expenses associated with this project.

4) Equipment
There are no equipment expenses associated with this project.

5) Supplies
There are no supply expenses associated with this project.

6) Contractual

Year one	% FTE	Base Salary	Total
Project Director-responsible for the overall leadership and management of the Kindergarten Readiness-P-3 Teacher Training Project.	100%	$90,000	$90,000
Research Assistants (4)-gather, analyze and report data from Kindergarten Readiness Assessment (KRA). Report to KRA manager.	100%	$60,000 (each)	$240,000
Administrative Support (2)-Provide administrative, editorial and communications support	100%	$50,000 (each)	$100,000
Total			**$430,000**

Years two through four	% FTE	Base Salary	Total
Project Director-responsible for the overall leadership and management of the Kindergarten Readiness-P-3 Teacher Training Project.	100%	$90,000	$90,000
Research Assistants (4)-gather, analyze and report data from	100%		$240,000

Kindergarten Readiness Assessment (KRA). Report to KRA manager.		$60,000 (each)	
Kindergarten readiness trainers (4)-Implement training model for readiness assessment and teacher training.	100%	$55,000 (each)	$220,000
Administrative Support (2)-Provide administrative, editorial and communications support	100%	$50,000 (each)	$100,000
Total			**$650,000**
Total Cost Grant Period (four years)			**$2,380,000**

Contractual Fringe Benefits
Fringe benefits are 30%, for a total year one budget of $129,000. Year 2 - 4 budget is $195,000 per year.
Total Cost: $714,000

Equipment
Computers will be purchased for each contractual staff member along with other necessary office equipment (desks, chairs, lamps, etc.) $20,000 has been allocated toward equipment expenses for the eleven additional contractual personnel.
Total Cost: $20,000

Supplies
Office supplies at $200 per month, $2,400 per year.
Total Cost: $9,600

- Implementation of Kindergarten Readiness Assessment (Years two through four): 95,000 students assessed in all Participating LEAs each year, at a cost of $15 per student.
  Total Cost: $4,275,000

Total Contractual Costs: $7,398,600

The Illinois State Board of Education will be in compliance with the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

7) Training Stipends
There are no training stipend expenses associated with this project.

8) Other
There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total

Total	$569,400	$2,276,400	$2,276,400	$2,276,400	**$7,398,600**

10) Indirect Costs
There are no indirect costs associated with this project.

11) Funding for Involved LEAs
The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs
There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$569,400	$0	$0	$0	$569,400
Year 2	$2,276,400	$0	$0	$0	$2,276,400
Year 3	$2,276,400	$0	$0	$0	$2,276,400
Year 4	$2,276,400	$0	$0	$0	$2,276,400
Total					**$7,398,600**

Budget Part II: Project-Level Budget Table Project Name: Super LEA Supplemental Funding Associated with Criteria: Evidence for selection criterion (D)(3)(i)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	0	0	0	0	0
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	0	0	0	0	0
10. Indirect Costs*	0	0	0	0	0
11.Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	5,000,000	7,000,000	5,000,000	3,000,000	20,000,000
13. Total Costs (lines 9-12)	5,000,000	7,000,000	5,000,000	3,000,000	20,000,000

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.

PROJECT-LEVEL BUDGET NARRATIVE
Super LEA Supplemental Funding

The Super LEA Supplemental Funding is described in Section (D)(3)(i) of the Application. The State agreed to set-aside at least 10% of the State Race to the Top allocation dedicated solely to Super LEAs. Super LEAs are those LEAs where both the LEA superintendent and local teachers' union leader agreed to three critical actions specified in Exhibit II of the Participating LEA MOU. There are 13 Super LEAs, distributed across the State and including more than 118,000 public school students, and 19 Illinois Priority Schools.

In return for the Super LEAs' and their local teachers' union leader's commitment to negotiate and waive collective bargaining restraints to provide autonomy for the principals of persistently low-performing schools to select and assign teachers to the school in order to establish an effective teaching staff as quickly as possible, the State has set-aside $20 million for the Super LEAs to implement aggressive, multi-faceted plans for attracting and retaining highly effective teachers and principals. Super LEAs will each receive a grant, based on the number of persistently low-performing schools within the LEA, for implementation of a variety of staffing incentives and other related strategies to develop a highly effective workforce for its persistently low-performing schools. ISBE will distribute this funding directly to the Super LEAs to be used in accordance with a reform plan approved by ISBE. The plan must include specific measurable objectives for attracting and retaining highly effective teachers and principals, with the Super LEAs' access to each annual distribution of the funding contingent upon progress toward these objectives. If a Super LEA's allocated funding is in excess of amounts necessary to support its plan to attract and retain educators, its funds may be allocated toward other priorities of the RTTT Plan.

1) **Personnel:** No personnel will be hired for this project.

2) **Fringe Benefits:** There are no fringe benefit expenses for this project.

3) **Travel:** There are no travel expenses associated with this project.

4) **Equipment:** There are no equipment related expenses for this project.

5) **Supplies:** There are no supply related expenses for this project.

6) **Contractual:** There are no contractual costs associated with this project.

7) **Training Stipends:** There are no training stipend expenses associated with this project.

8) Other: None.

9) Total Direct Costs: None (all funding to be distributed directly to Super LEAs as noted below).

10) Indirect Costs: There are no indirect costs associated with this project.

11) Funding for Involved LEAs: The State Plan does not include involved LEAs.

12) Supplemental Funding for Participating LEAs: Funding to Super LEAs: As described above, all funding for this project will be distributed directly to the Super LEAs in accordance with a plan approved by ISBE, with greater funding going towards Super LEAs with a large number of priority schools within the Super LEA. As further described in the Budget Summary Narrative, the most intensive funding will be provided in year 2 of the grant period for project implementation as year one will be primarily used for establishment and development of the project reform plans. The Super LEA funding will be according to the following funding schedule:

TIME PERIOD	BUDGET ALLOCATION
Year One: SY 2010-2011	**$5,000,000**
Year Two: SY 2011-2012	**$7,000,000**
Year Three: SY 2011-2012	**$5,000,000**
Year Four: SY 2011-2012	**$3,000,000**
TOTAL	**$20,000,000**

13) Total Costs: $20,000,000

Budget Part II: Project-Level Budget Table Project Name: Regional Superintendent RTTT Oversight and Technical Assistance Associated with Criteria: Evidence for selection criterion (A)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	2,105,500	3,801,700	7,957,400	7,957,400	21,822,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	2,105,500	3,801,700	7,957,400	7,957,400	21,822,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	2,105,500	3,801,700	7,957,400	7,957,400	21,822,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-Level Budget Narrative
Regional Superintendent RTTT Oversight and Technical Assistance

The Regional Superintendent RTTT Oversight and Technical Assistance program is described in Section (A)(2) of the application. The Illinois State Board of Education (ISBE) will contract with Regional Offices of Education (ROEs) and Intermediate Service Centers (ISCs) to implement the reforms described in the application at the school and district level. ROEs and ISCs will provide consistent, quality assistance and training to all LEAs increasing student achievement and ensuring that all students graduate with the necessary knowledge, skills, abilities and attitudes to be successful in college and careers. The majority of funds requested for this project will be used in grant years 3 and 4 as the State is re-purposing other funds towards this project for grant years 1 and 2.

1) **Personnel:** There are no personnel costs associated with this project.

2) **Fringe Benefits:** There are no fringe benefits associated with this project.

3) **Travel:** There are no travel costs associated with this project.

4) **Equipment:** There are no equipment expenses associated with this project.

5) **Supplies:** There are no supply expenses associated with this project.

6) **Contractual:** As mentioned above, ISBE will contract with the ROEs and ISCs to implement the Regional Service Delivery system. There will be contracts with 47 ROEs and ISCs for four years of Regional Delivery System work. The ROEs and ISCs will work directly with districts and schools in their regions to facilitate school improvement, increase student learning and evaluate progress as described in the narrative.

Contractual Personnel:

The follow requested personnel will be hired to oversee & coordinate the Regional Delivery System	% FTE	Base Salary	Total/ Year	Total
System Director for Regional Delivery System (Duties: project planning, project evaluation, ISBE liaison, supervision of area work, coordination of other partners, statewide training)	100%	$70,000	$70,000	$280,000
Administrative Assistant for System Director	50%	$30,000	$15,000	$60,000
Technology/Data Specialist	50%	$30,000	$15,000	$60,000
Area Coordinators for Regional Delivery	67%	$60,000	$241,200	$964,800

System (6 Areas) (Duties: training, evaluation, coordination, coaches network/training, training of ROE and ISC staff, area effectiveness data, area collaboration of resources, supervision of regional work)				
Administrative Assistants for Area Coordinators (6 Areas)	67%	$30,000	$120,600	$482,400
Total Contractual Personnel for Grant Period				**$1,847,200**

Contractual Personnel Fringe Costs: The total fringe benefits are budgeted at 44% of applicable salary, or $203,200 per year.
Total fringe benefit: **$812,800**

Contractual Travel Costs: The System Director will travel to six coordinator sites for planning, coordination, supervision and evaluation. The six Area Coordinators will travel within their respective areas to coordinate, supervise and evaluate ROEs' and ISCs' work. Travel will be reimbursed at the state rate. The System Director will have $500/month and the six Area Coordinators will have $400/month each. The total travel per year is $34,800.
Total travel: $139,200

ROE and ISC Contract Costs: Each ROE and ISC will receive both a base and a per student amount. The contract includes training and coaching for school and district staff.
Total ROE and ISC contract costs: $18,792,400

System Director and Area Coordinators Support Contract Costs: There will be contracts with 7 ROEs and ISCs for support of the System Director and Area Coordinators who will coordinate and supervise the overall implementation of the Regional Delivery System. These contracts will include support costs for office, supplies, copies and postage.
Total Support Contract Costs: $110,400 ($500/month or $6,000/year System Director supports and $300/month/coordinator or $3,600/year/coordinator for six Area Coordinators support)

Professional Development Contractual Costs: Professional development activities will be provided for ROE and ISC staff and key district personnel over the four years.
Total Professional Development Costs: $120,000

TOTAL CONTRACTUAL: $21,822,000

7) **Training Stipends**

There will be no training stipends for ROE and ISC staff. ROEs and ISCs may include training stipends for district personnel in their contracts.

8) Other

There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$2,105,500	$3,801,700	$7,957,400	$7,957,400	$21,822,000

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for Participating LEAs.

13) Total Costs

Category	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$2,105,500	$0	$0	$0	$2,105,500
Year 2	$3,801,700	$0	$0	$0	$3,801,700
Year 3	$7,957,400	$0	$0	$0	$7,957,400
Year 4	$7,957,400	$0	$0	$0	$7,957,400
TOTAL					**$21,822,000**

Budget Part II: Project-Level Budget Table Project Name: STEM Learning Exchanges Associated with Criteria: Evidence for selection criterion (B)(3)					
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	14,950	14,950	14,950	14,950	59,800
3. Travel	2,500	2,500	2,500	2,500	10,000
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	10,754,350	6,705,150	1,355,350	1,355,350	20,170,200
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	10,836,800	6,787,600	1,437,800	1,437,800	20,500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	10,836,800	6,787,600	1,437,800	1,437,800	20,500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
STEM Learning Exchanges

The STEM Learning Exchanges are described in Section B(3) of the Application.

1) Personnel

	% FTE	Base Salary	Total
One full time staff member will be hired by the Illinois State Board of Education (ISBE) as a grant manager to plan, implement, and evaluate grant proposals, as well as ensure all awardees are in compliance with established administrative and financial policies and procedures. Following awards, the grant manager will monitor all phases of award and closing, including assessment of progress and performance. Also, the grant manager will be required to participate as a member of each of the Science Technology Engineering and Mathematics (STEM) Learning Exchange steering committees as well as the overarching coordinating committee.	100%	$65,000	$260,000

2) Fringe Benefits
Benefits for the grant manager are approximately 23% of salary.
Total: $59,800 ($14,950 per year)

3) Travel
The ISBE grant manager will be expected to attend meetings in Springfield and Chicago to brief state stakeholders and will meet regularly with leadership from the nine STEM Learning Exchanges. The grant manager will also be required to attend each STEM Learning Exchange steering committee as well as participate in overarching coordinating committee meetings. ISBE will support travel expenses.
Total Travel: $10,000 ($2,500 per year)

4) Equipment
ISBE will use existing resources to provide an office with full use of computers, phones and other office equipment.

5) Supplies
ISBE will use existing resources to provide the grant manager with office supplies.

6) Contractual
ISBE will develop a web-based portal and common set of Learning and Performance Management System (LPMS) applications for managing STEM Learning Exchanges to fulfill its major functions. ISBE will contract with one or more application developers to design, build, and implement these applications over the course of the grant period. The developers will also be required to coordinate with the Learning and Performance Management development team to ensure the STEM Learning Exchange portal and

applications are interoperable with and can be migrated into other ISBE learning management systems.

- $2,000,000 for development, maintenance, and hosting of a web-based portal that will coordinate the core functions and applications developed to support each STEM Learning Exchange. The system will be designed to be migrated over to the LPMS cloud-based computing environment once the LPMS is fully operational.
- $1,500,000 for application development to support and deliver the nine core functions of the STEM Learning Exchanges.
- $395,000 for managing, coordinating and providing professional development for STEM Learning Exchange users.

Total (grant period): $3,895,000

In addition, a contractor will be retained to conduct an external evaluation of the STEM Learning Exchanges.
Total Evaluation (grant period): for $345,000

STEM Learning Exchanges are envisioned as statewide public-private education partnerships that are linked to national industry, education, and government networks related to a specific STEM area, as well as national public-private networks such as Partnership for 21st Century Skills. These exchanges will be organized as open collaborative communities governed by and orchestrated through a public-private steering group consisting of representatives from public and private stakeholders. Each STEM Learning Exchange will be supported by a lead non-profit organization or governmental entity that will serve as the administrative and fiscal agent for the exchange along with an educational foundation if necessary to receive tax-deductible donations and other funding from both public and private sources. STEM Learning Exchanges will be coordinated by ISBE through an overarching public-private entity that will include representatives from each STEM Learning Exchange and will advise ISBE and its partners on the guidelines for the operation of STEM Learning Exchanges.

ISBE will hold a competitive selection process to identify public-private partnerships to establish nine STEM Learning Exchanges that will designate or create a non-profit organization or foundation to receive federal funding. Each Learning Exchange will be funded at a level no lower than $1,000,000 but not to exceed $3,000,000 over the four years.
Total Competition Funds: $15,430,200

ISBE will also provide funding for pre-advanced placement (AP) and AP professional development programs for CTE and academic instructors to support STEM Programs of Study.
Total STEM Programs of Study Professional Development Funds: $500,000 ($250,000 for grant years 1 and 2).

Total Contractual: $20,170,200

Below is a list of allowable expenses and activities for Learning Exchanges accompanied by an example allocation for a Learning Exchange funded at $1,750,000. Salary and benefits for full-

time staff members, e.g. $375,000 for one full-time staff members over four years ($93,750 each year).

- Travel and travel-related expenses, e.g. $75,000 over four years ($18,750 per year).
- Development of e-learning curriculum, developing and hosting competitive challenges, distributing career development information, professional development and other materials and resources, e.g. $1,000,000 over four years.
- STEM Externships, e.g. $300,000 over four years ($75,000 per year). Aggregated together the nine STEM Learning Exchanges will support STEM externships for over 500 teachers.

In addition, each Learning Exchange will be expected to raise a minimum of 20 percent ($200,000 - $600,000) of the total award in direct and indirect matching funds from business and industry partners and leverage substantially more funding by coordinating existing investments being made by all partners. This match may be used to support any of the allowable expenses identified above.

Illinois will follow the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36 in engaging this developer.

7) Training Stipends

There are no training stipend expenses associated with this project. The Illinois Department of Commerce and Economic Opportunity (DCEO), however, has committed to providing an in-kind contribution of $300,000 in WIA Incentive Funds to support the development of career pathway applications as part of the core functions of the STEM Learning Exchanges.

8) Other

There are no other expenses associated with this project. However, in addition to the ISBE grant manager, the Illinois Business Roundtable (IBRT) will hire and fund, as a federal funds match, a business and industry coordinator for the STEM Learning Exchanges. The business and industry coordinator will be responsible for assisting ISBE with leadership and management of employer and employer associations in the STEM Learning Exchanges and will serve on the overarching coordinating committee. This person will have extensive experience in working with business and industry, education and government partners in education initiatives. The IBRT will fund the personnel costs for this position for all four years of the project and will also fund all administrative and travel costs.
Salary: $90,000 ($360,000 over four years).
Fringe: $20,700(23% of salary)for a total of $82,800 over four years.
Travel: $2,450 ($9,800 over four years) (16 trips to Springfield and other travel costs re presentations around the state)

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Totals
Total	$10,836,800	$6,787,600	$1,437,800	$1,437,800	**$20,500,000**

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$10,836,800	$0	$0	$0	$10,836,800
Year 2	$6,787,600	$0	$0	$0	$6,787,600
Year 3	$1,437,800	$0	$0	$0	$1,437,800
Year 4	$1,437,800	$0	$0	$0	$1,437,800
TOTAL					**$20,500,000**

Budget Part II: Project-Level Budget Table Project Name: College and Career Readiness (Community Colleges) Associated with Criteria: Evidence for selection criterion (B)(3)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	1,177,348	1,173,303	1,149,349	0	3,500,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	1,177,348	1,173,303	1,149,349	0	3,500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	1,177,348	1,173,303	1,149,349	0	3,500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
College and Career Readiness (Community Colleges)

The College and Career Readiness (CCR) project will support the implementation of STEM Programs of Study, as described in Section (B)(3) of the Application. For this project, Illinois State Board of Education (ISBE) will contract with and enter an intergovernmental agreement with the Illinois Community College Board (ICCB). Through the $3.5 million dollar budget, ICCB will work on a variety of college and career readiness initiatives, in cooperation with local high schools and middle schools, with specific focus given to activities designed to increase alignment between high school and college curriculums such as Programs of Study and integration of Science Technology Engineering and Mathematics (STEM) education. Funding will also go towards programs designed to reduce the need for remediation at the post secondary level.

1) **Personnel**
   There are no personnel expenses associated with this project.

2) **Fringe Benefits**
   There are no fringe benefit expenses associated with this project.

3) **Travel**
   There are no travel expenses associated with this project.

4) **Equipment**
   There are no equipment expenses associated with this project.

5) **Supplies**
   There are no supply expenses associated with this project.

6) **Contractual**

The following requested personnel will all be hired as employees of the project through the contract with ICCB.	% FTE	Base Salary	Total
Director for CCR (three year position): This person will be responsible for overall leadership and management of the implementation and evaluation of the CCR Project for Science Technology Engineering and Mathematics (STEM). The person selected for this position will be experienced in the delivery of remedial education and will understand both the secondary and postsecondary education systems in Illinois.	100%	$51,500	$154,500
Fringe Benefits: The following requested fringe benefits will be for employees of the project hired through the ICCB contract.	100%	$6,695	$20,085
Travel: The following requested travel will be for employees of the project hired through the ICCB contract.	100%	$4,100	$12,300
Total			**$186,885**

- Data collection and support (three years)-- $35,000 per year to support data analysis.
  Total: $105,000

- Program Evaluation--A contract to support qualitative and quantitative program evaluation of the success of the CCR in STEM interventions and curriculum alignment activities ($65,000 per year over three years). Note: The basis for this dollar amount is based upon the cost to evaluate pilot sites in the College and Career Readiness Pilot Project Act.
  Total: $195,000

- Professional Development--Contract for the professional development conference and the delivery of specific, training for teachers and instructors involved in the delivery of remedial interventions and curriculum alignment teams ($40,000 year 1; $30,000 year 2; $12,000 year 3).
  Total: $82,000

- Three-year contracts with 13 community colleges for the delivery of Remedial Interventions consistent with the following goals: (1) reduce remediation by developing interventions aimed at decreasing the need for remedial coursework in mathematics, reading, and writing at the college level--targeting high school juniors and seniors; (2) align high school and college curriculums in STEM education; (3) provide resources and academic support to students to enrich their junior and senior year of high school through remedial or advanced coursework and other interventions aimed at preparing students for STEM fields. These efforts will be focused specifically on low performing Participating LEAs. This work will include a specific focus on STEM related remediation.
  Total: $2,931,115 (Approximately $977,038.33 per year or $225,470.38 for each community college over the three year period)

  Contractual Total: $3,500,000

ISBE will be in compliance with the procurement requirements set forth under 34 CFR Parts 74.40-74.48 and Part 80.36

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$1,177,348	$1,173,303	$1,149,349	$0	**$3,500,000**

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for Participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$1,177,348	$0	$0	$0	$1,177,348
Year 2	$1,173,303	$0	$0	$0	$1,173,303
Year 3	$1,149,349	$0	$0	$0	$1,149,349
Year 4	$0	$0	$0	$0	$0
Total					**$3,500,000**

Budget Part II: Project-Level Budget Table Project Name: Special Education Scholarship Program Associated with Criteria: Evidence for selection criterion (D)(3)(ii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	37,500	37,500	37,500	37,500	150,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	37,500	37,500	37,500	37,500	150,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	420,000	420,000	420,000	420,000	1,680,000
13. Total Costs (lines 9-12)	457,500	457,500	457,500	457,500	1,830,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Special Education Scholarship Program

The Special Education Scholarship program is described in Section (D)(3)(ii) of the Application. Illinois State Board of Education (ISBE) will direct funds to the Illinois Student Assistance Commission (ISAC) and ISAC will provide funding to Participating LEAs, which will use this funding to provide scholarships to eligible general education teachers. The total amount of funds for Participating LEAs (administered by ISAC) under this budget is $1,680,000.

1) **Personnel**
No personnel will be hired for this project.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel**
There are no travel expenses associated with this project.

4) **Equipment**
There are no equipment expenses associated with this project.

5) **Supplies**
There are no supply expenses associated with this project.

6) **Contractual**
ISAC will provide the administrative support for this program and will be responsible for allocating these funds to Participating LEAs. ISBE will provide ISAC with $150,000 for a program coordinator over the course of the grant period ($37,500 per year, 50% FTE).

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40-74.48 and Part 80.36.

7) **Training Stipends**
There are no training stipend expenses associated with this project.

8) **Other**
There are no other expenses associated with this project.

9) **Total Direct Costs**

	Year 1	Year 2	Year 3	Year 4	Total
Total	$37,500	$37,500	$37,500	$37,500	**$150,000**

10) **Indirect Costs**
There are no indirect costs associated with this project.

11) **Funding for Involved LEAs**

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

Funds in the amount of $420,000 per grant year, totaling $1,680,000 for the entire grant period, will be provided to Participating LEAs from ISAC. This funding will provide scholarships for approximately 84 eligible teachers or students who are pursuing a career in special education. Over the course of the grant period, a total of 336 eligible teachers/students will receive the tuition waiver. *[Average number of courses for a special education endorsement is five courses at approximately $1,000 per course, for a total of a $5,000 tuition waiver].*

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$37,500	$0	$0	$420,000	$457,500
Year 2	$37,500	$0	$0	$420,000	$457,500
Year 3	$37,500	$0	$0	$420,000	$457,500
Year 4	$37,500	$0	$0	$420,000	$457,500
Total	**$150,000**				**$1,830,000**

Budget Part II: Project-Level Budget Table Project Name: Transitional Bilingual Education Scholarships Associated with Criteria: Evidence for selection criterion (D)(3)(ii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	$37,500	$37,500	$37,500	$37,500	$150,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	$37,500	$37,500	$37,500	$37,500	$150,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	$275,000	$275,000	$275,000	$275,000	$1,100,000
13. Total Costs (lines 9-12)	$312,500	$312,500	$312,500	$312,500	1,250,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Transitional Bilingual Education Scholarships

The Transitional Bilingual Education Scholarship program is described in Section (D)(3)(ii) of the Application.

1) Personnel
There are no personnel expenses associated with this project.

2) Fringe Benefits
There are no fringe benefits expenses associated with this project.

3) Travel
There are no travel expenses associated with this project.

4) Equipment
There are no equipment expenses associated with this project.

5) Supplies
There are no supply costs associated with this project.

6) Contractual
The Illinois Student Assistance Commission (ISAC) will provide the administrative support for this program through an intergovernmental agreement with ISBE and will be responsible for allocating these funds to Participating LEAs. ISBE will provide ISAC with $150,000 for a program coordinator over the course of the grant period ($37,500 per year, 50% FTE).
Total Contractual: $150,000

7) Training Stipends
There are no training stipend expenses associated with this project.

8) Other
There are no other costs associated with the project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$37,500	$37,500	$37,500	$37,500	**$150,000**

10) Indirect Costs
There are no indirect costs associated with this project.

11) Funding for Involved LEAs
The state plan does not include Involved LEAs

12) Supplemental Funding for Participating LEAs

Funds in the amount of $275,000 per grant year, totaling $1,100,000 for the entire grant period, will be provided to Participating LEAs from ISAC. This funding will provide scholarships for preschool teachers in Participating LEAs to obtain the requisite endorsement either in bilingual education or English as a second language. Approximately 366 teachers over the grant period (92 per year) will obtain $3,000 scholarships as a result of this program.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$37,500	$0	$0	$275,000	$312,500
Year 2	$37,500	$0	$0	$275,000	$312,500
Year 3	$37,500	$0	$0	$275,000	$312,500
Year 4	$37,500	$0	$0	$275,000	$312,500
Total					**$1,250,000**

Budget Part II: Project-Level Budget Table Project Name: School Leadership Consortia/Regional Pipeline Coordination Associated with Criteria: Evidence for selection criterion (D)(3)(ii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	$260,000	$260,000	$260,000	$260,000	$1,040,000
2. Fringe Benefits	$114,400	$114,400	$114,400	$114,400	$457,600
3. Travel	$4,000	$4,800	$4,800	$4,800	$18,400
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	$460,000	$920,000	$1,380,000	$1,380,000	$4,140,000
7. Training Stipends	$594,000	$1,188,000	$1,782,000	$1,782,000	$5,346,000
8. Other	$750,000	$1,500,000	$2,250,000	$2,250,000	$6,750,000
9. Total Direct Costs (lines 1-8)	$2,182,400	$3,987,200	$5,791,200	$5,791,200	$17,752,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	$2,182,400	$3,987,200	$5,791,200	$5,791,200	$17,752,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-Level Budget Narrative
School Leadership Consortium/Regional Pipeline Coordination Budget

The School Leadership Consortium/Regional Pipeline Coordination program is described in Section (D)(3)(ii) of the Application. Funding for the program will be provided to Consortium members and to principal candidates who will receive scholarship and stipend funds. Districts with Tier I and Tier II schools will be expected to supplement funding with funds from School Improvement Grants. The program is expected to roll-on leadership programs progressively throughout the grant period. The table below shows the expected number of programs and candidates in each year of the grant program:

	Year 1	Year 2	Year 3	Year 4
Number of Programs	2	4	6	6
Candidates Roll-on	30	60	90	90

1) Personnel

Personnel will include Regional Pipeline Coordinators with responsibility for project planning, project evaluation, liaison, supervision of area work, coordination of other partners, and statewide training. In addition the program will have a Data Analyst responsible for ensuring the quality of the programs.

Personnel: The follow requested personnel will be hired within the Center for School Improvement.	% FTE	Base Salary	Total/ Year	Total
Area Pipeline Coordinator (2)	100%	$100,000	$200,000	$800,000
Data Analyst	100%	$60,000	$60,000	$240,000
Total Personnel for Grant Period				**$1,040,000**

2) Fringe Benefits

The total fringe benefits are budgeted at 44 percent of applicable salary, or $114,400 per year.

Total Fringe Benefits: **$457,600**

3) Travel

This budget includes two trips per year to both current and prospective programs including those programs receiving Teacher Quality Partnership Grants at $200 per trip.

	Year 1	Year 2	Year 3	Year 4
Trips	20	24	24	24
	$4000	$4800	$4800	$4800

Total travel: $18,400

4) Equipment

There will be no equipment expenses associated with this project.

5) Supplies

There will be no supply expenses associated with this project.

6) Contractual

Personnel

Program Administrators – Each consortium member will be funded to have a program administrator responsible for managing the program including developing mentoring and coaching relationships, monitoring the impact, managing the partnership with the districts including finding residency placement and job placement opportunities. ($1,440,000 over 4 years)

Principal Coaches – Program coaches will be provided to principal candidates during their residency year and two subsequent years in placed positions. Principal coaches will be individuals who have demonstrated success in schools. They will be on full release and not in current positions. Each coach will supervise up to 10 principals. During residency, programs will cover the entire cost of a coach; during in-service coaching districts will be expected to cover the cost of coaches using School Improvement Grants or other funding ($2,700,000 over 4 years)

Personnel: All employees hired for this project will be hired by the contractor.	% FTE	Base Salary	Total
Year 1 Principal Coaches (3) Program Administrators (2)	100% 100%	$100,000 (each) $80,000 (each)	$300,000 $160,000
Year 2 Principal Coaches (6) Program Administrators (4)	100% 100%	$100,000 (each) $80,000 (each)	$600,000 $320,000
Year 3 Principal Coaches (9) Program Administrators (6)	100% 100%	$100,000 (each) $80,000 (each)	$900,000 $480,000
Year 3 Principal Coaches (9) Program Administrators (6)	100% 100%	$100,000 (each) $80,000 (each)	$900,000 $480,000
Total Contractual Personnel (4 years)			**$4,140,000**

The Illinois State Board of Education will be in compliance with the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

Total Contractual Costs: $4,140,000

7) Training Stipends

During residency principal candidates will receive a stipend equivalent to their salary in the most recent year in which they taught or were in a school or district administrator position. Districts will be expected to cover 66% of the cost of the stipend

Total Training Stipends (over 4 years): $5,346,000

8) Other

Candidates will receive scholarships to attend preparation programs. These scholarships will pay tuition toward principal preparation programs.

Total Other Costs (over 4 years): $6,750,000

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Personnel	$260,000	$ 260,000	$260,000	$260,000	$1,040,000
Fringe Benefits	$114,400	$ 114,400	$114,400	$114,400	$457,600
Travel	$ 4,000	$ 4,800	$4,800	$4,800	$18,400
Equipment	$ -	$ -	$ -	$ -	$ -
Supplies	$ -	$ -	$ -	$ -	$ -
Contractual	$460,000	$920,000	$1,380,000	$1,380,000	$4,140,000
Training Stipends	$594,000	$1,188,000	$1,782,000	$1,782,000	$5,346,000
Other Costs (Scholarships)	$750,000	$1,500,000	$2,250,000	$2,250,000	$6,750,000
Total Direct Costs	$2,182,400	$3,987,200	$5,791,200	$5,791,200	$17,752,000

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The State's plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for Participating LEAs.

13) Total Costs

Category	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$2,182,400	$0	$0	$0	$2,182,400
Year 2	$3,987,200	$0	$0	$0	$3,987,200
Year 3	$5,791,200	$0	$0	$0	$5,791,200
Year 4	$5,791,200	$0	$0	$0	$5,791,200
TOTAL					**$17,752,000**

Budget Part II: Project-Level Budget Table Project Name: Dropout Prevention & Reenrollment Associated with Criteria: Evidence for selection criterion (E)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	0	0	0	0	0
7. Training Stipends	0	0	0	0	0
8. Other (to Regional Superintendants of Education)	4,000,000	8,500,000	0	0	12,500,000
9. Total Direct Costs (lines 1-8)	4,000,000	8,500,000	0	0	12,500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	4,000,000	8,500,000	0	0	12,500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Dropout Prevention & Reenrollment

The Dropout Prevention and Reenrollment Project, to be administered through the Illinois Hope and Opportunity Pathways through Education (IHOPE) Program, is described in Section (E)(2) of the Application, Goal III. All funding for the Dropout Prevention and Reenrollment Program will be used to support the establishment of IHOPE regional delivery systems for re-enrolling students who have dropped out of school. As a result, formula funding will flow from Illinois State Board of Education (ISBE) directly to the Regional Superintendents of Education or the City of Chicago School District 299, who will then distribute these funds to the Participating LEAs, who have applied and have an approved IHOPE plan. Grant funds will be allocated based on the proportion of dropouts in the geographic area served by the Regional Office of Education or the City of Chicago School District 299 in comparison to the total number of dropouts statewide. A consistent count for dropouts will be used to calculate the amount each Regional Office or Chicago School District 299 will receive by using the dropout totals reported by school districts to the Illinois Student Information System by July 31 of each year.

1) **Personnel**
   There are no personnel expenses associate with this project. Existing IHOPE personnel will support any administrative functions relating to the expansion of this project.

2) **Fringe Benefits**
   There are no fringe benefit expenses associated with this project.

3) **Travel**
   There are no travel expenses associated with this project.

4) **Equipment**
   There are no equipment expenses associated with this project.

5) **Supplies**
   There are no supply expenses associated with this project.

6) **Contractual**
   There are no contractual expenses associated with this project.

7) **Training Stipends**
   There are no training stipend expenses associated with this project.

8) **Other**
   Funding to Regional Superintendents of Education or the City of Chicago School District 299.

   As described above, all formula funding for this project will be distributed directly to Regional Superintendents or the City of Chicago School District 299, who in turn will then distribute this funding to Participating LEAs, with priority given to those districts that have

applied and have an approved IHOPE plan. Funding allocated for years one and two of the grant period is indicated below.

TIME PERIOD	PROGRAM/ENROLLMENT GOAL	BUDGET ALLOCATION
Year One: 2010-2011	Phase I: Approximately 900 students will be re-enrolled.	**$4,000,000** for re-enrollment programs, with an average re-enrolling per student cost of $4,444.
Year Two: 2011-2012	Phase I: 900 new students will be re-enrolled. Phase II: An additional 1,913 students will be re-enrolled. Total re-enrolled students: 2,813	**$8,500,000** for re-enrollment programs, with an average re-enrolling per student cost of $4,444.
Year Three: 2012-2013	An additional 2,813 students will be re-enrolled.	**No funding required.***
Year Four: 2013-2014	An additional 2,813 students will be re-enrolled.	**No funding required.***
Total Grant Period:	**9,339 students will be re-enrolled.**	**$12,500,000**

*Note: once a "re-enrollment opening" is established, it then becomes self-sustaining without additional funds.

9) Total Direct Cost

	Year 1	Year 2	Year 3	Year 4	Totals
Dropout Prevention and Reenrollment	$4,000,000	$8,500,000	$0	$0	$12,500,000
TOTAL					**$12,500,000**

10) Indirect Cost

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$4,000,000	$0	$0	$0	$4,000,000
Year 2	$8,500,000	$0	$0	$0	$8,500,000
Year 3	$0	$0	$0	$0	$0
Year 4	$0	$0	$0	$0	$0
TOTAL					**$12,500,000**

Budget Part II: Project-Level Budget Table Project Name: State Monitoring, Data Collection, Measurement, and Reporting Associated with Criteria: Evidence for selection criterion (A)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	113,050	113,050	113,050	113,050	452,200
2. Fringe Benefits	48,700	48,700	48,700	48,700	194,800
3. Travel	0	0	0	0	0
4. Equipment	5,000	0	0	0	5,000
5. Supplies	0	0	0	0	0
6. Contractual	2,287,000	2,287,000	2,137,000	2,137,000	8,848,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	2,453,750	2,448,750	2,298,750	2,298,750	9,500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	2,453,750	2,448,750	2,298,750	2,298,750	9,500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
State Monitoring, Data Collection, Measurement, and Reporting

The State Monitoring, Data Collection, Measurement, and Reporting relates to ISBE's responsibilities across this Application. See Section (A)(2) of the Application for a description of ISBE's management structure.

1) Personnel

	% FTE	Base Salary	Total
Internal Auditor to assist in coordinating compliance efforts related to state monitoring, data collection, measurement and reporting.	85%	$66,500	$56,525
External Assurance Liaison to work with external contractors completing fiscal monitoring of sub-grantee awards.	85%	$66,500	$56,525
Total	85%	$133,000	$113,050

2) Fringe Benefits

	% FTE	Base Benefits	Total
Internal Auditor	85%	$28,647	$24,350
External Assurance Liaison	85%	$28,647	$24,350
Total	85%	$57,294	$48,700

3) Travel

Illinois State Board of Education (ISBE) will pay any travel expenses related to this project from state funds.

4) Equipment

	Cost of Item	Item Description	Total
Five desktop computers will be needed to supply the needs of five contractors.	$1,000	Computer	$5,000
Total			**$5,000**

5) Supplies

There are no supply expenses associated with this project.

6) Contractual

	Annual Cost	Total
One contractual position to coordinate the collection of required data for reporting needs. Activities to include, working with system programmers to design data collection tools, dissemination of technical instructions to LEAs in regarding reporting requirements: • 120 Days • 7.5 Hours Per Day • $60 Per Hour	$54,000	$216,000
Three contractual positions for data collection efforts and ensuring the reliability of reported data: • 120 Days • 7.5 Hours Per Day • $40 Per Hour	$108,000	$432,000
One contractual position for development of electronic data collection tools: • 2,000 Hours Per Year • $75 Per Hour	$150,000 (Years one and two only)	$300,000
One contractual position for Project Management. Activities to include overseeing the development and implementation of the Measurement Plan, LEA Accreditation with NCA CASI (see below), ITAC development, and Scorecard Reporting: • 2,000 Hours Per Year • $105 Per Hour	$210,000	$840,000
Multiple regionally based contracts with Certified Public Accounting Firms for fiscal monitoring of sub-grantee awards: • 4,100 Hours • $150 per Hour	$615,000	$2,460,000
Development of (i) web design application and "Scorecard" reporting for State, LEA, and school performance, student growth data, teacher and principal performance data, and other metrics specified in the Measurement Plan; and (ii) training modules to support LEA use of reporting tools.	$500,000	$2,000,000
Intergovernmental Agreement and/or a contract with an entity that will be procured to develop and implement detailed Measurement Plan and support LEA reporting of performance measures and indicators included within the Measurement Plan.	$500,000	$2,000,000

Index of Teacher Academic Capital data collection, preparation, and analysis (includes personnel, fringe benefits, travel, supplies and contractual expenditures)	$150,000	$600,000
Total		**$8,848,000**

ISBE will be in compliance with the procurement requirements set forth under 34 CFR Parts 74.40-74.48 and Part 80.36

7) **Training Stipends**
There are no training stipend expenses associated with this project.

8) **Other**
There are no other expenses associated with this project.

9) **Total Direct Costs**

	Year 1	Year 2	Year 3	Year 4	Total
TOTAL	$2,453,750	$2,448,750	$2,298,750	$2,298,750	**$9,500,000**

10) **Indirect Costs**
There are no indirect costs associated with this project.

11) **Funding for Involved LEAs**
The state plan does not include Involved LEAs.

12) **Supplemental Funding for Participating LEAs.**
There is no supplemental funding for participating LEAs.

13) **Total Costs**

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$2,453,750	$0	$0	$0	$2,453,750
Year 2	$2,448,750	$0	$0	$0	$2,448,750
Year 3	$2,298,750	$0	$0	$0	$2,298,750
Year 4	$2,298,750	$0	$0	$0	$2,298,750
TOTAL					**$9,500,000**

Budget Part II: Project-Level Budget Table Project Name: Interactive Illinois Report Card (IIRC) Associated with Criteria: Evidence for selection criterion (C)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	500,000	500,000	500,000	500,000	2,000,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	500,000	500,000	500,000	500,000	2,000,000
10. Indirect Costs*	0	0	0	0	0
11.Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	500,000	500,000	500,000	500,000	2,000,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Interactive Illinois Report Card (IIRC)

The Interactive Illinois Report Card (IIRC) Project is described in Section (C)(2) of the Application. Funding for this project will involve expanding the Illinois State Board of Education's current contract with IIRC to support various upgrades and enhancements to the IIRC. In addition to the funds budgeted below, other state and federal funds are being repurposed to support this project.

1) **Personnel**
   There are no personnel expenses associated with this project.

2) **Fringe Benefits**
   There are no fringe benefit expenses associated with this project.

3) **Travel**
   There are no travel expenses associated with this project.

4) **Equipment**
   There are no equipment expenses associated with this project.

5) **Supplies**
   There are no supply expenses associated with this project.

6) **Contractual:** As described above, ISBE will expand its current contract with IIRC to provide for the following:
   - Updating of IIRC instructional tools to ensure alignment with the Common Core (year 1).
   - Launching of IIRC student-level data dashboards and corresponding permission management system for teachers and principals with informative, easy-to-use screens to monitor, benchmark, and document progress for students and groups of students.
   - Addition of *High School-to-College Success Reports* to the IIRC.
   - Development of hosted web video presentations to guide librarians throughout the State in how to access, display and assist users with understanding information on the IIRC platform as part of ISBE's "Know More About Your Schools" campaign.
   - Upgrading IIRC website to include translated versions of key IIRC resource screens (beginning with Spanish) and a new user-friendly on-line guide for new IIRC visitors.
   - Installation of an on-line data access portal by which individual researchers can initiate, configure and customize web-delivery of non-confidential data variables from IIRC's data education warehouse.
   - Installation of user-feed-back options on IIRC website to create a system for obtaining regular feedback.
   - Upgrades to the Integrated Plan necessary to accommodate Race to the Top tracking and professional development reporting.

Total Contractual Costs: $2,000,000 ($500,000 per year)

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other costs associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Totals
Total	$500,000	$500,000	$500,000	$500,000	**$2,000,000**

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The State Plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs in this project.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$500,000	$0	$0	$0	$500,000
Year 2	$500,000	$0	$0	$0	$500,000
Year 3	$500,000	$0	$0	$0	$500,000
Year 4	$500,000	$0	$0	$0	$500,000
TOTAL					**$2,000,000**

Budget Part II: Project-Level Budget Table Project Name: Illinois Collaborative for Education Policy Research Associated with Criteria: Evidence for selection criterion (C)(3)(iii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	965,750	965,750	784,250	784,250	3,500,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	965,750	965,750	784,250	784,250	3,500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	965,750	965,750	784,250	784,250	3,500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Illinois Collaborative for Education Policy Research (ICEPR)

The Illinois Collaborative for Education Policy Research (ICEPR) is described in Section (C)(3)(iii) of the Application.

1) Personnel
There are no personnel expenses associated with this project.

2) Fringe Benefits
There are no fringe benefit expenses associated with this project.

3) Travel
There are no travel expenses associated with this project.

4) Equipment
There are no equipment expenses associated with this project.

5) Supplies
There are no supply expenses associated with this project.

6) Contractual
The ICEPR will provide grants to "seed" projects within universities. ICEPR will grant five awards during the first year and five different awards during the second year for various research projects. 10 grants will be awarded for years one and two totaling $181,500 per year. This funding would allow for subcontracts for evaluation projects aligned to the priorities of the RTTT Plan; and development of necessary systems to support longitudinal data analysis, including data on higher education and workforce outcomes.

ISBE will contract with an Illinois university to coordinate the establishment of the ICEPR. Costs to be paid from this budget include the following:

Total Costs (grant period)

ICEPR grants per above	$363,000
Data collection and data system development necessary for ICEPR and P-20 research functions.	$1,000,000
Advisory Committee Meetings at 25 participants at each meeting. Approximately 10 meetings per year	$30,000
Coordination of the ICEPR which includes personnel costs, minimal travel, equipment, supplies telecommunication and meeting costs.	$2,107,000
Total	**$3,500,000**

ISBE will be in compliance with the procurement requirements set forth under 34 CFR Parts 74.40-74.48 and Part 80.36.

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	965,750	965,750	784,250	784,250	**$3,500,000**

10) Indirect costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$965,750	$0	$0	$0	$965,750
Year 2	$965,750	$0	$0	$0	$965,750
Year 3	$784,250	$0	$0	$0	$784,250
Year 4	$784,250	$0	$0	$0	$784,250
Total					**$3,500,000**

Budget Part II: Project-Level Budget Table Project Name: Learning and Performance Management System Associated with Criteria: Evidence for selection criterion (C)(3)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	61,284	63,984	66,792	69,732	261,792
2. Fringe Benefits	26,965	28,153	29,388	30,682	115,188
3. Travel	4,000	4,000	4,000	4,000	16,000
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	12,500,000	15,500,000	4,146,225	4,146,224	36,292,449
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	12,592,249	15,596,137	4,246,405	4,250,638	36,685,429
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	12,592,249	15,596,137	4,246,405	4,250,638	36,685,429

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Learning and Performance Management System

The Learning and Performance Management System (LMPS) is described in Section (C)(3) of the Application.

1) Personnel

	% FTE	Base Salary	Total
The Project Liaison will coordinate efforts between Illinois State Board of Education (ISBE) and the Learning Technology Centers.	100%	$61,284 in Year one with a 4.4% increase in each of the following years	$61,284 in Year one with a 4.4% increase in each of the following years

Total Grant Period: $261,792

2) Fringe Benefits

	% FTE	Base Benefits	Total
Project Liaison	100%	$26,965 in Year one with a 4.4% increase in each of the following years	$26,965 in Year one with a 4.4% increase in each of the following years

Total Grant Period: $115,188

3) Travel

	# Trips	$ per Trip	Total
Travel to and from Learning Technology Centers.	20 per year	$200	$4,000

Total Grant Period: $16,000

4) Equipment

There are no equipment expenses associated with this project. The Illinois Department of Commerce and Economic Opportunity (DCEO) has committed to providing an in-kind contribution of $10,000,000 from the Broadband Development Fund to support broadband development in rural communities to assist with connecting school districts to the proposed Learning and Performance Management System. DCEO has also committed to providing $5 million from ARRA Matching Funds to support critical information technology initiatives under the proposed Learning and Performance Management System, in particular, the STEM Learning Exchange.

5) Supplies

There are no supply expenses associated with this project.

6) Contractual

Contract with an entity or entities to be procured for LPMS System Development and establishment of the cloud environment, including: • Hosting infrastructure • Portal Platform • Data Integration Platform • Assessments for Learning integration • Student Vault development • Curriculum management (Science Technology Engineering and Mathematics (STEM) Learning Exchanges hosting and integration) • Standard reporting • Professional Development	$35,526,929
One contractual position for ISBE Project Management. • 2,000 Hours Per Year • Average $95.69 Per Hour	$765,520
Total (4 year grant period)	**$36,292,449**

ISBE will be in compliance with the procurement requirements set forth under 34 CFR Parts 74.40-74.48 and Part 80.36

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$12,592,249	$15,596,137	$4,246,405	$4,250,638	**$36,685,429**

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$12,592,249	$0	$0	$0	$12,592,249

Year 2	$15,596,137	$0	$0	$0	$15,596,137
Year 3	$4,246,405	$0	$0	$0	$4,246,405
Year 4	$4,250,638	$0	$0	$0	$4,250,638
Total					**$36,685,429**

Budget Part II: Project-Level Budget Table Project Name: State Performance Evaluation Support Systems Associated with Criteria: Evidence for selection criterion (D)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	1,635,771	1,558,506	6,047,651	2,076,126	11,318,054
7. Training Stipends	0	0	0	0	0
8. Other	0	43,145	3,237,420	194,465	3,475,030
9. Total Direct Costs (lines 1-8)	1,635,771	1,601,651	9,285,071	2,270,591	14,793,084
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	307,500	307,500	307,500	307,500	1,230,000
13. Total Costs (lines 9-12)	1,943,271	1,909,151	9,592,571	2,578,091	16,023,084

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
State Performance Evaluation Support Systems

The State Performance Evaluation Support Systems Project is described in Section (D)(2) of the Application.

1) **Personnel**
There are no personnel expenses associated with this project.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel**
There are no travel expenses associated with this project.

4) **Equipment**
There are no equipment expenses associated with this project.

5) **Supplies**
There are no supply expenses associated with this project.

6) **Contractual**
The following personnel will work on the development of the new system on a contractual basis through the Statewide System of Support.

	% FTE	Base Salary	Total
Director	100%	$100,000	$100,000
Professional Staff (2)	100%	$80,000	$160,000
Assistant	100%	$50,000	$50,000
Total per year			**$310,000**
Total			**$1,240,000**

Support through the Center for School Improvement (CSI) and the National Board for Professional Teaching Standards for implementation of National Board for Certified Principals Program *(See also Illinois Partnership Zone Administration and Direct State Interventions Budget Narrative re NBCP support for Priority Schools)*
Total Cost: $2,023,084 ($505,771 per year)

Year One:

- Teacher Evaluation: District/Union negotiation: Facilitation of district/union negotiation regarding growth measures in evaluation - each of the 13 Super LEAs with priority schools will receive expert facilitation of their negotiations.
  Total Cost: 10 days @ $1,500/day equal $15,000 X 13 (Super LEAs) = **$195,000**

Years Two and Three:

- Principal Training: All principals in the state will be required to participate in two days of training prior to their own evaluation. The training will be led by a prequalified trainer.

  Cost: $190.00 per principal for year two and $100 per principal for year three (two days of training).
  - Year two: 19 principals x 190 = $3,610
  - Year three: 3,900 principals x 100 = $390,000

  Total Cost: $393,610

- Superintendents (and others who evaluate principals) will receive two days of training to prepare them to conduct effective evaluations.

  Cost: $190.00 per superintendent for year two and $100 per superintendent for year three (two days of training)
  - Year two: 19 superintendents x 190 = $3,610
  - Year three: 43 superintendents x 100 = $4,300

  Total Cost: $7,910

Years Two through Four:

- Evaluator prequalification: In order to conduct evaluations of teachers, principals and assistant principals will have to be prequalified which will include an assessment of their evaluation practice. The qualification program will require five days training for all evaluators.

  Cost: Training at $250 per evaluator.
  - Year two: 19 evaluators x 250 = $4,750
  - Year three: 736 evaluators x 250 = $184,000
  - Year four: 111 evaluators x 250 = $27,750

  Total Cost: $216,500

- Teacher Training: All teachers will be required to participate in two days training to prepare them for the evaluation process and help them to understand the student growth measures. All training will take place on existing professional development days.

  Cost: $55 per teacher (two days of training).
  - Year two: 1,923 teachers x 55 = $105,765
  - Year three: 73,568 teachers x 55 = $4,046,240
  - Year four: 11,111 teachers x 55 = $611,105

  Total Cost: $4,763,110

- Evaluation Contract State will contract with a major evaluation organization to provide both formative evaluation to support implementation and a summative evaluation to

determine the impact and effectiveness of the teacher and principal evaluation initiative.
Total Cost: $2,478,840

TOTAL CONTRACTUAL: $11,318,054

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

7) **Training Stipends**
There are no training stipend expenses associated with this project.

8) **Other**

- Principal evaluation data collection tools (years two and three): Each school will receive a set of data collection tolls that will inform principal evaluation (e.g., Val Ed 360 review tools, school climate survey). Final materials will be determined as part of the state rulemaking process.
  Cost: $500 per set of data collection tools
  - Year two: 19 schools x 500= $9,500
  - Year three: 3,900 schools x 500= $1,950,000

  Total Cost: $1,959,500

- Teacher training materials (years two through four): All teachers will be provided with $15 worth of materials, (e.g., handouts, printed materials). Each evaluator will be provided with the teacher materials and copies of any relevant books (e.g., Danielson's Framework for Teaching,) at a cost of $50 per evaluator.
  - Year two: 1,923 teachers x 15 = $28,845
  - Year two: 96 evaluators x 50 = $4,800
  - Year three: 73,568 teachers x 15 = $1,103,520
  - Year three: 3,678 evaluators x 50 = $183,900
  - Year four: 11,111 teachers x 15 = $166,665
  - Year four: 556 evaluators x 50 = $27,800

  Total Cost: $1,515,530

9) **Total Direct Costs**

	Year 1	Year 2	Year 3	Year 4	Totals
Total	$1,635,771	$1,601,651	$9,285,071	$2,270,591	**$14,793,084**

10) **Indirect Costs**
There are no indirect costs associated with this project.

11) **Funding for Involved LEAs**
The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

The state will provide Participating LEAs with $457.08 per school to be used for the purchase of video equipment for use in teacher evaluations. The districts can determine whether the funds are allocated to individual schools or maintained by the district office. Total equipment budget per year: $1,230,000 ($457.08 each for 2,691 schools).

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$1,635,771	$0	$0	$307,500	$1,943,271
Year 2	$1,601,651	$0	$0	$307,500	$1,909,151
Year 3	$9,285,071	$0	$0	$307,500	$9,592,571
Year 4	$2,270,591	$0	$0	$307,500	$2,578,091
Total					**$16,023,084**

Budget Part II: Project-Level Budget Table Project Name: State Superintendent Certification Actions Associated with Criteria: Evidence for selection criterion (D)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	500,000	500,000	500,000	500,000	2,000,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	500,000	500,000	500,000	500,000	2,000,000
10. Indirect Costs*	0	0	0	0	0
11.Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	500,000	500,000	500,000	500,000	2,000,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
State Superintendent Certification Actions

The State Superintendent Certification Actions Project is described in Section (D)(2) of the Application. Funding for this project will cover contracts with law firms, other external consultants, and hearing officers to support the State Superintendent's suspension and revocation actions.

1) Personnel
There are no personnel expenses associated with this project.

2) Fringe Benefits
There are no fringe benefit expenses associated with this project.

3) Travel
There are no travel expenses associated with this project.

4) Equipment
There are no equipment expenses associated with this project.

5) Supplies
There are no supply expenses associated with this project.

6) Contractual
ISBE will contract with law firms, other external consultants, and hearing officers for services needed to institute and carry out the State Superintendent's suspension and revocation actions ($500,000 per year).
Total Contractual Costs: $2,000,000

7) Training Stipends
There are no training stipend expenses associated with this project.

8) Other
There are no other costs associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Totals
Total	$500,000	$500,000	$500,000	$500,000	**$2,000,000**

10) Indirect Costs
There are no indirect costs associated with this project.

11) Funding for Involved LEAs
The State Plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs
There is no supplemental funding for participating LEAs in this project.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$500,000	$0	$0	$0	$500,000
Year 2	$500,000	$0	$0	$0	$500,000
Year 3	$500,000	$0	$0	$0	$500,000
Year 4	$500,000	$0	$0	$0	$500,000
TOTAL					**$2,000,000**

Budget Part II: Project-Level Budget Table Project Name: Illinois Math and Science Partnership Program Expansion Associated with Criteria: Evidence for selection criterion (D)(3)(ii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	51,576	52,092	52,613	0	156,281
2. Fringe Benefits	22,693	22,920	23,150	0	68,763
3. Travel	3,000	3,000	3,000	0	9,000
4. Equipment	2,000	0	0	0	2,000
5. Supplies	0	0	0	0	0
6. Contractual	1,550,000	1850,000	1,363,956	0	4,763,956
7. Training Stipends	0	0	0	0	0
8. Other (Grants to Institutes of Higher Learning)	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	1,629,269	1,928,012	1,442,719	0	5,000,000
10. Indirect Costs*	0	0	0	0	
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	1,629,269	1,928,012	1,442,719	0	5,000,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Illinois Math and Science Partnership Program Expansion

The Illinois Math and Science Partnership (IMSP) Expansion project is described in Section (D)(3)(ii) of the Application. Funding for the IMSP Expansion project, which is administered by the Illinois State Board of Education (ISBE) is allocated to institutions of higher education, which then partner with high need Participating LEAs to increase the math and science expertise of teachers within these LEAs.

1) **Personnel**
   One additional Illinois State Board of Education (ISBE) personnel will be employed for this project.
   FTE: 100%
   Base Salary: $51,576 (1% increase in years 2-4)
   Total (3 years): $156,281

2) **Fringe Benefits**
   Fringe benefits (44% of Base Salary) for the additional ISBE staff position ($22,693 per year with adjustments throughout grants years 2-4 to reflect salary adjustments).
   Total (3 years): $68,763

3) **Travel**
   Travel expenses for the additional ISBE staff position to provide on-site monitoring ($3,000 per year).
   Total (3 years): $9,000

4) **Equipment**
   Equipment expenses for additional ISBE staff position are included in year one of the project to cover laptop and other needed equipment.
   Total (year 1 only): $2,000

5) **Supplies**
   There are no supply expenses associated with this project.

6) **Contractual**
   As described above, this project is an expansion of an existing project administered by the state. ISBE will contract with and provide grants to institutions of higher education and LEA's partnering with institutions of higher education to expand their current IMSP programs. There are two types of IMSP programs: the IMSP Graduate Program offers a master's degree in math and/or science with a focus on K-12 instruction, and the IMSP Summer Workshop/Institute offers teachers specific professional development in math and science content matter and effective pedagogy in focused areas of math and/or science. The budget for expansion of these two programs is based on their current budgets. Through this expansion project, IMSP will include funding for openings for an additional 150 teachers in the IMSP Summer Workshop/Institute and an additional 150 teachers in the IMSP Graduate

Program. The following chart outlines the costs associated with expanding these programs to the additional teachers:

IMSP Program	Year 1	Year 2	Year 3	Year 4	Total
Summer Workshop/Institute (150 new teachers)	$600,000	$800,000	$437,500	No funding provided	$1,837,500
Graduate Program (150 new teachers)	$900,000	$1,000,000	$876,456	No funding provided	$2,776,456
Total					**$4,613,956**

In addition, one contract for evaluation services will be awarded under this project at an estimated cost of $50,000 per year and **$150,000 over 3 years**.

Total Contractual (3 years): $4,763,956

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40-74.48 and Part 80.36.

7) **Training Stipends**
There are no training stipend expenses associated with this project.

8) **Other**
There are no other expenses associated with this project.

9) **Total Direct Costs**

	Year 1	Year 2	Year 3	Year 4	Total
Total	$1,629,269	$1,928,012	$1,442,719	$0	$5,000,000

10) **Indirect Costs**
There are no indirect costs associated with this project.

11) **Funding for Involved LEAs**
The state plan does not include Involved LEAs.

12) **Supplemental Funding for Participating LEAs**
There is no supplemental funding for participating LEAs.

13) **Total Costs**

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$1,629,269	$0	$0	$0	$1,629,269
Year 2	$1,928,012	$0	$0	$0	$1,928,012

Year 3	$1,442,719	$0	$0	$0	$1,442,719
Year 4	$0	$0	$0	$0	$0
TOTAL					**$5,000,000**

Budget Part II: Project-Level Budget Table Project Name: Educator Preparation Content Area Advisory Groups Associated with Criteria: Evidence for selection criterion (D)(3)(ii)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	2,300	2,300	2,300	2,300	9,200
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	110,700	110,700	110,700	110,700	442,800
7. Training Stipends	0	0	0	0	0
8. Other (substitute teacher reimbursement and meetings)	22,200	22,200	22,200	22,200	88,800
9. Total Direct Costs (lines 1-8)	135,200	135,200	135,200	135,200	540,800
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	135,200	135,200	135,200	135,200	540,800

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Educator Preparation Content Area Advisory Groups

The Educator Preparation and Advisory Groups will work collaboratively to make recommendations on strengthening content knowledge requirements for all Illinois students (see Section (D)(3)(ii) of the Application. The budget for each grant year is the same. Each year the advisory groups will focus on different grade levels (e.g. elementary, middle and high school) and/or different content areas (e.g. math, science, and reading).

1) **Personnel**
There are no personnel expenses associated with this project.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel**

	# Trips	$ per Trip	Total
Travel for ISBE staff per year	10	$230	$2,300
Total (1 year)			**$2,300**
Total (4 years)			**$9,200**

4) **Equipment**
There are no equipment expenses associated with this project.

5) **Supplies**
There are no supply expenses associated with this project.

6) **Contractual**

	% FTE	Base Salary	Total
This contractual individual will be responsible for the coordination and preparation of all materials, meetings, and communications, as well as facilitation of meetings and subgroups. It is essential that this individual collect all materials produced by the groups, organize, update and disseminate them for each meeting. The building and documentation of the groups' work is critical to the analysis, interpretation and potential writing of legislation to change the preparation of Illinois educators. The salary is based upon 120 hours of work at $62.50 per hour	10%	$75,000	$7,500
Total (one year)			**$7,500**
Total (4 years)			**$30,000**

	# Trips	$ per Trip	Total
There will be four separate and distinct advisory groups of 25 individuals each. Travel will vary depending on distance from the meeting sites. State travel guidelines will be followed for travel costs. Travel is essential to enable advisory group members to work efficiently and reach their goal which is to produce recommendations for the SEA to make legislative changes impacting the preparation of Illinois educators.	6 meetings	$172 x100 participants	$103,200
Total (one year)			**$103,200**
Total (4 years)			**$412,800**

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40 - 74.48 and Part 80.36.

7) **Training Stipends**

There are no training stipend expenses associated with this project.

8) **Other**

	Number of Meetings	$ per meeting	Total
Of the 100 advisory group members, approximately 10% (10) will be teachers. Local school districts agree to release the teachers of record, but cannot be expected to absorb the cost of the substitute teacher. The substitute teacher pay varies statewide, but the average is $100 per day.	6 meetings	$100 x10 participants	$6,000
Total (one year)			**$6,000**
Total (four years)			**$24,000**

Cost of meeting space, beverages and meals for working lunches.	Number of Meetings	$ per meeting	Total
100 advisory group members will be attending all six meetings to identify recommendations for improving educator preparation. It is necessary to offer working lunches to maximize the time that participants have together. Costs will follow state guidelines.	6 meetings	$15 x100 participants	$9,000
Four meeting rooms, one for each advisory group.	6 meetings	$300 Per room x 4 rooms	$7,200

Total (one year)			**$16,200**
Total (4 years)			**$64,800**

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$135,200	$135,200	$135,200	$135,200	**$540,800**

10) Indirect costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$135,200	$0	$0	$0	$135,200
Year 2	$135,200	$0	$0	$0	$135,200
Year 3	$135,200	$0	$0	$0	$135,200
Year 4	$135,200	$0	$0	$0	$135,200
Total					**$540,800**

Budget Part II: Project-Level Budget Table Project Name: Teacher Performance Assessments Associated with Criteria: Evidence for selection criterion (D)(4)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	0	0	0	0	0
5. Supplies	0	0	0	0	0
6. Contractual	250,000	250,000	0	0	500,000
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	250,000	250,000	0	0	500,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	250,000	250,000	0	0	500,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Teacher Performance Assessments

The Teacher Performance Assessment program is described in Section (D)(4) of the Application. With this $500,000 budget, the Illinois State Board of Education (ISBE) will contract with Illinois universities which offer teacher preparation programs. These universities will be primarily responsible for the piloting and implementation of the teacher performance assessments for pre-service teachers. Under the contract, the selected universities will implement teacher performance assessments to evaluate pre-service teachers for initial licensure (Tier 1). Expenses for equipment including technology and software will be allowed for Illinois universities participating in this assessment. Universities will be allowed to purchase necessary technology including video cameras, related accessories, and software which are critical to the successful implementation of the teacher performance assessment. This pilot may be expanded as an additional measure of effectiveness of preparation programs.

1) **Personnel**
There are no personnel expenses associated with this project.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel and Meeting**
There are no travel expenses associated with this project.

4) **Equipment**
There are no equipment expenses associated with this project.

5) **Supplies**
There are no supply expenses associated with this project.

6) **Contractual**
There are contractual expenses for Universities participating in the assessment.

	Year 1	Year 2	Year 3	Year 4	Total
Equipment	$225,000	$225,000	$0	$0	**$450,000**
Supplies	$25,000	$25,000	$0	$0	**$50,000**
Total					**$500,000**

ISBE will be in compliance with the procedures for procurement under 34 CFR Parts 74.40-74.48 and Part 80.36.

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other expenses associated with this project.

9) Total Direct Costs

	Year 1	Year 2	Year 3	Year 4	Total
Total	$250,000	250,000	$0	$0	**$500,000**

10) Indirect Costs

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs

There is no supplemental funding for participating LEAs.

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Total
Year 1	$250,000	$0	$0	$0	$250,000
Year 2	$250,000	$0	$0	$0	$250,000
Year 3	$0	$0	$0	$0	$0
Year 4	$0	$0	$0	$0	$0
Total					**$500,000**

Budget Part II: Project-Level Budget Table Project Name: Technical Assistance and Program Accountability for Beginning Teacher Induction Programs, Associated with Criteria: Evidence for selection criterion (D)(5)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	640,000	640,000	640,000	640,000	2,560,000
2. Fringe Benefits	224,640	224,640	224,640	224,640	898,560
3. Travel	30,000	30,000	30,000	30,000	120,000
4. Equipment	0	0	0	0	0
5. Supplies	54,690	54,690	42,630	42,630	194,640
6. Contractual	0	0	0	0	0
7. Training Stipends	0	0	0	0	0
8. Other	151,700	151,700	61,700	61,700	426,800
9. Total Direct Costs (lines 1-8)	1,101,030	1,101,030	998,970	998,970	4,200,000
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	0	0	0	0	0
13. Total Costs (lines 9-12)	1,101,030	1,101,030	998,970	998,970	4,200,000

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Technical Assistance and Program Accountability for Beginning Teacher Induction Programs in Illinois

The Technical Assistance and Program Accountability for Beginning Teacher Induction Programs in Illinois project is described in Section (D)(5) of the Application. Funding for this project will concentrate on accelerating new teacher development through building the State systems necessary to ensure high quality induction and mentoring programs.

1) Personnel

Personnel: The following requested personnel will all be hired as employees of the project.	% FTE	Base Salary	Total
Technical Assistance Outreach Coordinators (6) The Outreach Coordinators will provide direct technical assistance to induction programs, provide regional trainings, and other necessary activities to ensure quality induction programming	100%	$90,000	$540,000
Project Director / Lead Project Director will provide oversight and coordinate the work throughout the state	50%	$100,000	$50,000
Project Administrator Project Administrator will provide logistical support for Outreach Coordinators and Project Director	100%	$50,000	$50,000
Total for year one			**$640,000**
Total for Grant Period (4 years)			**$2,560,000**

2) Fringe Benefits

Fringe benefits are 35.1% of the personnel costs. Therefore, fringe benefits are budgeted at $224,640 per year, for a total of **$898,560**.

3) Travel

Travel funds will be used for National New Teacher Collaborative (NTC) staff consultation and some direct service or training. The budget contains 15 days trips at $2,000 per trip for a total of $30,000 per year and **$120,000** per grant period.

4) Equipment

There are no equipment expenses associated with this project.

5) Supplies

The project will require the purchasing of technical assistance tools (via licensing agreements) for $54,690 in years one and two and $42,630 in years three and four, for a total of **$194,640** for the grant period.

6) **Contractual**
There are no contractual expenses associated with this project.

7) **Training Stipends**
There are no training stipend expenses associated with this project.

8) **Other**

- **Meetings**
  - Meeting with travel for three day start-up retreat for Technical Assistance Outreach Coordinators and Project Lead totaling $20,000 for one year and **$80,000** for the grant period.
  - Meeting with travel for Technical Assistant Outreach Coordinators and Project Lead for monthly coordination (8 people x 12 meetings = 96 trips at $200 per trip) totaling $19,200 for one year and **$76,800** for the grant period.
    Total Meetings Cost: $39,200 per year and $156,800 for four years.

- **Consultation with NTC Directors** ($1,500 per day x 15 days = $22,500 for one year and $90,000 for the grant period).
  - NTC Directors will provide consultation to design the technical assistance structure and support the development of technical assistance, tools and protocols.

- **Induction Institutes** (3) at $30,000 each for $90,000 for year one and $90,000 for year two making the total budgeted **$180,000** for the grant period.

- **Total Other Costs: $151,700 for years one and two and $61,700 for years three and four, for a grant period total of $426,800.**

9) **Total Direct Costs**

	Year 1	Year 2	Year 3	Year 4	Total
Total	$1,101,030	$1,101,030	$998,970	$998,970	**$4,200,000**

10) **Indirect Costs**
There are no indirect costs associated with this project.

11) **Funding for Involved LEAs**
The state plan does not include Involved LEAs.

12) **Supplemental Funding for Participating LEAs**
There is no supplemental funding for Participating LEAs.

13) **Total Costs**

	Line 9	Line 10	Line 11	Year 12	**Totals**
Year 1	$1,101,030	$0	$0	$0	$1,101,030
Year 2	$1,101,030	$0	$0	$0	$1,101,030

Year 3	$998,970	$0	$0	$0	$998,970
Year 4	$998,970	$0	$0	$0	$998,970
TOTAL					**$4,200,000**

Budget Part II: Project-Level Budget Table Project Name: Illinois Partnership Zone Administration and Direct State Interventions Associated with Criteria: Evidence for selection criterion (E)(2)					
Budget Categories	**Project Year 1 (a)**	**Project Year 2 (b)**	**Project Year 3 (c)**	**Project Year 4 (d)**	**Total (e)**
1. Personnel	0	0	0	0	0
2. Fringe Benefits	0	0	0	0	0
3. Travel	0	0	0	0	0
4. Equipment	4,000	0	0	0	4,000
5. Supplies	1,000	1,000	1,000	1,000	4,000
6. Contractual	1,095,171	1,273,172	2,523,372	2,523,372	7,415,087
7. Training Stipends	0	0	0	0	0
8. Other	0	0	0	0	0
9. Total Direct Costs (lines 1-8)	1,100,171	1,274,172	2,524,372	2,524,372	7,423,087
10. Indirect Costs*	0	0	0	0	0
11. Funding for Involved LEAs	0	0	0	0	0
12. Supplemental Funding for Participating LEAs	$500,000	$1,000,000	$1,000,000	$1,000,000	$3,500,000
13. Total Costs (lines 9-12)	1,600,171	2,274,172	3,524,372	3,524,372	10,923,087

All applicants must provide a break-down by the applicable budget categories shown in lines 1-13.
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-LEVEL BUDGET NARRATIVE
Illinois Partnership Zone Administration and Direct State Interventions

The Illinois Partnership Zone Administration and Direct State Interventions program is described in Section (E)(2) of the Application.

1) **Personnel**
There are no personnel expenses associated with this project.

2) **Fringe Benefits**
There are no fringe benefit expenses associated with this project.

3) **Travel**
There are no travel expenses associated with this project.

4) **Equipment** (one time purchase during year 1)

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 per Item	Item Description	Total
Desktop Computers: Three desktop computers will be needed to expand our current office and supply the needs of three contractual employees.	$1,333	Computer including monitor	$4,000

5) **Supplies**
Based on estimates of costs consistent with the funding of other divisions of the Illinois State Board of Education (ISBE).
General office supplies:
Annual: $1,000
Total: $4,000

6) **Contractual**

	% FTE	Base Salary	Annual	Total
The project director will be a full time position housed within the School Turnaround Unit of the Center for School Improvement. This person will have management responsibilities for the following tasks: • Procuring lead and supporting partners and monitoring progress and quality of work • Developing and implementing a performance management system for participating LEAs and partners • Coordinating: internal work with other	100%	$95,000	$95,000	$380,000

departments in the agency; Advisory Partnership Zone Council; development of indicators, benchmarks and metrics for monitoring and evaluation; professional support for LEA leadership • Oversight of data collection, analysis and reporting • Oversight for site visit monitoring The individual must have strong project management skills, and experience in school reform and intensive school-level interventions.				
The project coordinator will manage the lead partner and supporting partner work and the two contractual project staff – oversight and support at the LEA level.	100%	$75,000	$75,000	$300,000
The project support staff will perform site visits, oversee data collection and analysis, and support project management of the division.	100%	$50,000	$100,000	$400,000
Total				**$1,080,000**

Travel Description	# Trips	Annual	Total
	40 trips; $150/visit	$6,000	$24,000
The project director will attend national conferences and visit other states performing similar work.	four trips; $1,000/trip	$4,000	$16,000
Travel reimbursement for Advisory Council meetings	three meetings per year; 30 attendees; $200 reimbursement	$18,000	$72,000
Total			**$112,000**

Contractual Other

Consultants to assist the Super LEAs with negotiation of "thin collective bargaining agreements" (i.e. collective bargaining agreements that permit flexibility and autonomy around staffing and other workplace conditions).	$300,000
Measurement Plan Development and Implementation (specific to Illinois Partnership Zone) $100,000 per year	$400,000
Direct contracts between ISBE and Lead/Supporting Partners to undertake direct state interventions in LEAs that do not demonstrate a willingness or ability to undertake the dramatic action necessary to improve student outcomes ($500,000 - $750,000/school/year; budget will depend on need and may require re-allocation of other State and federal funds to support).	$3,546,171

Support to the National Board for Professional Teaching Standards and the School Turnaround Unit for implementation of National Board Certified Principals Program in Illinois Priority Schools and feeder schools to Illinois Priority Schools. Any excess funds will be provided to support NBCP in other Participating LEAs. (*See also State Performance Evaluation Support Systems Budget Narrative re NBCP support for Participating LEAs*)	$1,976,916
Total	**$6,223,087**

ISBE will be in compliance with the procurement requirements set forth under 34 CFR Parts 74.40-74.48 and Part 80.36

7) Training Stipends

There are no training stipend expenses associated with this project.

8) Other

There are no other expenses associated with this project.

9) Total Direct Cost

	Year 1	Year 2	Year 3	Year 4	Totals
Total	$1,100,171	$1,274,172	$2,524,372	$2,524,372	**$7,423,087**

10) Indirect Cost

There are no indirect costs associated with this project.

11) Funding for Involved LEAs

The state plan does not include Involved LEAs.

12) Supplemental Funding for Participating LEAs: $3,500,000

Grants to Super LEAs that do not have a Tier 1 or Tier 2 school (2 total) to undertake interventions and the dramatic actions necessary to improve student outcomes ($250,000/school in grant year 1; $500,000/school/year in years 2 - 4).

13) Total Costs

	Line 9	Line 10	Line 11	Line 12	Totals
Year 1	$1,100,171	$0	$0	$500,000	$1,600,171
Year 2	$1,274,172	$0	$0	$1,000,000	$2,274,172
Year 3	$2,524,372	$0	$0	$1,000,000	$3,524,372
Year 4	$2,524,372	$0	$0	$1,000,000	$3,524,372
TOTAL					**$10,923,087**

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Appendix A2-4

Letters of Support: Summary Table

Legislative Leaders

Legislators	Actions of Support
The Honorable John J. Cullerton, Illinois Senate President **The Honorable Michael J. Madigan**, Illinois House Speaker **The Honorable Christine Radogno**, Illinois Senate Republican Leader **The Honorable Tom Cross**, Illinois House Republican Leader	-Provide continued bipartisan support for education reform and RTTT initiatives to ensure that every child is prepared for success in post-secondary education and employment. -Within the last 18 months, the Illinois legislature has passed, and Governor Quinn has signed, legislation that: • Establishes a comprehensive state longitudinal education data system; • Allows for alternative certification programs to operate independently from higher education; • Creates new, rigorous teacher and principal evaluation systems that incorporate student growth as a significant factor; and • Doubles the number of charter schools in Illinois and formally explores the concept of an independent charter school authorizer.
Bill Brady, Illinois State Senator and Republican gubernatorial nominee	-Offer support for the proposed RTTT reform initiatives and help bring a culture of higher expectations, innovation, and accountability to both Illinois schools and State government. -Work in a bipartisan manner to support RTTT reforms.

Teachers Unions

Organization	Overview of Organization	Actions of Support
Illinois Federation of Teachers (IFT)	The Illinois Federation of Teachers represents 103,000 men and women who are teachers and paraprofessionals in school districts throughout Illinois, faculty and staff at Illinois' community colleges and universities, public employees under every statewide elected constitutional officer, and retirees.	-Participate in state-level work to implement Race to the Top activities in collaboration with ISBE and other education stakeholders. -Work with local unions to provide information and assistance for implementation of Race to the Top reforms at the district level.
Illinois Education Association (IEA)	IEA is an association of more than 133,000 Illinois elementary and secondary teachers, higher education faculty and staff, educational support professionals, retired educators, and college students preparing to become teachers. The IEA is committed to serving the interest of public education in Illinois and effecting excellence and equity in public education as an advocacy organization for all public education employees.	-Support the organization's local associations who have agreed to participate in Illinois' Race to the Top proposal. -Assist in developing effective educator evaluation systems. -Work collaboratively to develop and implement local education improvement plans.

Other Role-based Education Stakeholders

Organization	Overview of Organization	Actions of Support
Illinois Alliance of Administrators for Special Education (IAASE)	The IAASE is a non-profit corporation organized to promote quality education for all students and provide an organizational structure through which students with disabilities are represented at a local, state and national level.	-Provide effective support to teachers and principals. -Provide intensive educator support focused on students' critical transition points.
Illinois Association of Regional Superintendents of Schools (IARSS)	IARSS is dedicated to supporting the role of regional superintendents, assistant superintendants, and offices of education in Illinois. IARSS supports the efforts of school administrators to promote quality education for the students and citizens of Illinois, to provide educational leadership, to impact public policy, and to deliver educational services effectively for the benefit of Illinois school districts, other educational entities, and educational system clients.	-Lead the regional delivery of services for the system of support for under-performing schools. -Serve as a Lead or Supporting Partner for schools in the turn-around process.
Illinois Association of School Administrators (IASA)	IASA is a state-wide association representing school and district administrators.	-Work collectively and collaboratively with ISBE and all education stakeholders on behalf of Illinois school communities. -Continue to lead and participate in meetings, committees and task forces, such as the Education Stakeholders Meeting, IASA/ISBE Advisory Committee, P-20 Council and Performance Evaluation Advisory Council. -Strive to facilitate development and implementation of laws, regulations, policies, protocols, and procedures for the betterment of public education.
Illinois Association of School Business Officials (Illinois ASBO)	Illinois ASBO is devoted to the school business management profession and strives to promote the standards of school business administration through benefits to members including: job placement assistance, student scholarships, publications, professional development, and legislative involvement.	-Collaborate with ISBE to implement the RTTT grant. -Work with ISBE and other committees and task forces such as the Education Stakeholders, Illinois Education Roundtable, P-20 Council, and Performance Evaluation Advisory Council in recommending educational legislation, regulations, procedures, and practices. -Work to maintain the focus of policymakers and legislators on the need for ongoing funding for education.

Organization	Overview of Organization	Actions of Support
Illinois Network of Charter Schools (INCS)	INCS brings together students, parents, educators and administrators from the State's 39 charter schools, serving more than 32,000 children at 76 campuses. INCS's goal is to improve the quality of public education by promoting and strengthening charter schools throughout the State of Illinois.	-Support school turnaround efforts. -Assist with placement of effective teachers in public school classrooms. -Work with state leadership to implement a high-quality, independent authorizer to increase approval of transformative charter schools across the State.
Illinois Speech-Language-Hearing Association (ISHA)	ISHA is a non-profit organization representing 4,000 licensed professionals with advanced degrees in speech-language pathology and audiology. The organization is committed to reflecting the cultural diversity of Illinois and promoting sensitivity to diverse needs. ISHA's mission is to support and advocate for speech-language pathologists, audiologists, and the individuals they serve with communication, hearing, and swallowing disorders.	-Participate in the planning, development, and implementation of science and math programs of study and the STEM Learning Exchanges.

Funders

Organization	Overview of Organization	Actions of Support
The Chicago Community Trust—Race to the Top Collaborative Fund	The Chicago Community Trust is a community foundation, built by generations of Chicagoans to support a safe, health, and productive future for every resident. In 2008, the Trust and its donors granted more than $100 million to sustain effective, innovative programs throughout metropolitan Chicago. The fund is directed at supporting education, as well as arts and culture, basic human needs, community development, and health.	-The 18 foundation members of The Race to the Top Initiative—a collaborative fund of the Chicago Community Foundation—are providing a grant to develop Illinois' Race to the Top application and are committed to continued collaboration with the state for the long-term improvement of education in Illinois.

Advocacy and Education Partner Organizations

Organization	Overview of Organization	Actions of Support
ACT	ACT is an independent, not-for-profit organization that provides an array of assessment, research, information, and program management solutions in the areas of education and workforce development, including multimedia services and on-the-job instruction. Each year, ACT serves millions of people in high schools, colleges, professional associations, businesses, and government agencies.	-Support the development and adoption of Common Standards. -Assist in establishing new capacities to assist LEAs with adoption and implementation of Assessments for Learning. -Promote alignment of middle and high school instruction with college- and work-ready expectations. -Support implementation of the statewide longitudinal data system. -Conduct workshops and provide resources to support professional development for teachers and principals. -Implement the Illinois Partnership Zone initiative.
Advance Illinois	Advance Illinois is an advocacy group with bipartisan political leadership and a board of business and community leaders, policy experts, and educators. The group seeks to act as an objective voice to promote a public education system in Illinois that prepares all students for college, work, and democratic citizenship.	-Play a continuing role in the state's plan to overhaul the teacher evaluation system. -Sponsor an ongoing study by the National Council on Teacher Quality, in collaboration with the State, to assess the caliber of teacher preparation programs. -Support the State's plans to redesign principal preparation. -Continue supporting the state's efforts to use data to inform instruction and school improvement and play a central role in developing the Learning and Performance Management System for data management. -Work to develop the Kindergarten Readiness standard in partnership with leaders such as An Ounce of Prevention and the Erikson Institute.

Organization	Overview of Organization	Actions of Support
Alternative Schools Network (ASN)	ASN is an association of non-profit, independent, and self-governing youth and adult education organizations. Since 1973, ASN has been an advocate for community-based services with an emphasis on involving community members as active participants in developing and running programs. ASN is committed to working to promote quality education, with a specific emphasis on inner-city children, youth, and adults.	-Support the Dropout-Prevention and Re-Enrollment Support components of the State's proposal, with a focus on increasing graduation rates and helping youth who are now on the streets return to school. -Continue ASN's close partnership with the Illinois Council on Re-Enrolling Students Who Dropped Out of School. -Assist in developing and implementing the Illinois Hope and Opportunities Pathways through Education (IHOPE) plan. -Support multi-state high school charters for high school drop-outs.
Board of Education of the City of Chicago	The Chicago Board of Education is responsible for the governance, organizational and financial oversight of Chicago Public Schools (CPS), the third largest school district in the United States of America. It establishes policies, standards, goals and initiatives to ensure accountability and provide a high quality, world-class education for the 21st century that prepares students for success in college, work and life.	-Continue to partner with the State to pursue reform initiatives in CPS, including closing or turning around underperforming schools. -Work with CPS teachers and administrators and private sector partners to open new schools, create more choice for families in historically underserved neighborhoods, and use student growth data to measure teacher and principal performance.
ED-RED	ED-RED is an advocacy organization committed to serve as "the voice of suburban schools" in Illinois. ED-RED monitors and actively influences education policy at the state level, with a focus on issues that affect its member school districts.	-Support the development of a statewide longitudinal data system. -Support and pursue the Common Core standards.
Illinois Leadership Council for Agricultural Education (ILCAE)	ILCAE is a state-wide organization of individuals representing all segments of the agricultural industry to provide statewide leadership to improve education in and about agriculture. The council serves as an advocate for agricultural educators at the local and state levels and seeks to involve the agricultural industry in the assessment of agricultural education and in developing quality instructional programs and processes to meet current and future needs.	-Support STEM-related Programs of Study and Learning Exchanges in Agriculture and Natural Resources. -Develop e-learning curricula aligned to Common Core standards. -Provide internships and work-based learning opportunities and foster partnerships with agricultural businesses. -Provide career development and outreach to K-12 students. -Offer professional development opportunities for teachers. -Sponsor student challenges and provide project management resources to support teamwork development. -Review and research assessment performance.

Organization	Overview of Organization	Actions of Support
Illinois Science and Technology Coalition (ISTC)	ISTC cultivates economic development in Illinois by increasing resources for research and development (R&D) initiatives at Illinois-based institutions and businesses. ISTC is active in the industries of advanced manufacturing, agriculture, energy, information technology, life sciences, and supercomputing.	-Serve as a partner in implementing the National Career Readiness Certificate (NCRC) program and STEM-related Programs of Study throughout Illinois.
Interactive Illinois Report Card (IIRC)	Interactive Illinois Report Card is a program of Northern Illinois University that publishes test results and other school improvement information for Illinois schools online, so that the information is available and accessible to the public.	-Assist with developing and hosting online resources for the array of improved school performance benchmarks, assessments, and performance measures, including interactive access to the Common Core standards and STEM programs. -Deliver effective training for school leaders and teachers in use of new data applications. -Develop and implement multi-lingual versions of key digital resources, beginning with Spanish. -Promote wider public access to schools and learning resources by participating in ISBE's statewide partnership with the Illinois State Library system. -Launch student-level "data dashboards" for teachers and principals within the next school year and implement an access management system to give local controls to LEAs and provide links for parents and students. -Expand resources to make summative and formative assessments quickly available to teachers in their classrooms. -Provide data for research initiatives to enhance learning outcomes, including projects initiated by the Illinois Collaborative for Educational Policy Research.

Organization	Overview of Organization	Actions of Support
Large Urban District Association (LUDA)	LUDA represents the interests of the 55 largest districts in the state. Forty-four of its members are participating LEAs for the RTTT proposal.	-Coordinate RTTT participation and communication among member districts. -Support member districts' reform efforts, including revision of performance evaluations, development of new data systems, implementation of new assessments, and effective teacher placement. -Support revision and implementation of school leader preparation and principal performance evaluation systems. -Disseminate support systems for principal mentoring and development. -Offer ongoing professional development for superintendants and senior staff. -Foster university and district partnerships.
Learning Point Associates	Learning Point Associates applies research and evaluation, direct professional services, and policy knowledge to create change at every level of the education system—classroom, school, district, state and national.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Museum of Science and Industry	Chicago's Museum of Science and Industry, one of the largest science museums in the world, is home to more than 35,000 artifacts and nearly 14 acres of hands-on exhibits designed to spark scientific inquiry and creativity.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges. -Provide professional development opportunities for teachers at the Museum's Institute for Quality Science Teaching, and serve as a science education resource for Illinois. -Engage high need students in science learning as part of school field trip experiences.
Ounce of Prevention Fund	The Ounce of Prevention Fund strives to give children who were born into poverty a chance for success in school and in life by investing in children in the earliest weeks, months, and years of their lives. The Ounce is committed to four key goals: providing direct services to at-risk children and their families from birth to age 5, training early childhood professionals across the state, conducting research and incorporating it into programs, and advocating for sound public policies and sustained funding streams.	-Support the development and implementation of the Kindergarten Readiness Measure to promote instructional alignment from Pre-K through third grade. -Actively participate as a partner in planning Kindergarten Readiness Assessments (KRA). Efforts in this area have already begun, including convening KRA stakeholder meetings and facilitating conversations with other states to determine how to best use a KRA process to align education systems. -Serve as an active resource for professional training and development and an ex-officio member of the P-20 Council.

Organization	Overview of Organization	Actions of Support
Parents & Residents Invested in School and Education Reform Coalition (PRISE)	PRISE is a community-based organization of parents and residents invested in promoting education reforms in low-performing Illinois schools and increasing family and community involvement in local school systems.	-Support programs to increase parent and community engagement and social support for the most challenged low-performing schools.
Peoria Charter School Initiative (PCSI)	PCSI is an organization of community leaders, school administrators, and parents organized by the District 150 Board of Education to research, plan, and develop a new charter school in the Peoria, Illinois community. The new Quest Charter Academy will open in August, 2010 for grades 5-7.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Science Olympiad	Science Olympiad is a national non-profit organization dedicated to improving the quality of K-12 science education. The organization serves 6,000 school teams and hosts 320 academic competitions a year with the goal of improving K-12 STEM education and increasing interest and participation of underrepresented and minority students in science. Science Olympiad also piloted the Science Chicago Urban Schools Initiative in 2007, providing 17 Chicago Public Schools with Science Olympiad memberships, materials, and specialized educator training.	-Continue providing K-12 after-school STEM opportunities for students throughout Illinois. -Continue the Urban Schools Initiative in Chicago Public Schools and expand the program to schools outside the Chicago area. -Provide professional development and engagement activity to raise the bar for student achievement in STEM areas.
The Field Museum	The Field Museum is an educational institution concerned with the diversity and relationships in nature and among cultures. It provides research and learning to serve a diverse public of varied ages, backgrounds, and knowledge. The Field Museum serves hundreds of thousands of students each year through education, outreach, and digital programs and exhibitions.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges. -Provide professional development for science educators, with a focus on early elementary and high school instruction, to improve content knowledge, teaching skills, and use of museum resources.
Voices for Illinois Children	Voices for Illinois Children champions the full development of every child in Illinois to assure the future well-being of everyone in the state. The organization works with families, communities, and policymakers to help children grow up healthy, happy, safe, loved, and well-educated.	-Serve on Illinois' P-20 Council. -Advocate for the full development, best use, and proper monitoring of Kindergarten-readiness measures and longitudinal, data-sharing processes. -Advocate for additional local, state, and federal funding to support educational priorities. -Build public awareness of and support for the State's RTTT initiatives and goals.

Higher Education Institutions

Organization	Overview of Organization	Actions of Support
Associated Colleges of Illinois (ACI)	ACI is a group of 23 private colleges and universities, rooted in the liberal arts tradition, that leverages the expertise of a statewide network to provide underserved students with new educational opportunities. ACI is committed to engaging college, business, and community leaders to address three key areas: enhancing teaching and learning in K-12 schools serving at-risk children, raising graduation and college entrance rates among at-risk students, and improving the chances of college success for first-generation, low-income, and minority students.	-Operate six-week High-Need Schools Internships (HNSIs)—intensive summer experiences that prepare and position pre-service teachers to maintain ongoing relationships with partner LEAs. -Encourage and foster opportunities for internship participants to complete student teaching and assume permanent teaching positions in the LEAs in which they serve as interns.
Center for Renewable Energy, at Illinois State University (ISU)	ISU's Center for Renewable Energy works to meet growing needs for education, outreach, and research. The Center has three major functional areas: supporting the renewable energy major at ISU; serving the Illinois renewable energy community by providing information to the public; and encouraging applied research on renewable energy at ISU and through collaborations with other universities.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Consortium on Chicago School Research (CCSR) at the University of Chicago, Urban Education Institute	The CCSR at the University of Chicago conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. CCSR seeks to expand communication among researchers, policy makers, and practitioners, and to support the search for solutions to the problems of school reform.	-Work as an active partner on the proposed Illinois Collaborative for Education Policy Research (ICEPR), an innovative state research and development partnership modeled directly after CCSR's work and experience in Chicago.
Erikson Institute	The Erikson Institute is a premier graduate school in child development. It also focuses on applied research, providing clinical services to families, participating in a wide range of community engagement initiatives, and collaborating to improve and expand services from school districts and public agencies.	-Develop a plan for, and support the implementation of, a state-wide Kindergarten Readiness Assessment. -Support the implementation of the K – Grade 3 professional development program. -Continue current work with 11 Chicago Public Schools regarding K – Grade 3 educational issues and expand these efforts to schools state-wide.

Organization	Overview of Organization	Actions of Support
Illinois Education Research Council (IERC) at Southern Illinois University	IERC was established at Southern Illinois University to provide Illinois with educational research and support education policy-making and program development. The IERC conducts independent research and policy analysis and brings objective and reliable evidence to the work of state policymakers and practitioners.	-Update and refine the IERC Index of Teacher Academic Capital to analyze the equitable distribution of highly effective teachers and principals throughout the state. -Participate in the Educational Research Collaborative Steering Committee and Board. -Continue to serve on the Technical Advisory Group for the Illinois Longitudinal Data System.
Illinois Institute for Rural Affairs (IIRA), at Western Illinois University	IIRA builds the capacity of community leaders and policymakers by providing technical support, applied research, policy evaluation, and training across the state. IIRA is a clearinghouse for information on rural issues, coordinates rural research, and works with state agencies on issues of importance to rural communities.	-Participate in the planning, development, and implementation of Programs of Study and STEM Learning Exchanges, particularly the Energy Learning Exchange. -Lead the establishment of the Wind for Schools program and other renewable energy technology curriculum programs.
Loyola University Chicago, School of Education	Loyola University Chicago is the nation's largest Jesuit, Catholic university. The School of Education is dedicated to continuing the Jesuit tradition of uplifting people through education, regardless of race or religion. Loyola's community of educators is committed to serving as role models of scholarship and promoting social justice in education.	-Support the implementation of the Improving Effectiveness of Teacher and Principal Preparation Program and the statewide Longitudinal Data System. -Support the implementation of enhanced standards and high quality assessments of teachers and administrators. -Support efforts to link teacher candidate preparation to student learning outcomes. -Provide technical assistance in areas such as data-based decision-making. -Support implementation of response-to-intervention systems. -Play a leading role in reforming principal and teacher candidate professional preparation programs.

Organization	Overview of Organization	Actions of Support
National Center for Supercomputing Applications (NCSA) at the University of Illinois Urbana-Champaign	The NCSA provides powerful computers and expert support to help thousands of scientists across the country conduct research and gather and process data. For more than 20 years, NCSA has been a leader in deploying robust high-performance computing resources and in working with research and education communities to develop new computing and software technologies. The NCSA considers education to be a top priority and is committed to bringing computing and computation in the classroom to help students understand scientific concepts and bridge the gap between research and education.	-Deploy Blue Waters, the most powerful super computer in the world, in June 2011, which will sustain a broad range of science and engineering applications and support a far-reaching educational and workforce development program. -Provide freely available, research-quality computational tools to 127 teachers (representing 121 school districts) in high school chemistry classrooms. -Provide free software to teachers and students in rural districts to enable teachers to communicate and learn new chemistry-related content.
Roosevelt University, College of Education	Roosevelt University is an independent, non-profit, metropolitan university with campuses in downtown Chicago and Schaumburg, Illinois. Rooted in the traditions of social justice and responsibility, Roosevelt University's College of Education prepares teachers, counselors, and educational leaders to shape a better, brighter and more just tomorrow.	-Improve the effectiveness of teacher and principal preparation programs. -Provide effective support to beginning teachers and principals. -Support reforms to improve student preparation for and transition to post-secondary education.
Southern Illinois University, Carbondale (SIUC)	SIUC is a major public higher education institution dedicated to quality academic endeavors in teaching and research and supportive programming for student needs and development. SIUC is also committed to participating in economic initiatives in community, regional, and statewide contexts, and supporting affirmative action and equal opportunity initiatives.	-Participate in planning, development, and implementation of STEM Learning Exchanges and Programs of Study. -Provide rigorous and relevant education experience to SIUC students in STEM areas, including through a number of federally-funded programs dedicated to increasing participation of underrepresented minorities and low-income students in STEM areas. -Offer SIUC's new Master of Science in Math & Science Education degree program to provide training focused on math and science instruction for K-Grade 8 students. -Create and implement the Science, Mathematics and Action Research for Teachers ("SMART") program. -Provide math-focused professional development opportunities to educators in rural public elementary schools through SIUC's Rural Access to Mathematics Professional Develop Program.

Organization	Overview of Organization	Actions of Support
Southern Illinois University, Carbondale (SIUC), College of Education and Human Services	The SIUC College of Education is committed to preparing students for leadership roles throughout the human services professions, including those in education, health and leisure, rehabilitation, and business and industry. The College also seeks to be a leader in schools, industry, and public and private agencies for the promotion of a better society and improved quality of life.	-Provide rigorous and relevant education experience to SIUC students, particularly in STEM-related areas. -Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Southern Illinois University, Edwardsville (SIUE), School of Education	The School of Education at SIUE is committed to pursing key goals including offering high quality programs for its students, exceptional service to the community, and cutting-edge research that informs policy and practice. The School is also committed to forming partnerships with a variety of educational, service, and business entities in order to advance research and innovative practices across a broad spectrum of professions and community organizations.	-Support implementation of RTTT initiatives through SIUE's newly-formed STEM Center, which will coordinate various STEM-related activities across campus to strengthen the impact of P-12 outreach and related research. -Participate in STEM Learning Exchanges, with particular focus on Energy, Manufacturing, Information Technology, Research and Development, and Health Sciences. -Continue operating, in partnership with East St. Louis School District, a charter high school for at-risk adolescents. The charter school will participate in the Illinois Partnership Zone and systematic reform proposals. -Work collaboratively with entities across the State to strengthen teacher knowledge and effectiveness in math and science. -Serve on the State's Leadership to Integrate the Learning Continuum Advisory Committee, Illinois New Teacher Collaborative Partnership Board, Associate of Arts in Teaching Steering Committee, and Charter School Authorizer Task Force.
University of Illinois at Chicago (UIC)	UIC is the Chicago campus for the University of Illinois, a public university committed to serving the people of Illinois through excellence in teaching, research, public service, and economic development.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.

State Agencies

Organization	Overview of Organization	Actions of Support
Illinois Board of Higher Education (IBHE)	IBHE plans and coordinates Illinois' system of colleges and universities; administers state and federal grant programs; reviews new instruction, research, and service programs; and maintains centralized data systems for higher education institutions.	- Support implementation of programs for improving teacher and principal effectiveness, expansion and adaptation of statewide longitudinal data systems, P-20 coordination, and vertical and horizontal alignment. -Work in partnership with ISBE to strengthen teacher and principal qualifications by assisting with preparation work teams. -Work with higher education institutions to ensure essential data and information is available for the statewide longitudinal data system. -Work with member post-secondary institutions to implement standardized placement scores for credit-bearing coursework in the State's public universities.
Illinois Community College Board	The Illinois Community College Board is the state coordinating board for community colleges. The Board works with all groups within the community college system to establish policies necessary to implement state statutes.	-Support the implementation of College and Career Readiness Initiative. -Support the development and implementation of STEM Programs of Study.
Illinois State Library	The Illinois State Library was created more than 150 years ago as the official library for state government. Today, the Illinois State Library has become a computer-age doorway to worldwide information, providing patrons with an electronic bridge to the collections of universities, public and corporate libraries, and new information systems that will continue to develop into the 21st century and beyond.	-Partner with ISBE to launch the "Know More About Your Schools" campaign to ensure universal access to school performance data made available through Interactive Illinois Report Card (IIRC). -Train librarians and provide them with necessary tools to assist users in navigating IIRC, including a librarians' IIRC user guide and web-based video presentations. -Partner with ISBE to serve as an information conduit and promote training opportunities through weekly e-newsletters. -Encourage public libraries to participate in web-based training opportunities, facilitate public access to school performance information, and assist users' inquiries regarding this information.

Organization	Overview of Organization	Actions of Support
Illinois Department of Commerce and Economic Opportunity (DCEO)	DCEO administers a wide array of programs and services for Illinois businesses including services in business development, community development, energy and recycling, technology, tourism, trade, workforce development, and entrepreneurship.	-Commit up to $15 million through the *Illinois Jobs Now* bill to support: • Broadband development in rural communities to connect school districts to the Learning & Performance Management System (up to $10 million); • Critical information technology initiatives under the Learning & Performance Management System, particularly the STEM Learning Exchange (up to $5 million). -Commit up to $300,000 in federal Workforce Investment Act funds to support development of career pathway applications in the STEM Learning Exchanges. -Participate in planning, development, and implementation of STEM Learning Exchanges and Programs of Study. -Work with public and private partners to ensure that STEM initiatives receive the support of the business and labor communities.
Illinois Department of Transportation (IDOT)	IDOT has responsibility for planning, construction, and maintenance of Illinois' extensive transportation network, which encompasses, highways and bridges, airports, public transit, rail freight and rail passenger systems.	-Participate in the planning, development, and implementation of STEM Programs and Study and STEM Learning Exchanges.
P-20 Council	The P-20 Council is a comprehensive and balanced group of educational stakeholders, including legislators, P-12 teachers and higher-education faculty, staff and policymakers, professional organizations, parents, business leaders, and the Department of Commerce and Economic Opportunity. The Council is responsible for establishing a statewide agenda that better integrates all levels of learning in Illinois.	-Establish and monitor implementation of a framework for systemic educational improvement and innovation that will enable every student to meet or exceed state learning standards and be well prepared for education and careers. -Work with research and evaluation entities to develop and sustain a robust and useful empirical foundation for decision-making and monitoring progress. -Advise and make recommendations to the Governor, General Assembly, and state agencies on education issues, including the fiscal implications of current and proposed initiatives.

Federal Research Institutions

Argonne National Laboratory, Division of Educational Programs	DEP serves as the interface between the Department of Energy, Argonne National Laboratory, and the academic	-Participate in the planning, development, and implementation of STEM Programs and Study and STEM Learning Exchanges.

(DEP)	community. Argonne provides unique capabilities that afford numerous opportunities for participants at all educational levels interested in energy research and training in science and technology.	
Fermilab	Fermilab is a national science research institution, operating the Fermi National Accelerator Laboratory. Fermilab's mission is to advance the understanding of the fundamental nature of matter and energy by providing leadership and resources for qualified researchers to conduct research at the frontiers of high energy physics and related disciplines	-Support STEM-related initiatives to engage more students, particularly those who have not historically excelled in math and science.

Business/Civic Organizations

Organization	Overview of Organization	Actions of Support
Chicagoland Chamber of Commerce	The Chicagoland Chamber of Commerce is a private, non-profit business assistance and economic development organization dedicated to enhancing its members' success through aggressive programs in advocacy, member benefits, services, and information. The Chicagoland Chamber of Commerce has operated educational programs such as Future Founders, College Access Network, and School-to-Work.	-Participate in the planning, development, and implementation of programs of study in science and math to engage students and connect their academic and career interests. -Participate in the development and implementation of the STEM Learning Exchanges.
Illinois Biotechnology Industry Organization (iBio) and the **iBio Institute**	iBio is a life sciences industry association composed of a wide range of companies and business leaders. iBIO's mission is to make Illinois and the surrounding Midwest one of the world's top life sciences centers. iBio Institute is an educational-nonprofit dedicated to providing education, training, and research in biotechnology. The Institute seeks to build a top P-20 life sciences talent pipeline by facilitating alignment between the Illinois education system and the needs of industry. Institute programs encourage student interest in the sciences, facilitate interdisciplinary skill-building for students and educators, and raise public awareness of myriad life sciences career opportunities.	-Partner with the State on the Illinois Innovation Talent program, a STEM-focused, industry-led pilot program. -Serve as a partner in planning and implementation of STEM Learning Exchanges for health sciences and agriculture and natural resources. -Grow and leverage existing programs such as SCI: Science Career Investigation and TalentSparks! teacher professional development in biotechnology. -Support the development of STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and internship and career development opportunities for students.

Organization	Overview of Organization	Actions of Support
The Illinois Business Roundtable	Illinois Business Roundtable is a voluntary association of 63 chief executive officers of Illinois' leading businesses, formed to make recommendations and take action on critical public policy issues facing Illinois.	-Partner with the State to implement the NCRC program. -Participate in NCRC-related career development for students. -Work to promote NCRC as a tool for verification of workplace skills. -Provide resources and support for the development and implementation of STEM Learning Exchanges.
Vermillion Advantage	Vermilion Advantage is a member-based organization focused on strengthening and growing the economy of Vermilion County. Vermillion Advantage also provides educational programs to Vermilion County schools focused on math and science and character development to enhance students' career preparedness and workplace skills.	-Participate in planning, development, and implementation of math and science programs of study and STEM Learning Exchanges.

Business and Industry Leaders

Organization	Overview of Organization	Actions of Support
Astellas Pharma US, Inc.	Astellas Pharma US, Inc., is the U.S. affiliate of Japan's second-largest pharmaceutical company. The company's North American headquarters is located in Deerfield, Illinois. In the U.S., Astellas is intensely focused on cardiology, dermatology, immunology, infectious disease, and urology. Astellas is also committed to advancements within the field of oncology and other emerging therapeutic areas.	-Serve as a partner to implement the NCRC Program and STEM-related Programs of Study. -Serve as a partner in the planning and implementation of STEM Learning Exchanges for health sciences.
AT&T	AT&T is one of the world's leading producers of entertainment and communications products and services. The company's mission is to connect people and businesses to their world, everywhere they live and work.	-Work with the State and other stakeholders to implement Race to the Top initiatives, particularly STEM-related programs and the NCRC program.
Baxter International, Inc.	Baxter is a global healthcare company that assists healthcare professionals and their patients with treatment of complex medical conditions including hemophilia, immune disorders, kidney disease, trauma and other conditions. Baxter applies its expertise in medical devices, pharmaceuticals and biotechnology to make a meaningful difference in patients' lives	-Assist in implementation of the NCRC and STEM-related Programs of Study. -Help plan and implement STEM Learning Exchanges for Health Science. -Support the development of STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and internship and career development opportunities for students.

Organization	Overview of Organization	Actions of Support
Bison Gear & Engineering Corp.	Bison Gear & Engineering Corp. is a manufacturing firm with a strong engineering tradition that produces standard and custom-designed power transmission and motion-control products.	-Participate in the planning, development, and implementation of STEM programs of study and STEM Learning Exchanges.
BNSF Railway	BNSF Railway ships coal, agricultural products, consumer goods, and industrial products. BNSF Railway focuses on using speed, agility, and resourcefulness to help expand the global marketplace for goods and services.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Commonwealth Edison Company (ComEd)	ComEd is an energy utility company, and is also committed to long-term partnerships with the communities it serves. Through its education programs, ComEd focuses in encouraging student participation and professional development in the areas of energy, energy efficiency, and renewable energy.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
CSC Learning	Founded in Chicago in 1988, CSC Learning is a leader in e-learning and consulting in scientifically-based educational intervention for pre-K through post-secondary schools. CSC's mission is to assist educators in using scientifically-based e-learning tools for early prevention and targeted intervention to ensure that all students are successful.	-Support development and implementation of frameworks and processes for use of detailed student-growth data and implementation of new evaluations. -Provide teachers and principals with real-time access to data and intensive mentoring and training in the use of data to improve student growth. -Implement planning services and research-based web-delivered academic interventions for RTI. -Offer site, district, and regional professional development in the use of online formative assessments. -Develop and deliver training for teachers and principals through CSC's numerous existing partnerships with education cooperatives and professional organizations.
IBM	IBM is a global leader in the information technology industry. IBM's corporate citizenship activities focus on developing initiatives to address specific societal issues, such as the environment, community economic development, education, health, literacy, language, and culture. IBM is committed to creating innovative programs in these areas to assist communities around the world.	-Collaborate with the State to foster development and implementation of STEM-related Programs of Study.

Organization	Overview of Organization	Actions of Support
Legat Architects	Legat Architects is a sustainable design firm specializing in planning, architecture, and interior design.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Mervis Industries	Mervis Industries is a diversified, family-owned company dedicated to creating progressive solutions to the manufacturing, scrap management, and materials recycling needs of communities.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Michael A. Johl, LLC	-Michael A. Johl, LLC is a private consulting firm based in Northeastern Illinois that specializes in workforce, education, training, communication and government relations issues with a focus on the transportation sector.	-Support the implementation of a program of study and Learning Exchange dedicated to the transportation industry. -Bring together transportation industry leaders to open dialogue and create a viable long-term plan to support the development of future transportation industry leaders in Illinois.
Microsoft Corporation	Microsoft is a global leader in the information technology industry. The corporation is dedicated to using technology to effect societal change, including improving education, particularly in math and science. Microsoft works with partners around the world to invest in education IT infrastructure and personalized learning experiences for students.	-Support the development and implementation of Longitudinal Data Systems. -Participate in the design and outcomes of Learning Exchanges. -Facilitate sharing of best practices for teachers, administrators, and students. -Participate with the State's RTTT planning team on an ongoing basis, including participation by education and technical specialists. -Provide recommendations for technology tools to support RTTT programs. -Provide access to extended community-based programs to accelerate STEM adoption.
Northrop Grumman Corp.	Northrop Grumman is a leading global security company whose 120,000 employees provide innovative systems, products, and solutions in aerospace, electronics, information systems, shipbuilding, and technical services to government and commercial customers worldwide.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Pearson	Pearson is a global leader in educational publishing, providing scientifically research-based print and digital programs to help students learn.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.

Organization	Overview of Organization	Actions of Support
Promethean	Promethean is a global leader in interactive learning technology. Promethean creates, develops, supplies, and supports leading-edge classroom technology and supports the world's largest online community for teachers in that field. Promethean is dedicated to bringing 21st century learning to all students to improve engagement and results for both learners and teachers.	-Support the State's efforts to improve the use of standards and assessments, increase use of data, increase the effectiveness of teachers, and improve struggling schools. -Partner with ISBE to develop and implement proposed reforms. -Provide special pricing to bring updated technology to Illinois classrooms.
Rico Enterprises, Inc.	Rico Enterprises provides information technology solutions for government, businesses, educational institutions, and community organizations. The company's core services are technology sales, service, and consulting.	-Provide technology tools necessary to successfully prepare students to compete in the global market. -Develop, implement, and promote technology solutions to support educational programs, including hardware, software, training, maintenance services, and educational support. -Continue to serve on the Illinois P-20 Council.
Scholastic, Inc.	Scholastic is a global children's publishing, education, and media company with a corporate mission of helping children around the world read and learn. Scholastic is also committed to social responsibility and educational outreach, demonstrated by its diverse partnerships and efforts to address critical community issues, with an emphasis on reading and literacy.	-Partner with ISBE to improve literacy and math achievement and reduce dropout rates. -Continue efforts of Scholastic staff who work in classrooms, with an emphasis on serving below-proficient students. -Implement research-based, data-centric best practices designed to engage struggling students in literacy and math intervention models. -Provide support to educators through Scholastic's professional development team.
Takeda Pharmaceuticals	Takeda is a research-based global pharmaceutical company. Takeda is committed to striving toward better health for individuals and progress in medicine by developing superior pharmaceutical products.	-Support the NCRC and STEM-related Programs of Study. -Support the work of the iBio Institute to implement and grow STEM-focused educational programs and professional development.
The Security Board	The Security Board is a consulting company focused on assisting both private and public institutions to identify and secure their critical infrastructures.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.

Professional and Trade Associations and Other Unions

Organization	Overview of Organization	Actions of Support

Organization	Overview of Organization	Actions of Support
Alliance for Illinois Manufacturing	The Alliance for Illinois Manufacturing is a collaboration of tax-payer-supported and non-profit organizations that leverages, coordinates, and focuses collective resources into integrated solutions that transform Northeast Illinois manufacturers into globally competitive companies. The Alliance for Illinois Manufacturing impacts low income, economically disadvantaged communities in Northeast Illinois through the retention and growth of a high wage manufacturing employment base.	-Participate in the planning, development, and implementation of STEM Programs of Study and STEM Learning Exchanges.
Computing Technology Industry Association (CompTIA)	CompTIA is a non-profit trade association advancing the global interests of information technology professionals and companies including manufacturers, distributors, resellers, and educational institutions. CompTIA provides support and leadership to the global IT industry through educational programs, market research, networking events, professional certifications, and political advocacy.	-Serve as a partner to implement STEM-related Programs of Study and STEM Learning Exchanges.
Council of Supply Chain Management Professionals (CSCMP)	CSCMP is a worldwide professional organization of supply chain management professionals. CSCMP provides leadership, education, networking, research, communication, and other services to enhance the supply chain management profession.	-Support planning and implementation of supply chain, transportation, distribution and logistics education curriculum. -Develop e-learning curriculum resources. -Support implementation of professional development programs for teachers. -Expand internship and career development opportunities for students. -Provide industry personnel and resources to support RTTT initiatives. -Provide assistance to companies to promote knowledge and involvement in educational reforms.
Illinois Academy of Physician Assistants (IAPA)	IAPA is dedicated to providing information, education, resources, and governmental advocacy to support the physician assistant profession.	-Participate in the planning, development, and implementation of programs of study in STEM areas and the STEM Learning Exchanges.

Organization	Overview of Organization	Actions of Support
Illinois AFL-CIO	The Illinois AFL-CIO represents one million union members, including three teachers' unions and a school administrator's union. The Illinois AFL-CIO helps improve the lives of working men and women by promoting the rights of workers to join a union and making sure their voices are heard at the state capitol. In addition to a full-time presence in Springfield fighting for strong labor laws, the Illinois AFL-CIO also helps shape political dialog around issues that affect workers.	-Serve as a partner with the State in the planning and implementation of the STEM Learning Exchange for Architecture and Construction. -Support the development of STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and internship and career development opportunities for students.
Illinois Manufacturers' Association (IMA)	IMA is the largest state manufacturing trade association in the United States, with 4,300 members. IMA is dedicated to providing timely and accurate information on the actions taken by Illinois lawmakers in the General Assembly and other branches of government that affect manufacturing and its related sectors and working to improve Illinois' business climate.	-Participate as a STEM Learning Exchange leader for the manufacturing sector. -Participate in the development and implementation of manufacturing-related Programs of Study.
Metropolitan Chicago Healthcare Council (MCHC)	MCHC is a membership and service association comprising more than 140 hospitals and health care organizations working together to improve the delivery of health care services in the Chicago area. The Council's membership consists of hospitals, physician groups, nursing homes, outpatient treatment centers, insurers, medical schools, and other health care organizations.	-Assist in implementation of the NCRC program and STEM-related Programs of Study throughout Illinois. -Partner with the State in implementation of the STEM Learning Exchanges in health sciences. -Support the development of STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and internship and career development opportunities for students.
Tooling & Manufacturing Association (TMA)	TMA supports the tooling and manufacturing industry by providing educational opportunities, industry representation, and services to represent and promote the interests of member companies, foster members' global competitiveness, and serve as a forum for the exchange of ideas and information.	-Serve as a partner to implement STEM-related programs of study and STEM Learning Exchanges.

Appendix A3-1

Data on State Progress

A. NAEP Data

B. ISAT Data

C. PSAE Data

D. High School Graduation Data

E. Information on Cut Scores

A. NAEP Data

National Center for Education Statistics (NCES)

Institute of Education Sciences (IES)

National Assessment of Educational Progress (NAEP)

This report was generated using the NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/naepdata/

Report 1: Table

Percentages at each achievement level for reading, grade 4, by year, jurisdiction, and All students [TOTAL]: 2003, 2005, and 2007

		All students			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	34.95	32.89	24.19	7.97
2005	Illinois	37.78	32.82	22.65	6.76
2003	Illinois	38.76	30.42	23.11	7.71

NOTE: Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 2: Table

Percentages at each achievement level for reading, grade 4, by year, jurisdiction, and Natl School Lunch Prog eligibility (3 categories) [SLUNCH3]: 2003, 2005, and 2007

		Eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	52.37	31.64	13.55	2.44
2005	Illinois	59.33	27.43	11.26	1.99
2003	Illinois	59.13	27.07	11.64	2.16

		Not eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	21.33	33.87	32.51	12.30
2005	Illinois	22.14	36.65	30.97	10.24
2003	Illinois	21.82	33.20	32.70	12.28

		Info not available			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	54.60	28.04	13.54	3.82

‡ Reporting standards not met.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 3: Table

Percentages at each achievement level for reading, grade 4, by year, jurisdiction, and Race/ethnicity (from school records) [SDRACE]: 2003, 2005, and 2007

White

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	23.30	34.26	30.91	11.54
2005	Illinois	21.81	36.62	31.48	10.09
2003	Illinois	25.66	32.66	30.29	11.39

Black

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	56.26	29.48	12.55	1.71
2005	Illinois	64.59	25.94	8.18	1.30
2003	Illinois	63.94	25.63	8.85	1.58

Hispanic

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	50.07	32.22	14.68	3.03
2005	Illinois	56.38	29.60	11.81	2.21
2003	Illinois	57.86	27.35	13.16	1.64

Asian/Pacific Island

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	13.14	33.03	37.48	16.35
2005	Illinois	24.81	31.01	31.70	12.48
2003	Illinois	16.08	37.92	34.99	11.02

American Indian

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

Unclassified

Year	Jurisdiction	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

‡ Reporting standards not met.

NOTE: Black includes African American, Hispanic includes Latino, Pacific Islander includes Native Hawaiian, and American Indian includes Alaska Native.

Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 4: Table

Percentages at each achievement level for reading, grade 4, by year, jurisdiction, and Student classified as English Language Learner (2 categories) [LEP]: 2003, 2005, and 2007

Year	Jurisdiction	Below basic	ELL At basic	At proficient	At advanced
2007	Illinois	76.64	20.00	3.09	0.27
2005	Illinois	81.73	14.67	3.25	0.35
2003	Illinois	78.42	16.28	4.28	1.02

Year	Jurisdiction	Below basic	Not ELL At basic	At proficient	At advanced
2007	Illinois	31.65	33.91	25.86	8.58
2005	Illinois	34.34	34.22	24.17	7.27
2003	Illinois	36.43	31.24	24.22	8.10

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 5: Table

Percentages at each achievement level for reading, grade 4, by year, jurisdiction, and Student classified as having a disability, including 504 [IEP]: 2003, 2005, and 2007

Year	Jurisdiction	Below basic	SD At basic	At proficient	At advanced
2007	Illinois	63.20	22.48	10.50	3.82
2005	Illinois	64.33	20.84	11.75	3.08
2003	Illinois	68.51	20.30	9.52	1.66

Year	Jurisdiction	Below basic	Not SD At basic	At proficient	At advanced
2007	Illinois	31.59	34.13	25.82	8.46
2005	Illinois	35.19	33.98	23.71	7.12
2003	Illinois	34.96	31.73	24.85	8.46

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

National Center for Education Statistics (NCES)

Institute of Education Sciences (IES)

National Assessment of Educational Progress (NAEP)

This report was generated using the NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/naepdata/

Report 1: Table

Percentages at each achievement level for reading, grade 8, by year, jurisdiction, and All students [TOTAL]: 2003, 2005, and 2007

		All students			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	25.12	45.08	27.46	2.34
2005	Illinois	25.37	43.59	28.34	2.71
2003	Illinois	23.06	42.41	31.07	3.46

NOTE: Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 2: Table

Percentages at each achievement level for reading, grade 8, by year, jurisdiction, and Natl School Lunch Prog eligibility (3 categories) [SLUNCH3]: 2003, 2005, and 2007

		Eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	39.24	46.00	14.18	0.58
2005	Illinois	40.63	44.49	14.38	0.49
2003	Illinois	41.05	43.86	14.45	0.63

		Not eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	16.09	44.48	35.95	3.48
2005	Illinois	16.18	43.07	36.74	4.02
2003	Illinois	12.88	41.25	40.67	5.20

		Info not available			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	25.32	47.91	25.80	0.96

Rounds to zero.

‡ Reporting standards not met.

NOTE: Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 3: Table

Percentages at each achievement level for reading, grade 8, by year, jurisdiction, and Race/ethnicity (from school records) [SDRACE]: 2003, 2005, and 2007

			White		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	17.19	44.60	34.88	3.32
2005	Illinois	16.46	44.13	36.03	3.38
2003	Illinois	13.46	41.83	39.79	4.92

			Black		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	45.66	44.45	9.70	0.19
2005	Illinois	47.00	40.71	11.42	0.86
2003	Illinois	43.60	43.25	12.91	0.25

			Hispanic		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	35.87	48.57	15.20	0.36
2005	Illinois	35.01	46.15	17.69	1.15
2003	Illinois	39.36	44.97	15.14	0.54

			Asian/Pacific Island		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	13.10	40.90	41.61	4.39
2005	Illinois	7.98	43.38	40.23	8.41
2003	Illinois	13.34	33.89	44.61	8.16

			American Indian		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

			Unclassified		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

NOTE: Black includes African American, Hispanic includes Latino, Pacific Islander includes Native Hawaiian, and American Indian includes Alaska Native.

Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 4: Table

Percentages at each achievement level for reading, grade 8, by year, jurisdiction, and Student classified as English Language Learner (2 categories) [LEP]: 2003, 2005, and 2007

			ELL		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	75.10	22.34	2.56	0.00
2005	Illinois	66.35	27.35	6.30	0.00
2003	Illinois	67.01	26.66	6.33	0.00

			Not ELL		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	23.86	45.65	28.08	2.40
2005	Illinois	24.73	43.84	28.68	2.75
2003	Illinois	21.88	42.71	31.83	3.58

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

Report 5: Table

Percentages at each achievement level for reading, grade 8, by year, jurisdiction, and Student classified as having a disability, including 504 [IEP]: 2003, 2005, and 2007

			SD		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	64.64	27.04	7.45	0.88
2005	Illinois	61.84	31.20	6.96	0.00
2003	Illinois	59.72	35.17	5.03	0.09

			Not SD		
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2007	Illinois	20.56	47.16	29.76	2.51
2005	Illinois	20.69	45.18	31.08	3.05
2003	Illinois	18.42	43.25	34.43	3.90

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005 and 2007 Reading Assessments.

National Center for Education Statistics (NCES)

Institute of Education Sciences (IES)

National Assessment of Educational Progress (NAEP)

This report was generated using the NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/naepdata/

Report 1: Table

Percentages at each achievement level for mathematics, grade 4, by year, jurisdiction, and All students [TOTAL]: 2003, 2005, 2007, and 2009

		All students			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	20.44	41.93	30.93	6.70
2007	Illinois	21.35	42.32	30.72	5.60
2005	Illinois	26.07	42.31	27.06	4.57
2003	Illinois	27.05	41.42	26.74	4.79

NOTE: Detail may not sum to totals because of rounding.
Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 2: Table

Percentages at each achievement level for mathematics, grade 4, by year, jurisdiction, and Natl School Lunch Prog eligibility (3 categories) [SLUNCH3]: 2003, 2005, 2007, and 2009

		Eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	34.20	47.85	16.84	1.11
2007	Illinois	36.19	46.88	16.10	0.82
2005	Illinois	44.01	41.23	13.38	1.37
2003	Illinois	47.53	41.52	10.21	0.74

		Not eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	8.68	36.87	42.95	11.49
2007	Illinois	9.73	38.77	42.15	9.34
2005	Illinois	11.58	43.16	38.09	7.16
2003	Illinois	10.93	41.17	39.89	8.01

		Info not available			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	‡	‡	‡	‡
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	40.87	44.05	13.58	1.51

‡ Reporting standards not met.
NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 3: Table

Percentages at each achievement level for mathematics, grade 4, by year, jurisdiction, and Race/ethnicity (from school records) [SDRACE]: 2003, 2005, 2007, and 2009

		White			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	9.52	38.87	42.10	9.51
2007	Illinois	8.94	40.84	42.11	8.11
2005	Illinois	11.30	44.48	37.74	6.48
2003	Illinois	12.55	43.11	36.95	7.39

		Black			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	45.82	43.26	10.30	0.62
2007	Illinois	45.99	44.58	9.04	0.40
2005	Illinois	53.78	37.28	8.40	0.54
2003	Illinois	55.92	37.02	6.73	0.33

		Hispanic			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	28.03	51.67	18.82	1.47
2007	Illinois	35.81	45.24	17.60	1.35
2005	Illinois	41.11	44.57	13.59	0.73
2003	Illinois	45.21	41.99	12.31	0.49

		Asian/Pacific Island			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	2.96	23.87	48.05	25.13
2007	Illinois	5.11	32.40	45.04	17.45
2005	Illinois	7.50	26.03	46.46	20.01
2003	Illinois	7.78	34.57	48.76	8.88

		American Indian			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	‡	‡	‡	‡
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

		Unclassified			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	18.96	42.50	32.19	6.35
2007	Illinois	23.04	50.40	21.50	5.06
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

NOTE: Black includes African American, Hispanic includes Latino, Pacific Islander includes Native Hawaiian, and American Indian includes Alaska Native.

Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 4: Table

Percentages at each achievement level for mathematics, grade 4, by year, jurisdiction, and Student classified as English Language Learner (2 categories) [LEP]: 2003, 2005, 2007, and 2009

		ELL			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	47.18	42.20	9.82	0.80
2007	Illinois	49.84	41.52	7.89	0.76
2005	Illinois	63.80	30.99	4.40	0.80
2003	Illinois	65.56	29.81	4.55	0.09

		Not ELL			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	18.46	41.91	32.49	7.14
2007	Illinois	18.86	42.40	32.72	6.03
2005	Illinois	22.42	43.45	29.20	4.93
2003	Illinois	23.89	42.36	28.58	5.17

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 5: Table

Percentages at each achievement level for mathematics, grade 4, by year, jurisdiction, and Student classified as having a disability, excluding 504 [IEP2009]: 2003, 2005, 2007, and 2009

		SD			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	39.53	37.41	18.98	4.08
2007	Illinois	—	—	—	—
2005	Illinois	—	—	—	—
2003	Illinois	—	—	—	—

		Not SD (including 504)			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	17.74	42.57	32.62	7.07
2007	Illinois	—	—	—	—
2005	Illinois	—	—	—	—
2003	Illinois	—	—	—	—

— Not available.

‡ Reporting standards not met.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

National Center for Education Statistics (NCES)

Institute of Education Sciences (IES)

National Assessment of Educational Progress (NAEP)

This report was generated using the NAEP Data Explorer. http://nces.ed.gov/nationsreportcard/naepdata/

Report 1: Table

Percentages at each achievement level for mathematics, grade 8, by year, jurisdiction, and All students [TOTAL]: 2003, 2005, 2007, and 2009

		All students			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	27.38	39.54	25.89	7.19
2007	Illinois	29.70	39.52	23.81	6.98
2005	Illinois	31.70	39.72	23.17	5.41
2003	Illinois	33.53	37.22	23.35	5.89

NOTE: Detail may not sum to totals because of rounding.
Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 2: Table

Percentages at each achievement level for mathematics, grade 8, by year, jurisdiction, and Natl School Lunch Prog eligibility (3 categories) [SLUNCH3]: 2003, 2005, 2007, and 2009

		Eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	46.95	38.59	12.77	1.69
2007	Illinois	48.72	38.37	11.34	1.58
2005	Illinois	53.86	36.21	9.23	0.71
2003	Illinois	56.54	33.15	9.39	0.93

		Not eligible			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	15.08	40.14	34.14	10.65
2007	Illinois	17.36	40.27	31.89	10.48
2005	Illinois	18.03	41.81	31.82	8.34
2003	Illinois	18.95	39.97	32.02	9.05

		Info not available			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	‡	‡	‡	‡
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	43.45	32.41	20.51	3.64

‡ Reporting standards not met.
NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 3: Table

Percentages at each achievement level for mathematics, grade 8, by year, jurisdiction, and Race/ethnicity (from school records) [SDRACE]: 2003, 2005, 2007, and 2009

		White			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	14.64	41.57	33.58	10.21
2007	Illinois	18.54	40.82	31.26	9.39
2005	Illinois	18.14	43.25	31.02	7.59
2003	Illinois	19.94	40.04	31.56	8.46

		Black			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	58.57	32.57	8.13	0.73
2007	Illinois	59.30	34.02	6.29	0.39
2005	Illinois	66.12	27.94	5.69	0.25
2003	Illinois	65.53	28.11	5.89	0.47

		Hispanic			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	40.56	42.41	15.91	1.12
2007	Illinois	44.87	42.31	11.81	1.01
2005	Illinois	44.88	41.86	12.24	1.02
2003	Illinois	52.32	38.96	8.32	0.41

		Asian/Pacific Island			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	10.75	29.57	40.65	19.03
2007	Illinois	12.84	32.02	32.11	23.03
2005	Illinois	9.91	39.87	35.37	14.85
2003	Illinois	11.17	30.45	43.14	15.24

		American Indian			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	‡	‡	‡	‡
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

		Unclassified			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	‡	‡	‡	‡
2007	Illinois	‡	‡	‡	‡
2005	Illinois	‡	‡	‡	‡
2003	Illinois	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

NOTE: Black includes African American, Hispanic includes Latino, Pacific Islander includes Native Hawaiian, and American Indian includes Alaska Native.

Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 4: Table

Percentages at each achievement level for mathematics, grade 8, by year, jurisdiction, and Student classified as English Language Learner (2 categories) [LEP]: 2003, 2005, 2007, and 2009

		ELL			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	68.29	24.32	7.14	0.25
2007	Illinois	56.32	31.64	9.05	2.98
2005	Illinois	69.61	21.93	5.51	2.96
2003	Illinois	79.88	16.39	3.73	0.00

		Not ELL			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	26.22	39.98	26.42	7.39
2007	Illinois	28.85	39.77	24.28	7.10
2005	Illinois	30.94	40.08	23.52	5.46
2003	Illinois	31.47	38.17	24.21	6.16

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

Report 5: Table

Percentages at each achievement level for mathematics, grade 8, by year, jurisdiction, and Student classified as having a disability, excluding 504 [IEP2009]: 2003, 2005, 2007, and 2009

		SD			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	63.89	28.90	6.44	0.77
2007	Illinois	—	—	—	—
2005	Illinois	—	—	—	—
2003	Illinois	—	—	—	—

		Not SD (including 504)			
Year	**Jurisdiction**	Below basic	At basic	At proficient	At advanced
2009	Illinois	22.98	40.83	28.23	7.96
2007	Illinois	—	—	—	—
2005	Illinois	—	—	—	—
2003	Illinois	—	—	—	—

— Not available.

‡ Reporting standards not met.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, 2007, and 2009 Mathematics Assessments.

B. ISAT Data

ISAT Data 2003-2009: % Students Meets & Exceeds

Reading		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race.	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 3	62.0	58.8	65.5	76.0	34.7	49.3	82.5	59.0	63.2	38.0	62.3	25.5	32.2	66.7	41.6	75.1
2004	Grade 3	65.0	62.0	68.3	76.9	39.0	55.8	85.3	59.6	71.6	60.5	65.1	50.0	35.6	69.9	46.2	78.3
2005	Grade 3	66.6	64.1	69.3	78.2	41.2	55.6	84.1	70.4	68.7	58.0	66.7	56.5	38.6	71.3	48.3	79.6
2006	Grade 3	70.7	66.5	75.1	80.4	48.4	62.2	87.9	74.5	68.3	66.3	70.7	56.8	39.8	75.8	54.2	82.4
2007	Grade 3	73.0	68.7	77.4	82.4	50.5	65.7	89.8	78.9	72.8	66.8	73.0	67.1	42.9	77.9	57.2	84.3
2008	Grade 3	71.7	67.7	76.0	83.6	55.3	55.2	87.2	75.6	75.3	42.5	75.7	59.6	42.8	76.1	56.8	84.9
2009	Grade 3	72.2	68.6	75.9	83.9	56.9	54.9	87.7	77.1	77.2	43.4	76.4	61.9	41.7	76.7	57.6	85.6
2006	Grade 4	72.9	68.3	77.7	81.8	50.0	68.2	88.8	79.6	73.4	63.8	73.0	66.0	39.7	78.6	58.0	83.6
2007	Grade 4	73.7	70.6	76.9	82.5	50.3	68.5	90.6	71.2	73.3	77.7	73.6	61.7	41.1	79.3	58.0	84.6
2008	Grade 4	73.2	69.7	76.9	83.8	56.2	59.4	87.6	73.6	75.8	38.4	76.6	60.0	41.2	78.3	58.7	85.1
2009	Grade 4	73.8	70.3	77.4	84.5	55.8	60.1	89.3	79.7	76.5	39.3	77.2	53.8	40.4	79.1	59.3	86.7
2003	Grade 5	60.4	58.6	62.3	73.5	35.9	42.2	78.9	64.4	64.6	12.3	62.4	32.7	25.3	66.1	40.0	73.4
2004	Grade 5	60.9	58.8	63.0	71.7	36.6	49.9	79.7	66.3	63.2	49.5	61.3	36.8	24.9	67.1	42.2	73.7
2005	Grade 5	62.8	60.9	64.7	73.6	38.6	54.0	81.8	67.3	64.8	53.1	63.1	30.8	26.7	68.7	45.6	75.3
2006	Grade 5	68.5	64.7	72.4	79.2	42.2	61.7	86.5	74.1	70.0	49.6	68.6	55.1	30.8	74.7	51.4	80.8
2007	Grade 5	69.7	66.0	73.5	79.2	44.8	64.3	87.7	70.4	70.3	65.1	69.8	67.2	33.6	75.7	53.1	81.5
2008	Grade 5	73.5	70.1	77.2	84.7	55.8	58.2	87.6	73.1	76.1	32.5	76.9	50.0	38.5	79.1	58.0	86.0
2009	Grade 5	73.5	70.2	77.1	84.3	55.6	59.8	87.9	79.0	76.3	33.4	76.5	50.0	37.6	79.2	58.6	86.2
2006	Grade 6	72.8	68.2	77.6	83.1	54.2	61.0	89.4	75.6	75.5	32.3	73.5	48.0	33.0	79.3	57.9	84.2
2007	Grade 6	73.4	69.8	77.1	83.4	53.4	62.2	90.6	77.1	76.1	36.6	75.0	61.5	34.2	79.7	57.9	85.0
2008	Grade 6	79.0	75.7	82.6	86.0	63.4	67.9	91.8	80.2	82.6	37.0	81.6	46.2	43.0	84.6	66.3	89.0
2009	Grade 6	79.9	76.8	83.1	88.4	64.9	69.4	92.0	79.8	80.9	41.1	82.2	44.0	43.9	85.4	68.0	89.8
2006	Grade 7	72.0	68.3	75.8	80.8	52.7	63.2	88.8	77.8	72.5	33.3	72.5	67.7	29.6	79.0	57.2	82.3
2007	Grade 7	73.4	69.4	77.6	82.4	54.6	64.4	90.6	78.5	76.1	39.8	74.4	69.8	31.7	80.3	59.0	83.9
2008	Grade 7	77.7	73.8	81.8	85.5	63.7	67.6	91.5	79.6	79.7	34.9	79.7	41.3	38.0	83.8	65.3	87.0
2009	Grade 7	77.5	73.3	81.9	85.6	63.1	66.8	90.5	80.9	79.9	33.7	79.6	53.6	36.3	83.4	65.1	87.2
2003	Grade 8	63.7	58.7	69.0	72.9	45.4	46.9	79.8	54.7	59.6	14.7	64.3	19.5	19.5	71.1	46.0	72.3
2004	Grade 8	67.1	62.5	71.9	76.3	48.3	51.3	81.5	72.0	66.5	28.9	67.6	36.8	24.2	74.6	49.8	76.9
2005	Grade 8	72.7	70.6	74.9	82.2	53.7	59.7	86.8	73.7	73.4	35.0	73.2	64.0	30.9	80.0	56.8	82.9
2006	Grade 8	79.2	75.1	82.4	86.3	63.6	71.1	91.9	80.7	80.2	38.7	79.6	63.3	37.6	85.2	66.8	87.2
2007	Grade 8	81.8	77.6	86.1	87.1	69.8	76.2	93.7	82.3	83.0	52.0	82.3	73.7	40.8	88.6	71.8	88.5
2008	Grade 8	81.4	77.5	85.5	86.2	68.7	73.5	92.5	81.7	84.8	40.4	82.9	54.8	42.4	87.5	70.4	89.4
2009	Grade 8	83.6	80.4	87.0	89.8	70.7	77.4	93.6	82.1	85.1	46.8	85.2	53.6	46.2	89.3	73.6	91.3

ISAT Data 2003-2009: % Students Meets & Exceeds

Math		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 3	75.7	75.5	76.1	88.5	48.8	69.4	93.4	78.6	77.9	57	75.9	48.2	55.1	79	57.8	87.2
2004	Grade 3	79.2	79.1	79.2	89.7	53.7	76.0	94.7	78.4	85.8	79.4	79.2	61.8	59.7	82.4	63.3	90.3
2005	Grade 3	79.2	79.4	79.0	89.1	54.9	74.9	94.0	77.2	81.9	79.7	79.2	62.6	60.1	82.4	64.3	89.9
2006	Grade 3	85.6	85.0	86.2	93.1	66.6	82.7	96.8	86.6	84.4	85.7	85.5	90.9	65.7	88.7	74.3	93.7
2007	Grade 3	86.8	86.3	87.2	93.9	68.1	84.8	97.1	90.5	87.3	84.8	86.8	88.6	70.0	89.5	76.2	94.4
2008	Grade 3	85.1	84.8	85.5	93.6	68.3	78.1	95.9	92.0	87.7	72.9	86.9	90.6	67.8	87.7	75.2	94.0
2009	Grade 3	85.2	85.0	85.5	93.3	69.9	77.7	95.5	87.8	88.0	73.2	87.0	79.5	66.2	88.0	75.9	94.0
2006	Grade 4	84.8	84.1	85.6	92.1	64.3	83.5	96.2	89.5	85.5	80.6	84.8	80.0	62.0	88.7	73.6	92.8
2007	Grade 4	86.4	85.4	87.4	92.7	68.0	85.6	96.7	84.7	85.9	90.1	86.3	91.7	64.5	90.1	76.4	93.3
2008	Grade 4	84.6	83.9	85.3	92.5	69.0	76.8	95.1	84.3	86.6	64.8	86.6	78.9	63.8	87.9	74.6	92.9
2009	Grade 4	85.7	85.0	86.5	92.8	71.0	79.5	95.6	90.3	86.7	68.3	87.5	87.2	64.0	89.2	76.7	93.8
2003	Grade 5	68.3	67.5	69.3	81.3	40.2	55.3	89.0	69.6	71.9	28.9	69.9	45.1	35.2	73.8	49.1	80.6
2004	Grade 5	71.8	70.8	72.8	82.5	44.1	67.0	91.5	75.7	68.8	69.4	71.9	57.9	39.0	77.5	54.2	83.8
2005	Grade 5	73.1	72.1	74.2	83.9	46.3	69.2	92.1	76.9	74.0	70.3	73.2	56.0	41.7	78.6	56.6	85.3
2006	Grade 5	78.6	78.2	79.0	88.1	52.4	76.8	94.4	82.8	79.4	68.1	78.7	69.4	50.3	83.2	64.2	89.0
2007	Grade 5	82.5	81.4	83.7	90.1	60.2	81.6	96.2	80.7	83.0	81.6	82.6	81.3	55.9	86.9	70.6	91.1
2008	Grade 5	81.4	80.3	82.4	89.8	63.1	74.0	94.4	80.9	81.8	58.9	83.2	67.8	54.5	85.6	70.0	90.5
2009	Grade 5	82.4	81.3	83.6	90.3	65.7	75.5	94.1	84.8	83.4	58.2	84.3	68.6	54.8	86.8	72.0	91.4
2006	Grade 6	79.1	77.6	80.6	89.0	56.0	74.7	94.8	83.6	80.4	53.9	79.5	60.0	45.6	84.5	65.5	89.5
2007	Grade 6	81.4	79.8	83.1	89.6	60.8	77.4	96.0	82.8	82.8	62.9	82.3	65.4	49.2	86.6	69.6	90.4
2008	Grade 6	82.6	80.9	84.5	90.9	63.6	77.1	94.8	81.9	84.9	57.9	84.2	67.3	52.0	87.3	71.6	91.4
2009	Grade 6	82.4	80.8	84.1	90.2	65.4	75.9	94.5	81.5	81.9	55.8	84.1	65.6	50.7	87.3	71.9	91.2
2006	Grade 7	76.1	74.6	77.6	85.7	52.4	70.1	93.9	78.6	75.5	45.8	76.5	64.5	36.1	82.7	61.2	86.5
2007	Grade 7	79.4	78.3	80.5	88.1	58.2	75.0	95.2	77.6	80.4	58.0	80.1	73.4	41.9	85.6	66.5	88.8
2008	Grade 7	80.4	79.1	81.8	88.8	59.7	75.4	94.1	81.9	81.8	54.3	81.7	58.7	45.2	85.8	68.4	89.4
2009	Grade 7	82.8	80.8	84.8	90.2	64.7	78.1	94.6	86.4	83.3	56.8	84.1	69.8	47.7	88.1	72.4	91.0
2003	Grade 8	53.1	52.8	53.4	65.7	23.0	35.5	78.8	43.8	46.2	17.7	53.4	22.0	13.0	59.8	30.3	64.1
2004	Grade 8	54.4	53.8	55.1	66.7	24.6	38.7	81.0	55.4	46.4	25.4	54.8	33.3	13.8	61.5	32.4	66.9
2005	Grade 8	54.3	53.9	54.9	67.3	24.9	39.3	82.2	50.6	52.9	25.9	54.7	42.3	15.1	61.2	32.3	66.4
2006	Grade 8	78.2	76.8	79.8	87.0	56.1	72.2	94.6	81.0	78.3	48.6	78.6	83.3	37.7	85.1	64.1	87.4
2007	Grade 8	81.3	79.7	82.9	89.0	61.5	76.8	95.5	78.5	82.5	57.3	81.7	71.4	42.0	87.8	69.0	89.5
2008	Grade 8	80.4	79.2	81.6	88.9	60.9	74.5	93.9	82.2	81.3	52.7	81.5	53.5	43.2	86.1	68.2	89.2
2009	Grade 8	81.7	80.5	83.0	89.3	63.6	76.3	94.0	82.1	82.7	54.4	82.9	53.6	44.7	87.3	70.6	90.2

ISAT Data 2003-2009: % Students Meets & Exceeds

Science		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 4	66.5															
2004	Grade 4	67.8															
2005	Grade 4	71.4	72.6	70.1	85.1	38.7	62.9	87.9	75.1	75.9	65.8	71.5	77.3	55.2	74.2	52.2	84.9
2006	Grade 4	79.8	79.4	80.3	90.9	51.2	74.9	93.0	89.5	81.7	71.3	79.9	75.5	62.7	82.7	64.2	91.0
2007	Grade 4	79.8	79.5	80.0	90.3	51.7	74.8	93.3	82.0	80.6	82.1	79.7	78.3	61.7	82.8	64.2	90.5
2008	Grade 4	76.2	76.0	76.3	89.3	52.9	61.7	88.1	77.8	79.9	43.7	79.4	60.7	58.9	78.9	60.6	89.0
2009	Grade 4	76.8	76.6	77.0	89.3	53.1	63.9	90.0	84.7	80.6	48.0	79.7	66.7	57.5	79.8	62.0	90.0
2003	Grade 7	73.7															
2004	Grade 7	74.4															
2005	Grade 7	74.6	74.9	74.2	86.7	49.2	60.6	90.2	74.0	80.1	39.8	75.5	41.3	44.9	79.6	57.1	86.2
2006	Grade 7	80.9	79.7	82.2	89.6	61.6	73.1	94.0	84.8	81.6	47.2	81.4	71.0	48.7	86.2	68.3	89.7
2007	Grade 7	79.3	79.1	79.5	89.8	57.0	70.2	93.9	85.3	82.5	47.8	80.3	92.1	48.2	84.4	64.9	89.8
2008	Grade 7	79.1	79.4	78.9	89.7	58.8	67.6	91.9	85.9	81.6	38.8	81.2	45.7	49.3	83.7	65.0	89.7
2009	Grade 7	79.5	79.1	79.8	90.0	59.4	67.7	91.8	83.8	81.8	39.3	81.6	64.3	49.3	84.0	65.9	90.1

GAP Reading		Black/ White	Hispanic/ White	LEP/ non-LEP	IEP/ non-IEP	Low/ not Low
2005	Grade 3	32.0	18.2	4.4	36.0	28.2
2007	Grade 3	31.9	16.6	6.2	35.0	27.2
2008	Grade 3	28.3	28.4	33.2	33.3	28.1
2009	Grade 3	26.9	29.0	33.1	34.9	28.2
2005	Grade 4	31.8	13.6	9.2	38.8	25.6
2007	Grade 4	32.3	14.1	-4.1	38.2	26.7
2008	Grade 4	27.6	24.4	38.2	37.2	26.4
2009	Grade 4	28.6	24.3	37.8	38.6	27.4
2005	Grade 5	37.0	17.4	19.1	43.8	29.4
2007	Grade 5	34.3	14.9	4.7	42.0	28.4
2008	Grade 5	28.9	26.5	44.3	40.6	28.0
2009	Grade 5	28.6	24.4	43.2	41.6	27.6
2005	Grade 6	28.9	22.1	41.2	46.3	26.2
2007	Grade 6	30.0	21.2	38.4	45.5	27.0
2008	Grade 6	24.6	20.2	44.6	41.6	22.7
2009	Grade 6	23.5	19.0	41.2	41.5	21.8
2005	Grade 7	28.1	17.6	39.2	49.4	25.1
2007	Grade 7	27.7	18.0	34.6	48.6	24.8
2008	Grade 7	21.8	17.9	44.8	45.7	21.7

GAP Math		Black/ White	Hispanic/ White	LEP/ non-LEP	IEP/ non-IEP	Low/ not Low
2005	Grade 3	26.5	10.4	-0.1	22.0	19.4
2007	Grade 3	25.8	9.1	2.0	19.5	18.1
2008	Grade 3	25.2	15.5	14.0	19.9	18.8
2009	Grade 3	23.4	15.6	13.8	21.8	18.0
2005	Grade 4	27.8	8.6	4.3	26.7	19.2
2007	Grade 4	24.8	7.2	-3.8	25.6	16.9
2008	Grade 4	23.5	15.7	21.8	24.1	18.3
2009	Grade 4	21.8	13.3	19.3	25.2	17.2
2005	Grade 5	35.7	11.3	10.6	32.9	24.9
2007	Grade 5	30.0	8.5	1.0	31.0	20.5
2008	Grade 5	26.7	15.8	24.3	31.1	20.5
2009	Grade 5	24.6	14.7	26.1	31.9	19.4
2005	Grade 6	33.0	14.3	25.6	38.9	24.0
2007	Grade 6	28.8	12.2	19.3	37.5	20.7
2008	Grade 6	27.3	13.8	26.3	35.3	19.8
2009	Grade 6	24.9	14.3	28.3	36.6	19.3
2005	Grade 7	33.4	15.7	30.7	46.5	25.3
2007	Grade 7	29.9	13.1	22.1	43.7	22.3
2008	Grade 7	29.1	13.4	27.5	40.6	21.0

ISAT Data 2003-2009: % Students Meets & Exceeds

2009	Grade 7	22.4	18.8	45.9	45.2	22.2	2009	Grade 7	25.5	12.1	27.3	40.4	18.6
2006	Grade 8	22.7	15.2	40.9	48.6	20.4	2006	Grade 8	30.9	14.7	29.9	47.4	23.4
2007	Grade 8	17.3	10.9	30.3	47.9	16.6	2007	Grade 8	27.5	12.2	24.4	45.8	20.5
2008	Grade 8	19.5	14.7	42.5	45.1	19.0	2008	Grade 8	28.0	14.4	28.7	42.9	20.9
2009	Grade 8	19.1	12.4	38.4	43.1	17.7	2009	Grade 8	25.7	13.0	28.5	42.6	19.6

Reading		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race.	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2006	Grade3-8	72.7	68.8	76.9	82.0	51.9	64.6	86.9	77.1	72.9	42.5	73.1	59.8	35.0	79.0	57.6	83.5
2007	Grade3-8	74.2	70.4	78.2	82.9	54.1	66.8	90.5	76.6	74.8	50.9	74.8	66.6	37.2	80.3	59.6	84.7
2008	Grade3-8	76.2	72.5	80.1	85.7	60.7	63.4	89.7	77.3	78.6	38.1	79.0	52.1	41.0	81.6	62.5	87.0
2009	Grade3-8	76.8	73.3	80.4	86.1	61.3	64.5	90.1	79.8	79.0	39.9	79.6	53.7	41.4	82.2	63.6	87.9

Math		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2006	Grade3-8	80.2	79.2	81.3	89.1	57.8	76.0	95.1	83.4	81.0	59.0	80.5	76.0	49.2	85.4	66.9	89.7
2007	Grade3-8	82.8	81.7	84.0	90.5	62.7	79.5	96.1	82.3	83.9	69.0	83.2	78.6	53.4	87.7	71.2	91.1
2008	Grade3-8	82.4	81.3	83.5	90.7	64.0	76.0	94.7	83.8	84.3	62.8	83.9	70.3	54.3	86.7	71.4	91.1
2009	Grade3-8	83.4	82.2	84.6	91.0	66.7	77.2	94.7	85.5	84.6	63.9	84.9	70.8	54.6	87.8	73.3	91.9

Science		All	Male	Female	White	Black	Hispanic	Asian/Pac. Islander	Native American	Multi-Race	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2006	Grade4,7	80.4	79.6	81.3	90.2	56.6	73.9	93.5	86.9	81.7	55.0	80.7	73.8	55.4	84.6	66.3	90.3
2007	Grade4,7	79.5	79.3	79.8	90.0	54.5	72.1	93.6	83.7	81.4	58.3	80.0	85.4	54.6	83.7	64.6	90.1
2008	Grade4,7	77.7	77.7	77.6	89.5	56.0	64.6	90.0	82.0	80.7	42.0	80.3	53.9	54.1	81.3	62.7	89.4
2009	Grade4,7	78.1	77.9	78.4	89.7	56.3	65.8	90.9	84.3	81.1	44.9	80.7	65.4	53.4	82.0	63.9	90.1

GAP Reading		Black/ White	Hispanic/ White	LEP/ non-LEP	IEP/ non-IEP	Low/ not Low
2006	Grade3-8	30.1	17.4	30.6	44.0	25.8
2007	Grade3-8	28.8	16.0	24.0	43.1	25.1
2008	Grade3-8	25.0	22.2	40.9	40.6	24.5
2009	Grade3-8	24.8	21.6	39.7	40.9	24.3

GAP Math		Black/ White	Hispanic/ White	LEP/ non-LEP	IEP/ non-IEP	Low/ not Low
2006	Grade3-8	31.2	13.1	21.4	36.2	22.8
2007	Grade3-8	27.8	11.0	14.2	34.3	19.9
2008	Grade3-8	26.7	14.7	21.1	32.4	19.7
2009	Grade3-8	24.3	13.8	21.1	33.1	18.6

PSAE Data 2003 - 2009: % Students Meets & Exceeds

Reading		All	Male	Female	White	Black	Hispanic	Asian/ Pac. Island	Native American	Multi-Race.	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 11	56.4	52.8	60	64.6	31.1	34.3	65.2	51.2	50.7	16.2	56.8	17.9	15.3	60.9	31.8	62.7
2004	Grade 11	56.8	53.7	59.8	65.3	31.8	34.4	65	52.5	50.5	12.8	57.2	14.3	16.1	61.4	32.6	64
2005	Grade 11	59.5	55.9	63.1	67.8	35.1	40.2	71	56.5	56.3	17.3	59.8	28.6	15.9	64.7	37.4	66.8
2006	Grade 11	58.4	55.7	61.1	67.1	33.3	38.5	72.8	53.8	58.5	20.4	58.6	23.5	17.5	63.5	35.1	66.6
2007	Grade 11	54.1	51.1	56.9	63.5	28.0	33.0	67.7	55.6	52.7	26.9	54.4	29.0	19.3	58.5	31.4	62.5
2008	Grade 11	53.3	51.2	55.3	64.7	24.9	30.9	63.9	49.8	54.4	7.7	54.3	33.3	18.8	57.5	28.5	63.4
2009	Grade 11	56.9	54.6	59.2	68.5	28.0	36.5	68.7	60.6	61.2	8.1	58.0	27.8	16.8	61.8	33.2	67.9

Math		All	Male	Female	White	Black	Hispanic	Asian/ Pac. Island	Native American	Multi-Race.	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 11	53.3	56	50.7	62.6	20.5	29.4	73.7	47.1	46.8	24.2	53.6	10.7	12.8	57.7	25	60.5
2004	Grade 11	53.1	55.1	51.2	62.4	20.5	30.7	75	44.4	45.1	26.3	53.4	35.7	12.2	57.7	25.4	61.3
2005	Grade 11	52.8	54.5	51.1	63.1	18.6	30.8	75.7	51.1	47.8	25.8	53	21.4	12.5	57.6	25.5	61.7
2006	Grade 11	53.6	56.1	51.3	63.6	20.8	33.5	76.7	49.2	49.9	29.7	53.8	17.6	13.1	58.6	27.6	62.8
2007	Grade 11	52.7	55.6	50.0	63.1	19.4	33.0	75.7	55.6	47.1	32.3	53.0	25.8	14.4	57.6	27.2	62.2
2008	Grade 11	53.0	55.4	50.6	64.1	20.6	32.6	77.4	48.2	52.3	19.5	53.7	30.0	13.3	57.9	27.5	63.4
2009	Grade 11	51.6	54.3	49.1	63.4	18.6	31.6	75.8	47.8	52.0	17.7	52.4	8.3	12.1	56.5	26.3	63.4

Science		All	Male	Female	White	Black	Hispanic	Asian/ Pac. Island	Native American	Multi-Race.	LEP	Not LEP	Migrant	IEP	Not IEP	Low Income	Not Low Income
2003	Grade 11	51.3	54.4	48.3	61.4	17.3	25.8	65.5	49	44.6	16.5	51.6	14.3	13.1	55.4	21.3	58.9
2004	Grade 11	52.9	55.3	50.5	62.7	20.1	29.2	70	49	45.1	16.3	53.2	21.4	13.2	57.4	24.4	61.4
2005	Grade 11	52.5	54.7	50.3	63.4	18.5	28.6	69.6	51.7	51	15.9	52.8	14.3	13	57.2	24.4	61.7
2006	Grade 11	50.8	54.9	46.8	61.7	17.3	27.6	68.8	46.2	46.7	19.4	50.9	11.8	12.6	55.4	23.0	60.5
2007	Grade 11	51.0	53.8	48.3	61.9	18.9	28.2	70.6	51.5	48.2	29.3	51.3	29.0	14.0	55.7	24.8	60.7
2008	Grade 11	51.2	54.3	48.2	63.5	18.4	27.6	70.3	49.0	50.5	8.9	52.1	30.0	13.4	55.9	23.8	62.4
2009	Grade 11	50.5	54.0	47.1	63.4	17.2	27.6	67.7	52.6	52.8	8.2	51.4	5.6	13.9	55.0	23.8	62.8

D. High School Graduation Data

High School Graduation Rates: 2003 - 2009

YEAR	Total	Male	Female	White	Black	Hispanic	Asian	Native American	MultiRacial	LEP	Migrant	IEP	Low Income
2002-03	86.0	83.8	88.3	91.0	73.3	75.5	92.5	77.8	NA	64.5	63.3	71.5	69.9
2003-04	86.6	84.3	88.8	91.8	74.0	75.9	91.9	76.6	87.9	57.9	25.0	75.8	71.1
2004-05	87.4	85.4	89.4	92.2	77.6	76.0	93.4	86.0	90.2	62.8	75.6	76.1	75.8
2005-06	87.6	85.4	89.8	92.3	78.0	76.4	94.1	80.5	88.2	63.2	41.7	77.0	76.2
2006-07	85.9	83.1	88.8	92.2	73.8	73.4	93.5	72.5	83.0	69.1	51.5	71.9	74.9
2007-08	86.5	84.2	88.8	92.5	74.9	75.7	93.4	75.3	87.6	57.2	36.4	81.2	78.2
2008-09	87.1	84.5	89.7	92.3	76.7	76.8	94.0	79.4	88.9	63.1	27.8	78.1	76.6

E. Information on Cut Scores

A vertical ISAT scale was first used in 2006. Proficiency levels represented by each category on the new scales were set by ISBE after the performance of extensive statistical "bridge studies" in 2005.

In grades 3, 5, and 8 in reading and math, and grades 4 and 7 in science (i.e. years for which there was previous data), cuts were set on the vertical scale to be "scale neutral." In other words, cut scores were designed to achieve the same percent of students at the "Meets or Exceeds" level that would have been obtained using the pre-2006 scale.

For establishment of new cut scores, data was not available for intermediate grades (4, 6, and 7 in reading and math, and grades 5 and 6 in science). For these grades, cut scores were set by interpolating and averaging from the percent "Meets or Exceeds" from the surrounding grades. For example, data from grades 3 and 5 was averaged to obtain the cut score for percent "Meets or Exceeds" in grade 4 reading and math. Simultaneously, as based on their SAT-10 NPRs, the "Meets or Exceeds" cut score for grade 8 mathematics was brought in line with those of other grades.

Appendix A3-2

Data on Closing the Achievement Gap

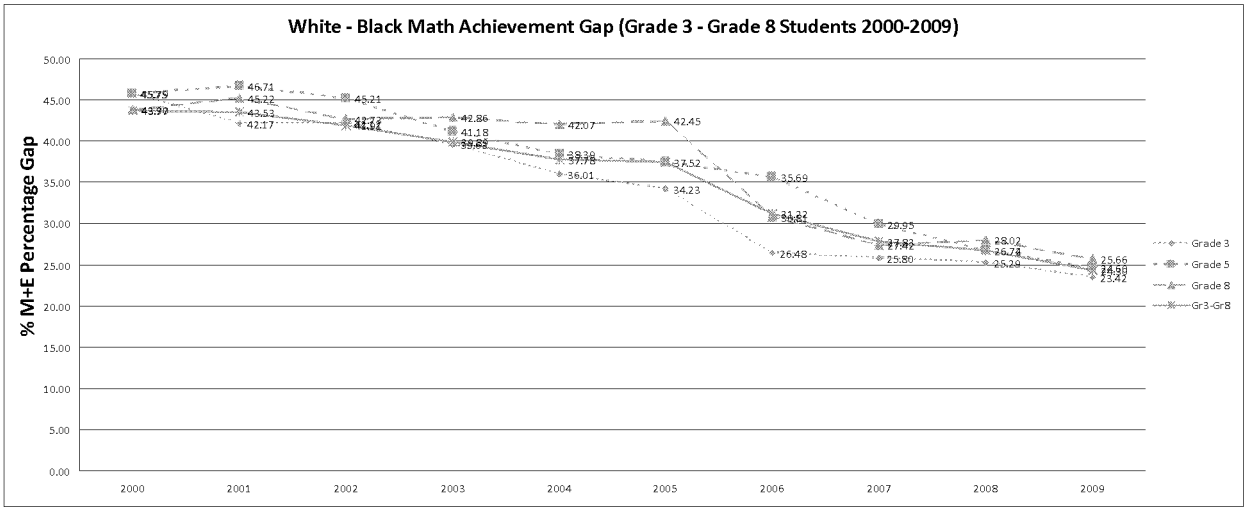
A. Data on Illinois' Progress toward Closing the Achievement Gap in Math

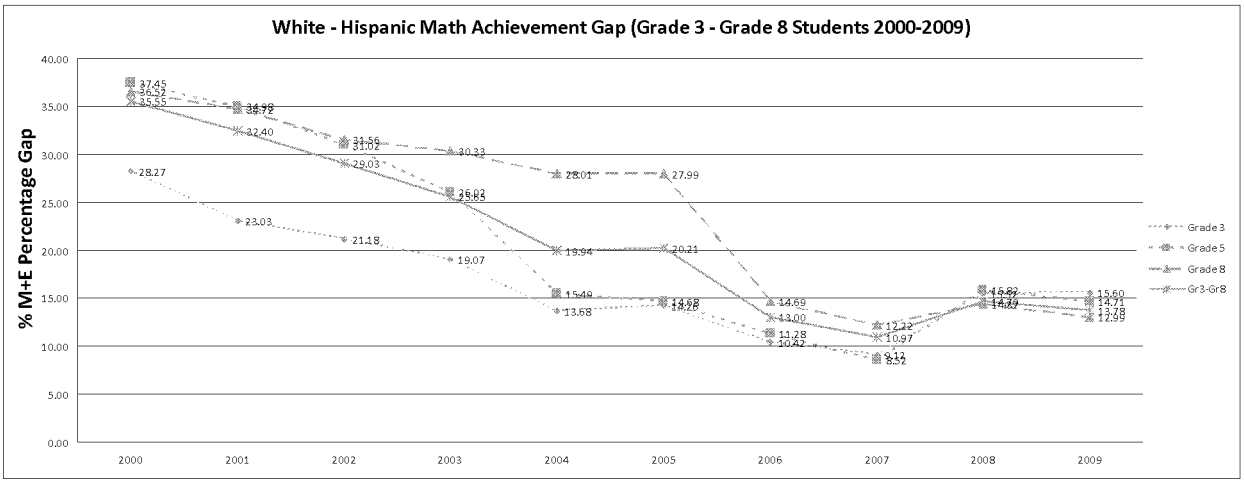
B. Data on Illinois' Progress toward Closing the Achievement Gap in Reading

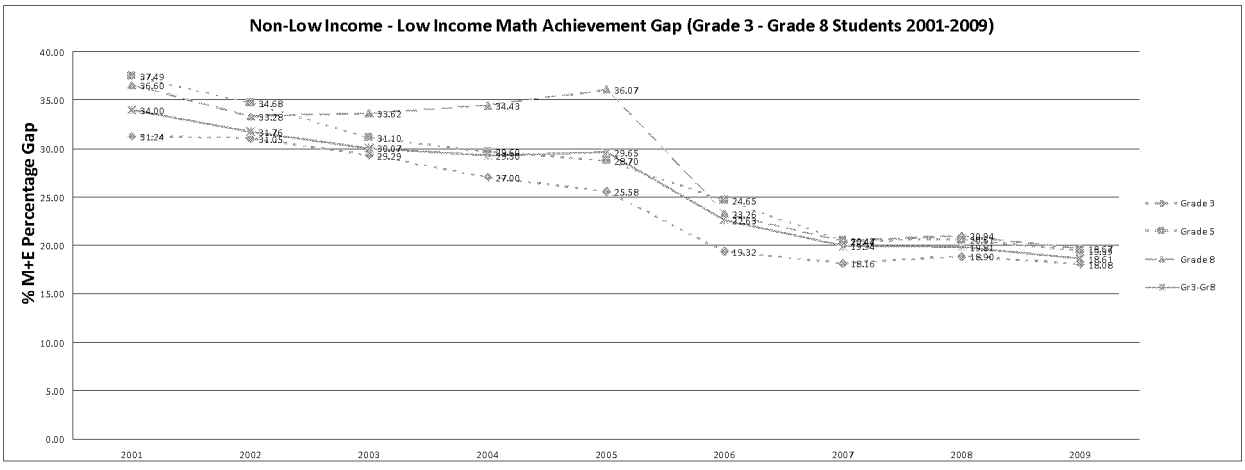
C. Data on Illinois' Progress toward Closing the Achievement Gap on the AP Exam

D. Data on Illinois' Progress toward Closing the Achievement Gap for Students with Disabilities

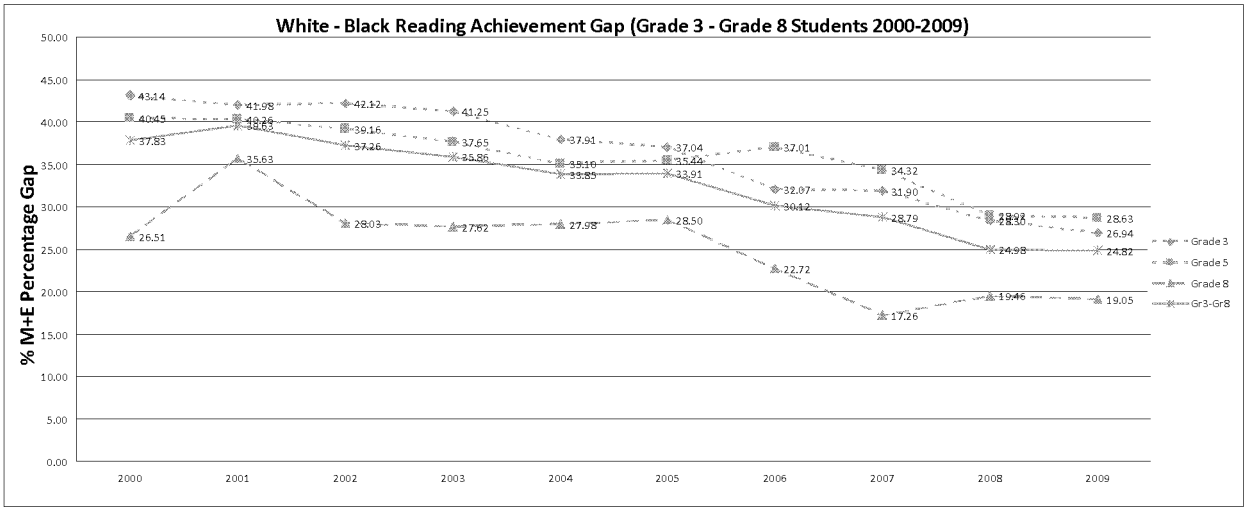
A. Data on Illinois' Progress toward Closing the Achievement Gap in Math

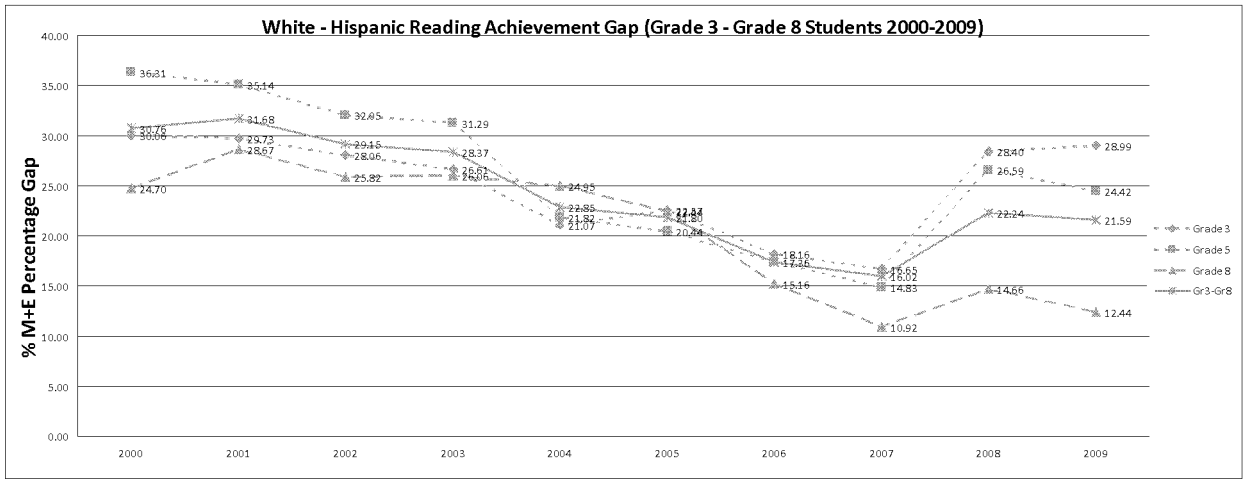


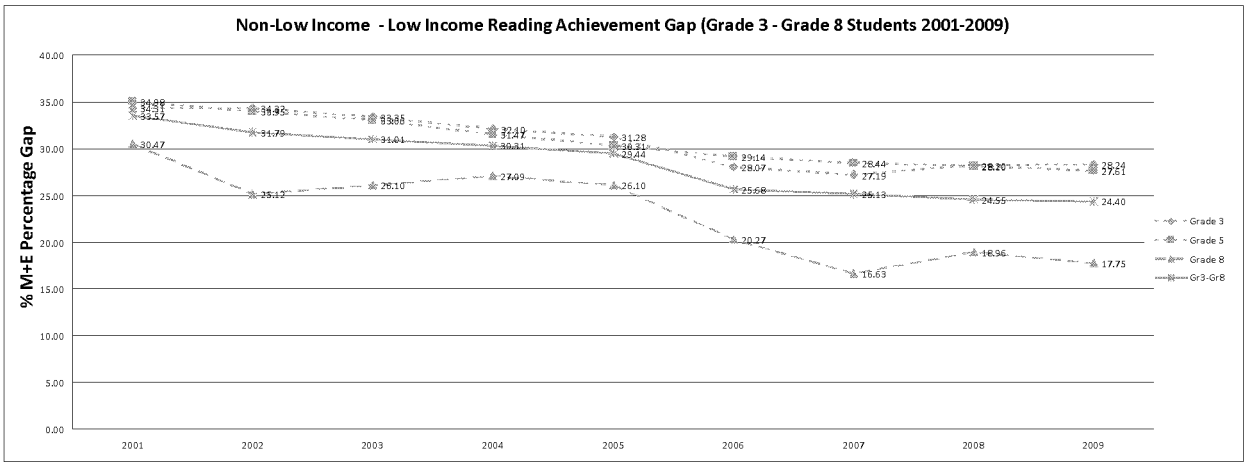




B. Data on Illinois' Progress toward Closing the Achievement Gap in Reading[1]





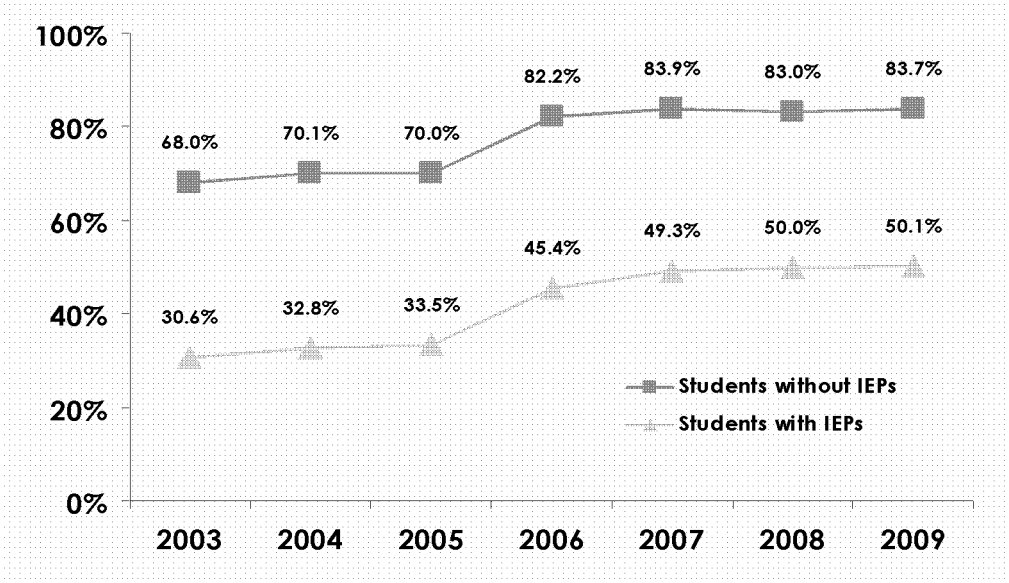


[1] Prior to 2008, Limited English Proficient (LEP) students in Illinois took the Illinois Measure of Annual Growth in English (IMAGE) test. After several years of analyses, modifications, and negotiations with the federal government, Illinois determined that a state accountability test for LEP students cannot be built using the IMAGE platform. Therefore, starting in 2008, LEP students took the ISAT or PSAE (with accommodations) instead of the IMAGE test. Therefore, comparisons between pre- and post-2008 achievement levels for LEP students and Hispanic subgroup performance must account for this change in assessment approach.

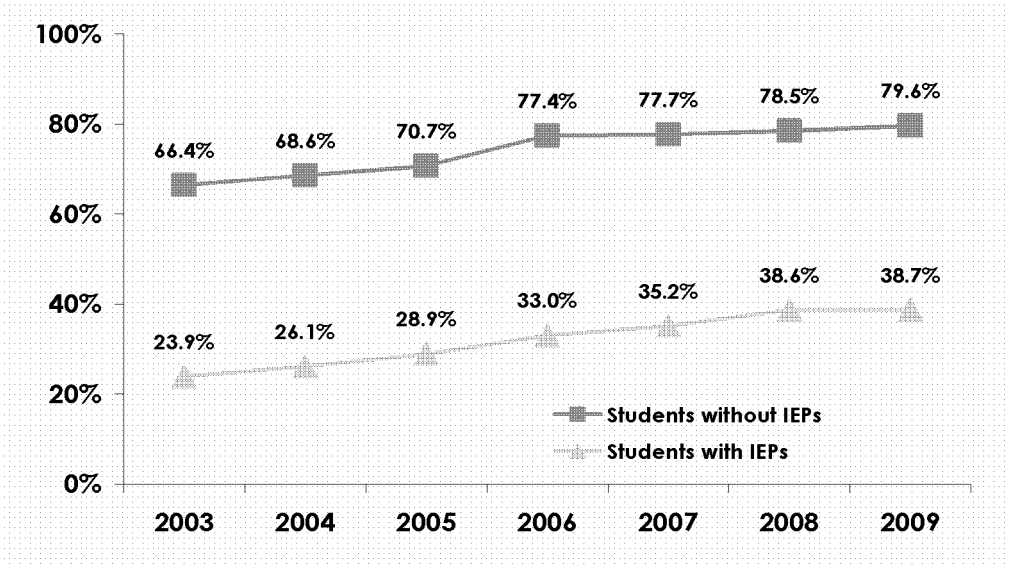
C. Data on Illinois' Progress toward Closing the Achievement Gap on the AP Exam

- The number of Latino students taking an AP Exam in 2008 increased 19.4% from the previous year, and the number of Latino students scoring a 3 or higher also increased by 19%.
- The percentage of African American students taking an AP exam in 2008 grew by 9.3% from the previous year.
- More than 56% of students taking an AP test in 2008 were women, a 9.6% increase over the previous year. Female students scoring a 3 or higher grew by 7.4% from the previous year.
- Low-income students comprised 19% of seniors taking AP exams in Illinois in 2008, a notable increase over the 12.3% during 2003.
- Chicago's Whitney M. Young Magnet High School was singled out in the 5th Annual AP Report to the Nation for having the greatest number of African American students in the country from the class of 2008 scoring a 3 or higher on the AP English Language exam.

D. Data on Illinois' Progress toward Closing the Achievement Gap for Students with Disabilities



Students With Disabilities: Performance on State Math Test 03-09



Students With Disabilities: Performance on State Reading Test 03-09

Appendix B3-1

Programs of Study/STEM Learning Exchanges

A. Illinois High School Reform Context and Momentum

B. Illinois Career Clusters Programs of Study Model

C. STEM Application Areas

D. Blue Wave Project

A. Illinois High School Reform Context and Momentum

Over the last three years, practitioners from throughout the state have engaged in strategic planning activities spearheaded by the three state education agencies, the Illinois State Board of Education (ISBE), the Illinois Community College Board (ICCB), and the Illinois Board of Higher Education (IBHE). Over 300 individuals representing education, employers, labor unions, professional associations, and others in local communities were involved in regional meetings to envision new forms of education that can assist students to complete high school ready to transition to college and careers. The ISBE, ICCB, IBHE, and numerous other agencies are engaging Partnerships for College and Career Success (PCCS) throughout the state that include K-12 schools, community colleges, universities, and employers in grassroots implementation of new Programs of Study that integrate rigorous curricula and experiential approaches to learning. Local PCCSs throughout the state have engaged in a self-assessment process to determine assets and opportunities for improvement and to lead conversations with local constituents about curriculum reform. These dialogues center on ways high schools can better partner with community colleges, universities and employers to adopt Programs of Study that integrate rigorous academics with career and technical education to enhance learning. Illinois views reformed high school education as a primary means of providing students with new pathways to college and careers.

Illinois' vision of Programs of Study offers rigorous, integrated academic, career and technical education that is aligned with and reinforced by the new Common Core College and Career Readiness Standards, the American Diploma Project (ADP), the Building 21st Century Skills initiative, and other reforms such as High Schools That Work (HSTW) of the Southern Regional Education Board (SREB), Project Lead the Way (PTLW), New Tech High Schools, and career academies associated with National Academy Foundation (NAF). In 2008, Illinois adopted a framework for implementation and evaluation of Programs of Study that provides six guiding principles geared to creating career pathways that extend from the high school to the postsecondary level and employment so all students have the opportunity to transition to college and careers. The guiding principles grew out of the aforementioned dialogue, and they captured the state's collective vision and aspiration for educational reform at the high school and postsecondary levels and in larger workforce training and education arena.

Illinois' six guiding principles for Programs of Study have been disseminated widely throughout the state, through print documents, websites (see, for example, the ICCB website link: and the Office of Community College Research and Leadership (OCCRL), University of Illinois, link at: occrl.illinois.edu), and professional development activities. An important aspect of the dissemination strategy involves the use of workgroups dedicated to each guiding principle, to gather input, refine core concepts, and consider implementation challenges. Nearly 100 practitioners representing the K-12 and postsecondary levels participated in these conversations, and several educational leaders identified through this process contributed to webinars conducted by OCCRL on each guiding principle. The webinars were conducted between January and June 2009 (one webinar was conducted per month), and, in addition, the state's Forum on Excellence meeting (sponsored by the ICCB and conducted by Illinois Center for Specialized Professional Services (ICSPS) at Illinois State University) featured Programs of Study in the September 2009.

In addition to the above activities, two state-level groups were formed in FY08 to provide leadership for Programs of Study. One state leadership group includes the chief academic officers of the ISBE and ICCB, along with other state agency leaders, and the second group includes all agency personnel affiliated with the ISBE and ICCB who have responsibility for implementation of academic and/or career-technical education programs as well as professional development. This Programs of Study Planning Team includes approximately 30 agency officials, plus personnel of OCCRL and ICSPS to support implementation of Programs of Study statewide.

The six guiding principles adopted by the state to implement Programs of Study are:

1. Programs of Study are developed, supported and led with guidance from collaborative partners.
2. Each and every student has access to educational opportunities and services that enable their success.
3. Education and training providers, with input from business and industry, enhance alignment that facilitates student preparation and transition through the educational pipeline.
4. Curriculum and pedagogy involve rigorous and relevant instruction that enhances learning and enables students to attain academic and technical standards and credentials.
5. Comprehensive and continuous professional development that impacts teaching and learning is delivered to enhance the recruitment, preparation and retention of qualified instructional and administrative staff.
6. Data are collected, shared, and utilized to improve outcomes and demonstrate accountability.

These guiding principles are employed by local Partnerships for College and Career Success (PCCS) involving high schools, community colleges, universities, employers, and other partners to implement Programs of Study. The guiding principles foster systematic thinking at all levels of education, including and importantly at the high school level. Much more than a name change, these Partnerships reflect the state's commitment to coordinating state and local efforts and supporting the transition of high school graduates to the postsecondary level ready to learn and acquire high wage, high skill, and high demand jobs. Illinois requires that these Partnerships involve a broad base group of constituents to support student success, including high schools, area career centers, Education For Employment (EFE) regions, community colleges, universities, employer, labor, and other groups.

The guiding principles reflect untold hours of conversation with practitioners, and they are based on empirical research and promising practices known to create positive educational outcomes. The guiding principles are consistent with federal No Child Left Behind Act and the Carl D. Perkins Act laws, as well Title I and Title II of the Workforce Investment Act. As mentioned above, the guiding principles align with High Schools That Work (HSTW), Project Lead the Way (PTLW), New Tech High Schools, career academies supported by the National Academy Foundation (NAF), the Illinois Innovation Talent Project, and other standards-oriented initiatives adopted by the state of Illinois, including the American Diploma Project (ADP) and Building 21st Century Skills. The principles are consistent with various postsecondary, workforce and economic development initiatives, including Illinois' Critical Skills Shortage Initiative

(CSSI), the Shifting Gears Initiative, and numerous others. Most importantly, the guiding principles have been reviewed and vetted with leaders of these initiatives and they have received their endorsement and been integrated into complimentary initiatives.

From the beginning Illinois' guiding principles of Programs of Study were developed with an eye toward high school reform. A roadmap for development of Illinois' Programs of Study was a set of recommendations developed by the National High School Center. Illinois' guiding principles were inspired by and cross-walked with the high school reform design principles of the National High School Center, ensuring the same comprehensive approach to high school reform that was evident in the National Center's work were evident in Illinois' guiding principles for Programs of Study. As such, Illinois' guiding principles are consistent with enhancing quality and accountability at the high school level, and preparing students for college and careers.

Each of Illinois' guiding principle is accompanied by a set of six to eight design elements that help practitioners understand what they need to do to implement Programs of Study. The full list of guiding principles and design elements appears at the end of this document, and the guiding principles and design elements have also been cross-walked with the proposed High School Reform Design Principles emanating from the International Seminar in Occupational Education and authored by Bob Sheets (October 2009). The High School Reform Design Principles fall under five of the six guiding principles of Programs of Study, as shown in Table 1 (see below). As such, the Illinois Programs of Study framework provides an inclusive, comprehensive roadmap for high school reform.

Table 1. Cross-walk of Illinois' Six Guiding Principles for Programs of Study with High School Reform Design Principles

Illinois' Guiding Principle for Programs of Study	Illinois' Program of Study Design Elements	High School Reform Design Principles
Leadership, Organization and Support - *Programs are developed and supported with input from collaborative partners.*	• Leaders support authentic collaborative partnerships that include secondary and postsecondary education and encourage the active involvement of business and industry and labor organizations; community-based organizations and community members; student organizations; parent organizations; and other organizations and agencies that benefit student transition to college and careers. • Leaders establish and communicate a vision, mission, and goals that are aligned with enabling federal and state policies and important components of the larger educational system. • Leaders encourage individuals at all levels to engage in shared decision making, encouraging the perspective of individuals and groups not always active in curriculum reform and organizational change.	

Illinois' Guiding Principle for Programs of Study	Illinois' Program of Study Design Elements	High School Reform Design Principles
	• Leaders nurture a collaborative culture of respect, high expectations, and demonstrable student outcomes and benefits for partners. • Leaders formalize genuine collaborative partnerships, including the roles and responsibility of member entities and create a formal memorandum of understanding to ensure clarity and accountability. • Leaders encourage the planning, implementation and evaluation of Programs of Study that are guided by active, joint secondary-postsecondary advisory committees. • Leaders encourage that resources including personnel, fiscal, curriculum, physical, and technology are adequate and distributed appropriately among partners. • Leaders encourage that partners receive technical assistance and technology assistance to support Program of Study implementation and continuous improvement.	
Access, Equity and Opportunity - *Each and every student has access to educational opportunities and services that enable their success.*	• Various strategies are used to recruit, enroll, and retain students, including students who are underserved, under-represented, and from special populations. • Processes are in place to identify and overcome gaps and barriers for learners to foster access to education and inclusion in educational programs, including flexible time and location of programs. • Processes are in place to assist students to overcome barriers to initial entry or re-entry into secondary and postsecondary education. • Appropriate support services are available to promote student success, help students become college and career ready, and meet their educational goals. • The physical, virtual, and learning spaces of programs and support services are universally designed to promote state-wide access to education and successful transition. • Special population sub-groups are clearly identified so that their progress and success can be quantified and compared with other populations. • Programs and support services reflect learners' and their families' perspectives and interests in education and transition while addressing changes in resources and family roles across settings. • Students have access to networks and resources, including adult mentors from the employment	• Personalized Tutoring and Support Services

Illinois' Guiding Principle for Programs of Study	Illinois' Program of Study Design Elements	High School Reform Design Principles
	community, to assist with curriculum, career exploration, and work-based learning.	
Alignment and Transition - *Education and training providers, with input from business and industry, enhance alignment that facilitates student transition through the educational pipeline.*	• Non-duplicative curriculum is ensured through secondary and postsecondary collaboration for greater efficiency and alignment. • Course content and credit are aligned through articulation agreements which lead to industry recognized credentials and/or certification. • Curriculum is aligned with relevant educational, state, and industry standards and certifications. • Programs are designed with multiple entry and exit points to high-skill, high-wage, or high-demand occupations and encourage stackable credentials. • Programs include development of a coherent sequence of courses and programs that may lead to the baccalaureate degree. • Data-sharing agreements are developed for program improvement, program reporting, and the evaluation of student transition across educational levels to provide necessary support services and ensure student success. • Programs provide students with multiple opportunities to build and/or increase their "college knowledge" in order to make informed decisions about educational and occupational options.	• Transition to Postsecondary Education
Enhanced Curriculum and Instruction - *Curriculum and pedagogy involve rigorous and relevant instruction, and career development that enhances learning and enables students to attain credentials.*	• Programs infuse career exploration, development and guidance throughout the educational system. • Programs strongly encourage dual credit opportunities in academic and career and technical courses to accelerate student learning and encourage transition to and success in college-level occupational programs. • Programs involve business, industry and community partners to provide relevant instructional opportunities (e.g. work-based learning, access to current technology, mentoring and leadership development, cross-cluster projects). • Programs' cluster-level orientation courses have a rigorous foundation of academic and career-technical content that prepares students for more advanced course work. • Curriculum and pedagogy are designed to ensure the rigor and support services necessary to reduce the need for remedial/developmental education. • Programs include multiple measures of assessment designed for diverse learning styles and accurately determine acquisition of academic and technical knowledge and skills.	• Career and Education Guidance • Academic Core Curriculum with Optional Programs of Study • Academic Integration and Application Within Programs of Study • Real-World Connections with External Partners

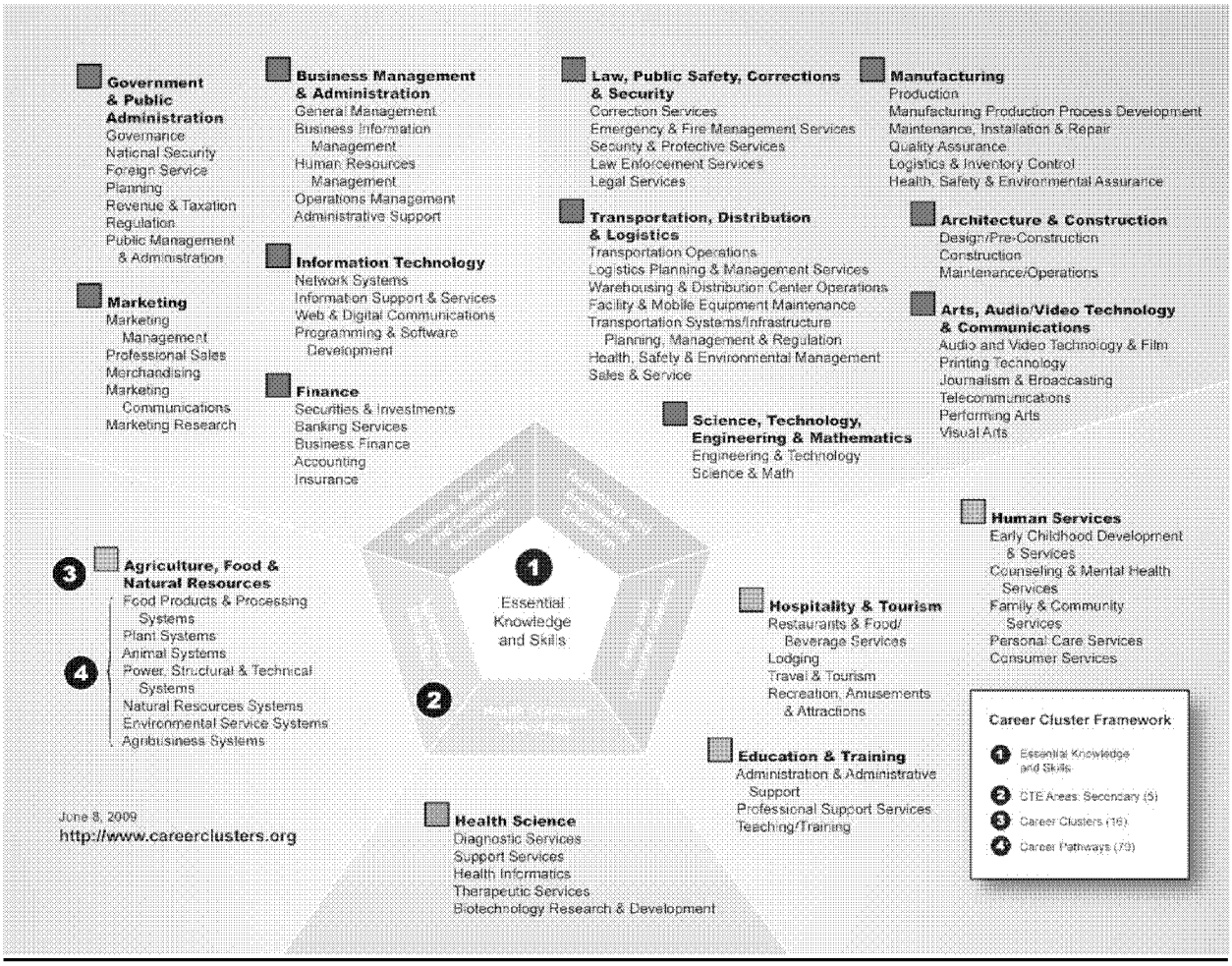
Illinois' Guiding Principle for Programs of Study	Illinois' Program of Study Design Elements	High School Reform Design Principles
	• Programs develop, improve or expand the use of technology to foster students' technical skills and reach more learners.	
Professional Preparation and Development - *Teacher preparation, recruitment and selection of qualified instructional staff, and the delivery of quality professional development.*	• Professional development activities are coordinated with teacher certification or licensing, in-service and pre-service learning, other related professional development activities, or current local reform initiatives and school improvement plans. • Professional development activities are high-quality, sustained, intensive, comprehensive, and instruction-focused in order to have an impact on classroom instruction. • Professional development is designed to help all partners and stakeholders improve the quality of instruction in order to impact student achievement and meet the state annual adjusted level of performance (AALP). • Local leaders conduct needs assessments prior to designing professional development and involve stakeholders and partners in collaborative planning. • Professional development combines resources with other regions and organizations to maximize resources. • Professional development includes the sharing of best or promising practices based on scientifically-based research and data that demonstrate program effectiveness. • Professional development includes opportunities for secondary and postsecondary educators to collaborate to encourage curriculum alignment and integration.	• Teacher Preparation, Qualifications and Support
Accountability and Program Improvement - *Data are collected and shared to demonstrate accountability, program improvement and student outcomes.*	• All programmatic activities, including professional development are evaluated for improvement and accountability using multiple forms of assessment and measurement. • Data are used to inform a culture of program improvement that uses data to improve instruction and programs. • Data are used within the organization and shared with partners to foster local improvement and regional development. • Relevant labor market data are used to inform program development and implementation. • A data collection system is developed with the capacity to collect longitudinal data on core indicators, performance measures, and workforce placement. • Procedures are implemented to collect reliable and	• Continuous Improvement

Illinois' Guiding Principle for Programs of Study	Illinois' Program of Study Design Elements	High School Reform Design Principles
	valid data at each educational level and point of data collection. • Partnerships set specific performance targets and establish measureable goals for participant outcomes based on state adjusted level of performance on each indicator and are responsible for meeting those targets or providing plans of improvement. • Collected data are disaggregated and cohort based to provide gap analysis on different student groups for purposes of equity.	

Appendix B3-1

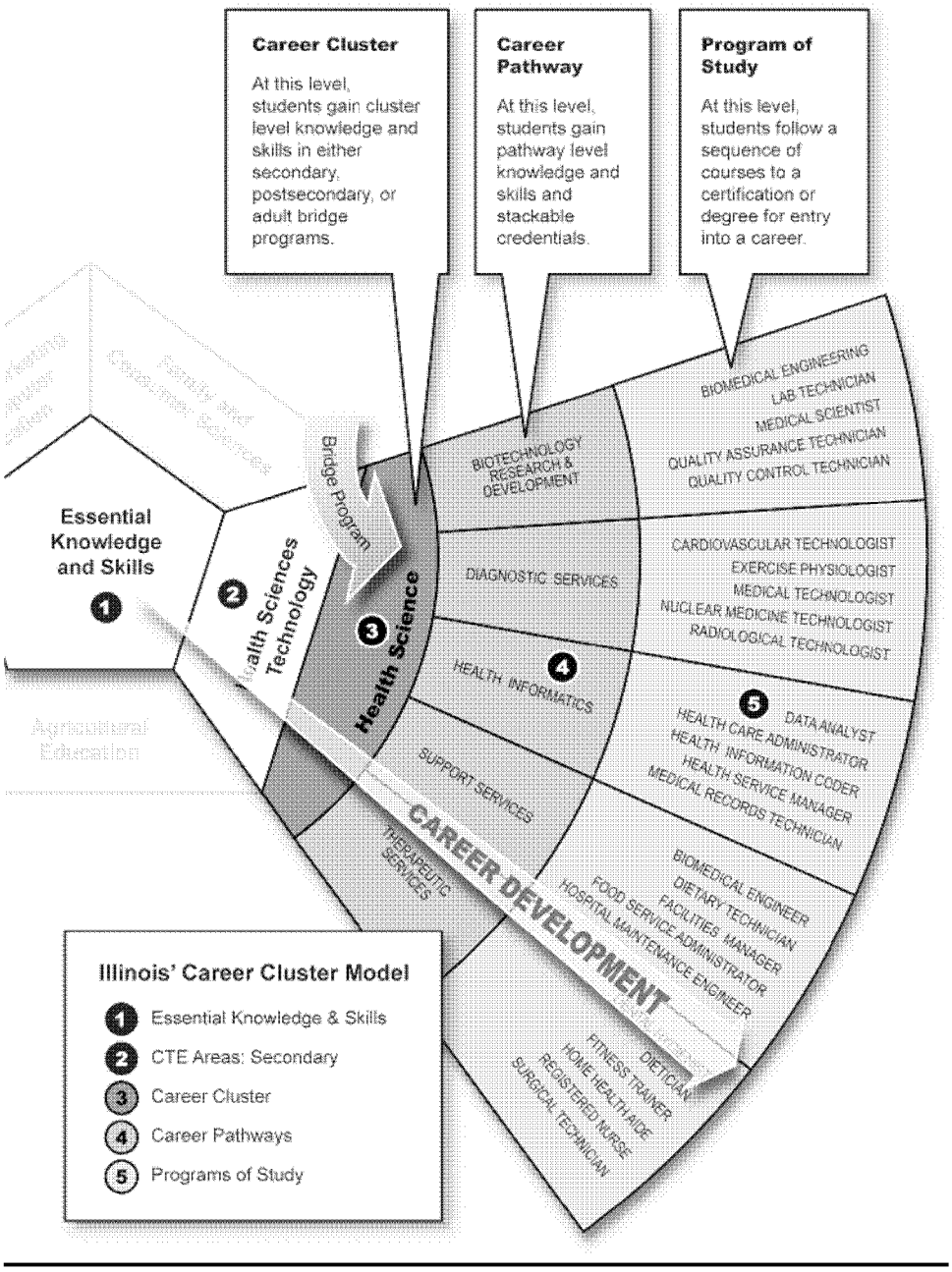
Programs of Study/STEM Learning Exchanges

B. Illinois Career Clusters Programs of Study Model



- This illustration reflects the National Career Cluster framework which Illinois has adopted as an organizing guide for Programs of Study development. There are five secondary education career and technical education areas of study followed by 16 career clusters and 79 career pathways.[2]

[2] Jankowski, Natasha A., Catherine L. Kirby, Debra D. Bragg, Jason L. Taylor, & Kathleen M. Oertle. *Illinois' Career Cluster Model.* Champaign: University of Illinois at Urbana-Champaign, 2009. Pg. 10-11.



- This illustration demonstrates how Programs of Study are organized and developed within the Illinois Career Cluster framework. Students participating in Programs of Study are first oriented to career and technical education areas of study that connect with their academic and career interests. Students then identify a career cluster and corresponding career pathways where they gain core knowledge and skills in a given industry field. Finally, students participate in a sequence of courses through an articulated Program of Study across secondary and postsecondary institutions resulting in a certification or degree program for entry into a career.[3]

[3] Jankowski, Natasha A., Catherine L. Kirby, Debra D. Bragg, Jason L. Taylor, & Kathleen M. Oertle. *Illinois' Career Cluster Model.* Champaign: University of Illinois at Urbana-Champaign, 2009. Pg. 12.

This example of the Illinois Career Cluster Model shows the relationship between one of Illinois' five secondary career and technical education areas (Health Sciences Technology), the related career cluster (Health Science), the five pathways within that cluster, and sample programs of study within the pathway. It also illustrates the essential knowledge and skills that are shared by all clusters, the cluster level knowledge and skills shared by all occupations within the pathways in the cluster, the pathway level knowledge and skills specific to each of the five pathways, and the programs of study which represent courses that are taken at multiple education levels which lead to employment in related pathway occupations. Career exploration and development are infused at all levels of the model. The model also shows an entry point for adults by including bridge programs that infuse cluster level knowledge and skills with adult education and remedial education course content.

Career Cluster

At the career cluster level, students are exposed to the breadth of essential and cluster level knowledge and skills needed for multiple careers. The career cluster framework provides multiple entry and exit points for students as they progress through a program of study. For example, a K-12 student may participate and acquire cluster level knowledge and skills and dual credit while in the secondary system, and adults may acquire cluster level knowledge and skills as they progress through an adult bridge program.

Career Pathway

At the career pathway level, students make choices about occupations in terms of their career interests, and start to acquire pathway level knowledge and skills at either the secondary or postsecondary levels of the educational system. Pathway level knowledge and skills are more specialized than those at the cluster level, preparing students to enter occupations that they have identified in their individualized plan of study. This means students become more specialized in their pursuit of occupational and career areas.

Program of Study

Through the program of study, students are provided with the opportunity to receive stackable credentials, secure credentials aligned with segments of the curriculum, and acquire certificates and degrees at multiple completion points from secondary school through the baccalaureate degree. Career clusters and career pathways offer the knowledge and skills required to complete a program of study that leads to the community college and/or university level and provide students with opportunities for certification and degree attainment.[4]

[4] Jankowski, Natasha A., Catherine L. Kirby, Debra D. Bragg, Jason L. Taylor, & Kathleen M. Oertle. *Illinois' Career Cluster Model.* Champaign: University of Illinois at Urbana-Champaign, 2009. Pg. 13.

Appendix B3-1

Programs of Study/STEM Learning Exchanges

C. STEM Application Areas

1. Agriculture and Natural Resources: development, production, processing, distribution, of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources;

2. Energy: developing, planning and managing the production of energy including renewable energy and clean coal technology and its distribution through smart grid technologies;

3. Manufacturing: product and process development and managing and performing the processing of materials into intermediate or final products and related support activities;

4. Information Technology: designing, developing managing, supporting and integrating hardware and software system;

5. Architecture and Construction: designing, planning, managing, building, and maintaining the built environment including the use of green technologies;

6. Transportation, Distribution and Logistics: planning, management and movement of people, materials and goods across all transportation modes as well as maintaining and improving transportation technologies;

7. Research and Development: scientific research and professional and technical services including laboratory and testing services, and research and development services;

8. Health Sciences: planning, managing and providing therapeutic, diagnostic, health informatics, and support services as well as biomedical research and development; and

9. Financial Services: securities and investments, business finance, accounting, insurance, and banking services.

Appendix B3-1

Programs of Study/STEM Learning Exchanges

D. Blue Wave Project

Creating a Blue Wave in Science Education

A National Project to Bring Computational Science Tools and Capabilities to Students Who Will Shape the Future of Science and Engineering

Computation has transformed science in the past few decades. Scientific computing has opened up new areas of scientific exploration, contributing to our understanding of a broad range of phenomena from the functioning of biological molecules and the decoding of genetic information to the tracking of hurricanes and the evolution of galaxies. The rate of progress promises to accelerate in the next few years, as a new generation of computers, orders of magnitude more powerful than the present computers, are brought on line, beginning with *Blue Waters*, the sustained petascale computer being deployed by the National Center for Supercomputing Applications[5] (NCSA) on the campus of the University of Illinois at Urbana-Champaign in 2011.

Computational modeling, using computational tools similar or even identical to those used by scientists, can also be used to offer students insights into the world around us that is difficult to obtain by any other means. The use of these tools is especially critical when students are learning about objects or processes far too small to be seen, e.g., molecules in chemistry, or processes that are far too slow to be observed, e.g., movement of the earth's crustal plates in geology or the evolution of the universe. In these cases the use of interactive computational tools, which allow the student to change conditions, modify the processes and so on, can give them a deep and rich appreciation for the scientific principles involved.

Background: ICLCS

The Institute for Chemistry Literacy through Computational Science (ICLCS) Project[6] at the University of Illinois at Urbana-Champaign has shown that the use of computational tools to teach basic chemical concepts has the potential to revolutionize the teaching of chemistry in the nation's high schools. Working with teachers from Illinois' rural high schools, this project has shown that the use of computational tools in the classroom is enthusiastically embraced by teachers, results in improved performance of students on standardized chemistry tests, and leads to increased student interest in chemistry.

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5 Website: http://www.nsa.illinois.edu/

6 Website: http://www.iclcs.illinois.edu/. The ICLCS is funded through an NSF Math-Science Partnership grant.

Blue Wave Project

Although ICLCS has been a notable success, the computational tools and course materials needed to teach chemistry and other sciences are still not widely available, nor is there a social networking infrastructure to support teachers when they adopt these new tools and create and use materials to systemically revise the high school science curriculum. Furthermore, while the use of these tools has improved performance on existing standardized chemistry tests, these tests may not adequately measure the student's understanding of the subject, nor their ability to analyze and understand new science problems in the subject.

The goal of the proposed project, *Creating a Blue Wave in Science Education*, is to:

- Develop a comprehensive set of computational tools and course materials to teach the basic concepts of physics, chemistry, biology and earth science in high school.
- Provide an educational computing infrastructure to provide students with the ability to use these computational tools to learn basic scientific concepts, to explore their understanding, and to participate in authentic research experiences.
- Provide a social networking infrastructure to allow teachers to work together to utilize the computational tools and computing infrastructure to revitalize the high school science curriculum.
- Create and test the assessment tools that monitor computational skills and the ability to use those skills in inquiry-based learning.
- Disseminate the computational tools and classroom materials to high schools throughout the nation through the established outreach programs in the specialized secondary schools.

The proposed project, *Creating a Blue Wave in Science Education*, is a partnership of the University of Illinois at Urbana-Champaign and its National Center for Supercomputing Application (NCSA) and the National Consortium of Specialized Secondary Schools of Mathematics, Science and Technology7 (NCSSSMST). The University of Illinois is one of the nation's premiere public universities and NCSA is a leader in deploying high-performance computing resources and in working with research communities to advance science and engineering. NCSSSMST was established in 1988 to foster, support, and advance the effort of those specialized schools whose primary purpose is to attract and academically prepare students for leadership in mathematics, science, and technology. NCSSSMST has over 100 institutional members, representing more than 39,000 students and 1,600 educators.

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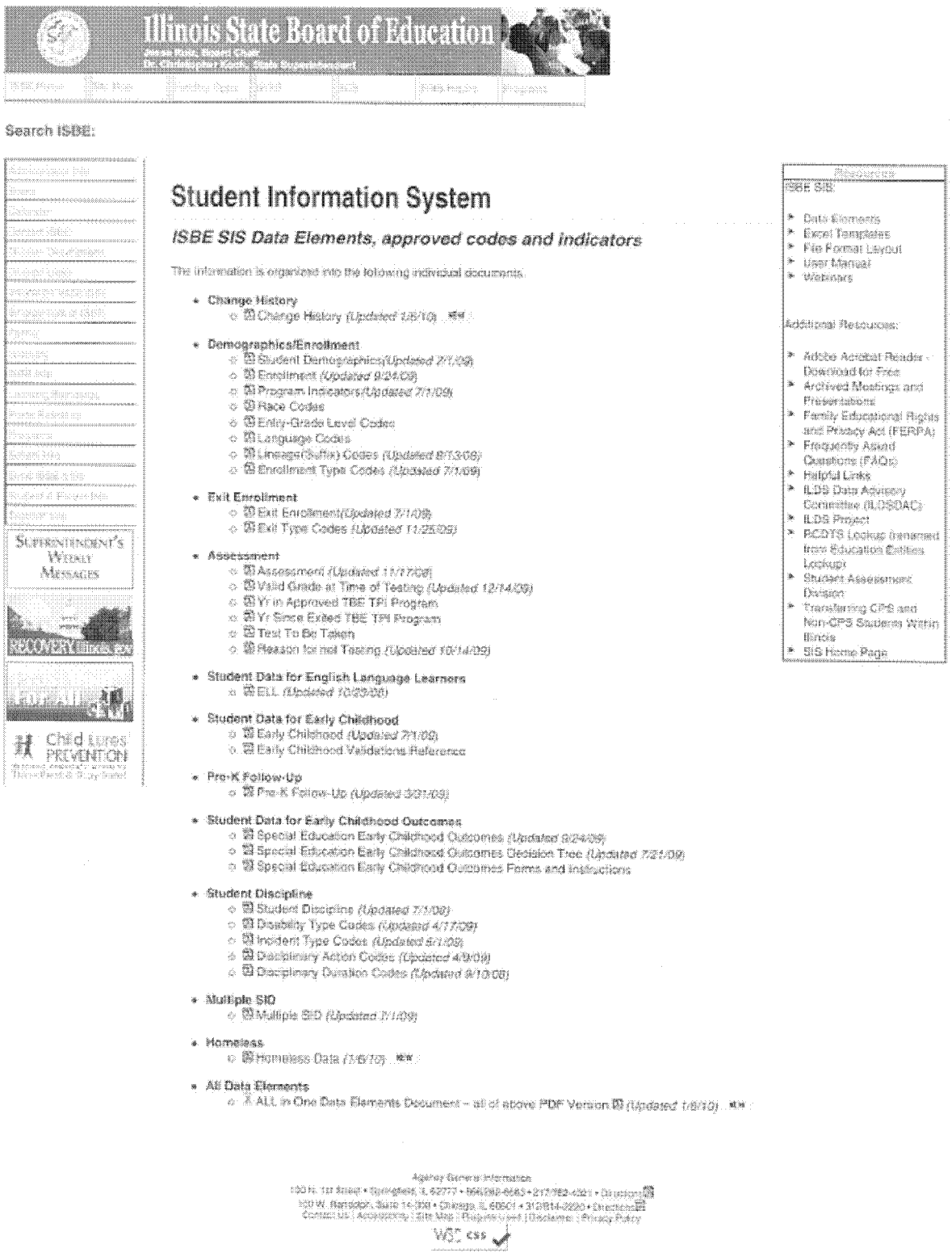
7 Web site: http://www.ncsssmst.org/.

Appendix C1-1

ISBE Website: Available Data re America COMPETES Act



Illinois State Board of Education

Search ISBE:

Student Information System

ISBE SIS Data Elements, approved codes and indicators

The information is organized into the following individual documents:

- **Change History**
  - Change History *(Updated 1/8/10)* NEW
- **Demographics/Enrollment**
  - Student Demographics *(Updated 2/1/09)*
  - Enrollment *(Updated 9/24/09)*
  - Program Indicators *(Updated 7/1/09)*
  - Race Codes
  - Entry-Grade Level Codes
  - Language Codes
  - Lineage(Suffix) Codes *(Updated 8/13/08)*
  - Enrollment Type Codes *(Updated 7/1/09)*
- **Exit Enrollment**
  - Exit Enrollment *(Updated 7/1/09)*
  - Exit Type Codes *(Updated 11/25/09)*
- **Assessment**
  - Assessment *(Updated 11/17/09)*
  - Valid Grade at Time of Testing *(Updated 12/14/09)*
  - Yr in Approved TBE TPI Program
  - Yr Since Exited TBE TPI Program
  - Test To Be Taken
  - Reason for not Testing *(Updated 10/14/09)*
- **Student Data for English Language Learners**
  - ELL *(Updated 10/23/08)*
- **Student Data for Early Childhood**
  - Early Childhood *(Updated 7/1/09)*
  - Early Childhood Validations Reference
- **Pre-K Follow-Up**
  - Pre-K Follow-Up *(Updated 3/31/09)*
- **Student Data for Early Childhood Outcomes**
  - Special Education Early Childhood Outcomes *(Updated 9/24/09)*
  - Special Education Early Childhood Outcomes Decision Tree *(Updated 7/21/09)*
  - Special Education Early Childhood Outcomes Forms and Instructions
- **Student Discipline**
  - Student Discipline *(Updated 7/1/09)*
  - Disability Type Codes *(Updated 4/17/09)*
  - Incident Type Codes *(Updated 6/1/09)*
  - Disciplinary Action Codes *(Updated 4/9/09)*
  - Disciplinary Duration Codes *(Updated 9/10/08)*
- **Multiple SID**
  - Multiple SID *(Updated 7/1/09)*
- **Homeless**
  - Homeless Data *(1/8/10)* NEW
- **All Data Elements**
  - ALL in One Data Elements Document – all of above PDF Version *(Updated 1/8/10)* NEW

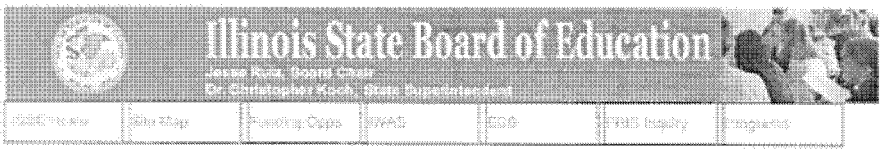
Resources

ISBE SIS:

- Data Elements
- Excel Templates
- File Format Layout
- User Manual
- Webinars

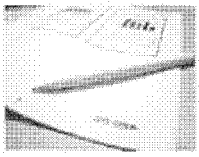
Additional Resources:

- Adobe Acrobat Reader - Download for Free
- Archived Meetings and Presentations
- Family Educational Rights and Privacy Act (FERPA)
- Frequently Asked Questions (FAQs)
- Helpful Links
- ILDS Data Advisory Committee (ILDSDAC)
- ILDS Project
- PCDTS Lookup (renamed from Education Entities Lookup)
- Student Assessment Division
- Transferring CPS and Non-CPS Students Within Illinois
- SIS Home Page



Search ISBE:

Student Assessment



The Assessment Division of the Illinois State Board of Education is responsible for developing and administering tests that measure the performance of students and schools against the Illinois Learning Standards. The state assessment scores are used to measure adequate yearly progress (AYP) for all public schools. All students' scores are part of the AYP measure, including students with disabilities and limited English proficiency.

▸ *Announcements*

- Illinois Longitudinal Data System Data Advisory Committee (ILDSDAC)
- 2009-10 Guidance – PSAE and the Receipt of a Regular High School Diploma *(Posted 09/30/09)*
- Request for a Change in the Two-Week Test Window – 2010 ISAT
- Request for Modified Testing Dates – 2010 ACCESS
- Memorandum: Elimination of the Fall Retake for the PSAE and Exemptions from the PSAE Diploma Requirement *(Posted 08/11/09)*
- 5 Year Work Plan for the Development/Implementation of English Language Learner Assessment for Title 1 Accountability
- Implementation Schedule of Assessment Strategies for ELL's
- Interactive ISAT Multiple-Choice Sample Questions

Note: If a test does not display, a pop-up blocker may be preventing it from opening and you may need to instruct the pop-up blocker to allow access to these tests. If you get "access denied," or "page not found" messages, it may mean that tight security at your school or district is preventing access. Contact your technical support and have them try to access these tests. Contact support@metalogic1.com as needed for assistance.

- EXPLORE/PLAN PROCEDURES AND PROTOCOL and Illinois ACT Online Prep
- Illinois Growth Model Task Force Report
- State Assessment Scale Score Cut Points
  - 2009
  - 2008
  - 2007
  - 2006
  - 2005

Resources

- ACCESS
- AYP
- IAA
- ICEPT
- ISAT
- NAEP
- PSAE
- TIMSS
- ELL Assessment
- ISAT Sample Books
- Join the Student Assessment Listserv
- Illinois Assessment Frameworks
- Illinois Learning Standards
- Illinois Accountability Workbook
- Student Assessment Committees

IL State Assessment

Quick Reference Charts

- 2010 *(Updated 10/16/09)*
- 2009 *(Updated 7/10/09)*
- 2008 *(Updated 11/24/08)*
- 2007 *(Updated 8/4/07)*
- 2006 *(Updated 3/15/06)*
- 2005

Areas to be Tested

- Mathematics
- Reading
- Science
- Writing

General Areas

- Fine Arts
- Physical Development and Health
- Social Science
- Staff
- Assessment Home

Appendix C2-1

Access to State Longitudinal Data

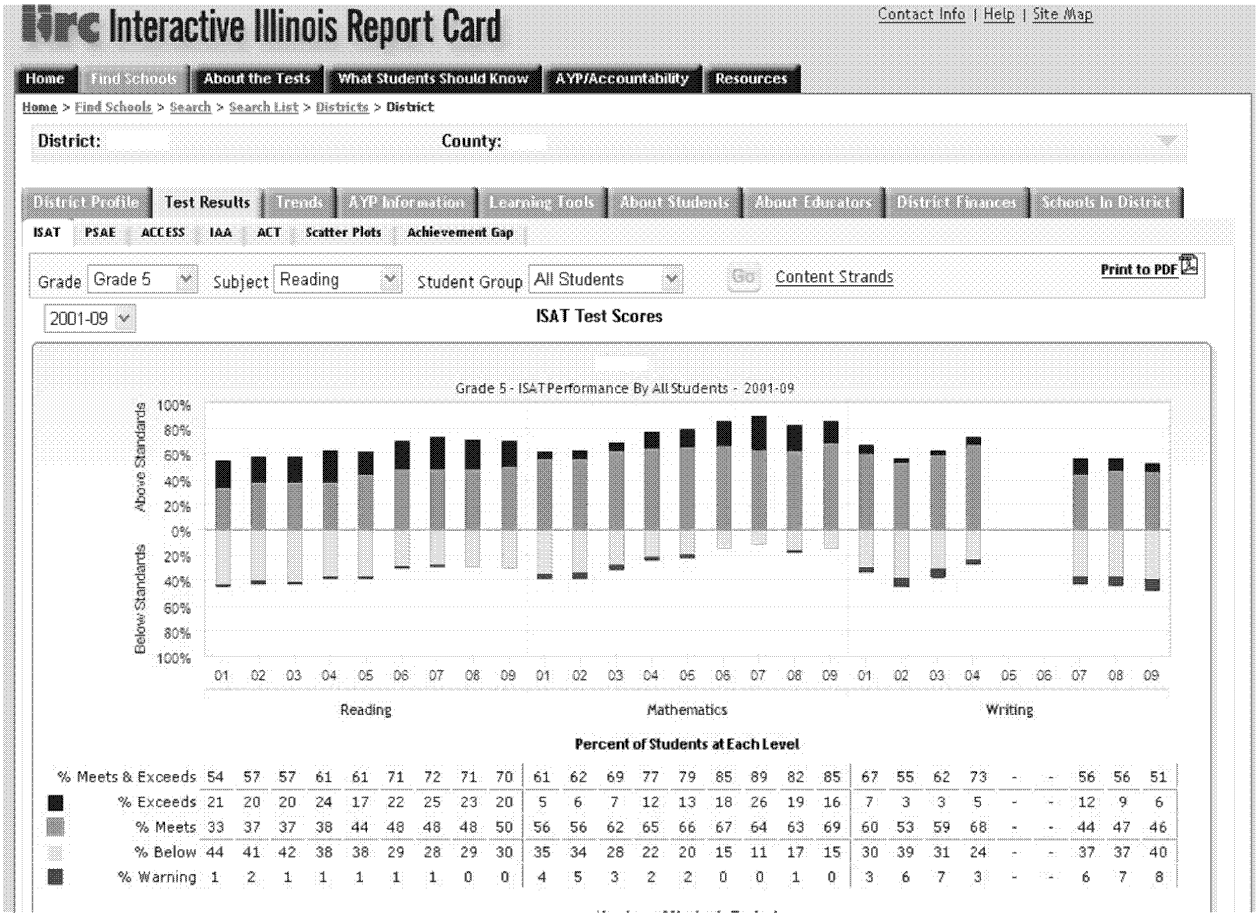
A. IIRC Performance Data, Drill-Down and Instructional Tools Screen Shots

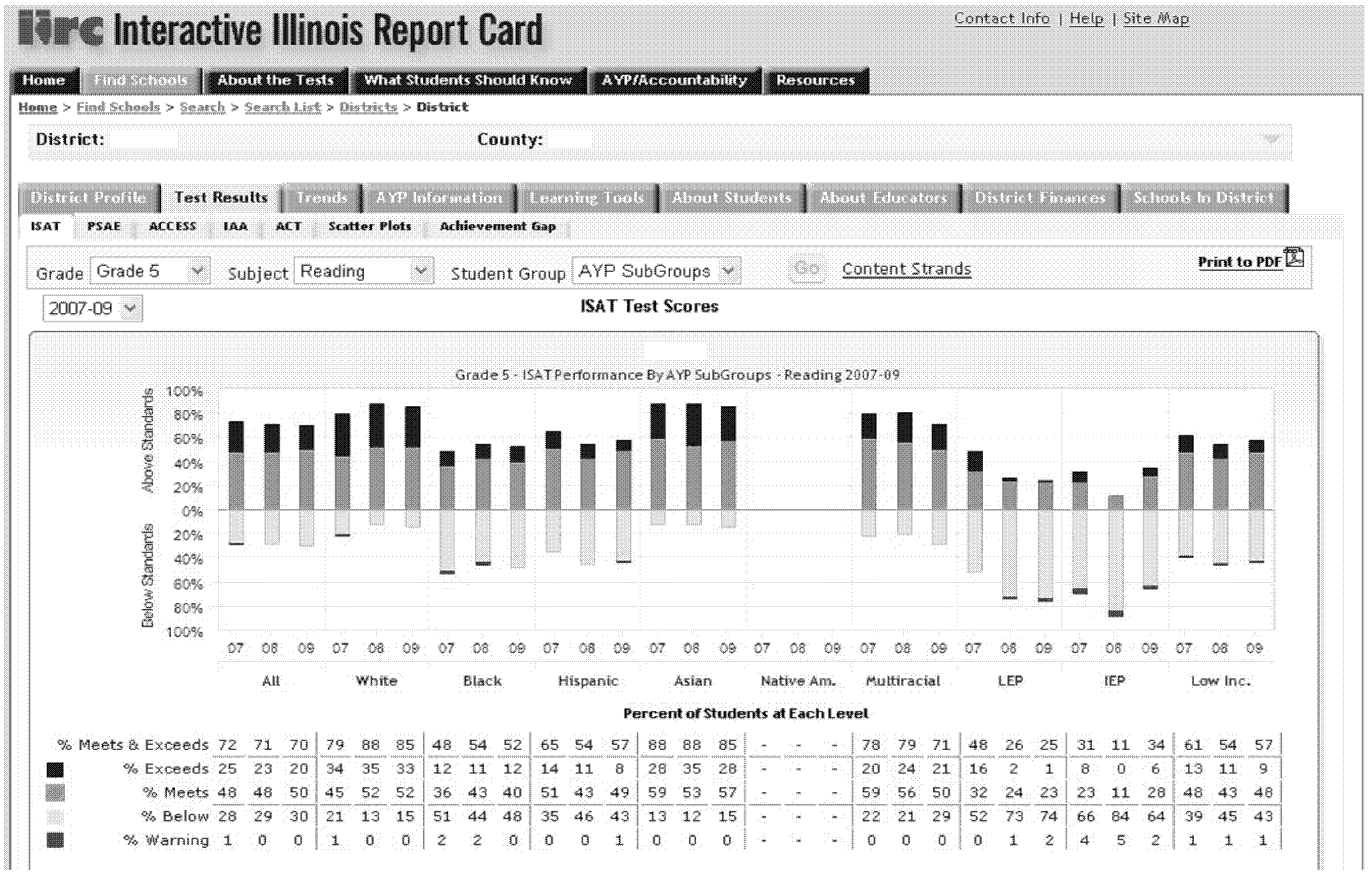
B. IIRC Data Dashboards Screen Shots

C. Example of High School-to-College Success Reports

A. IIRC Performance Data, Drill-Down and Instructional Tools Screen Shots

[screen shots on following pages]


Interactive Illinois Report Card
Contact Info | Help | Site Map
Home
Find Schools
About the Tests
What Students Should Know
AYP/Accountability
Resources
Home > Find Schools > Search > Search List > Districts > District
District:
County:
District Profile
Test Results
Trends
AYP Information
Learning Tools
About Students
About Educators
District Finances
Schools In District
ISAT
PSAE
ACCESS
IAA
ACT
Scatter Plots
Achievement Gap
Grade
Grade 5
Subject
Reading
Student Group
All Students
Go
Content Strands
Print to PDF
2001-09
ISAT Test Scores
Grade 5 - ISAT Performance By All Students - 2001-09
Above Standards
Below Standards
100%
80%
60%
40%
20%
0%
01 02 03 04 05 06 07 08 09 01 02 03 04 05 06 07 08 09 01 02 03 04 05 06 07 08 09
Reading
Mathematics
Writing
Percent of Students at Each Level
% Meets & Exceeds 54 57 57 61 61 71 72 71 70 61 62 69 77 79 85 89 82 85 67 55 62 73 - - 56 56 51
% Exceeds 21 20 20 24 17 22 25 23 20 5 6 7 12 13 18 26 19 16 7 3 3 5 - - 12 9 6
% Meets 33 37 37 38 44 48 48 48 50 56 56 62 65 66 67 64 63 69 60 53 59 68 - - 44 47 46
% Below 44 41 42 38 38 29 28 29 30 35 34 28 22 20 15 11 17 15 30 39 31 24 - - 37 37 40
% Warning 1 2 1 1 1 1 1 0 0 4 5 3 2 2 0 0 1 0 3 6 7 3 - - 6 7 8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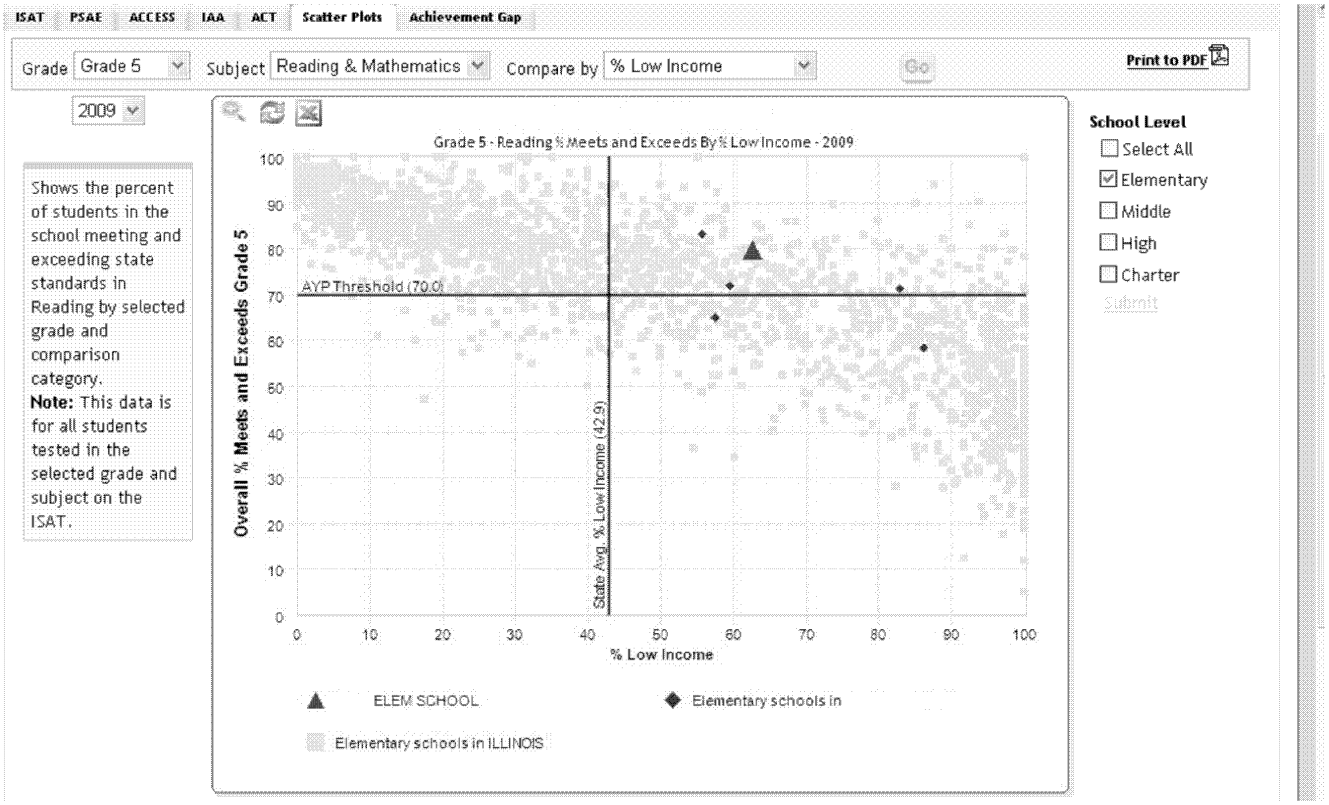
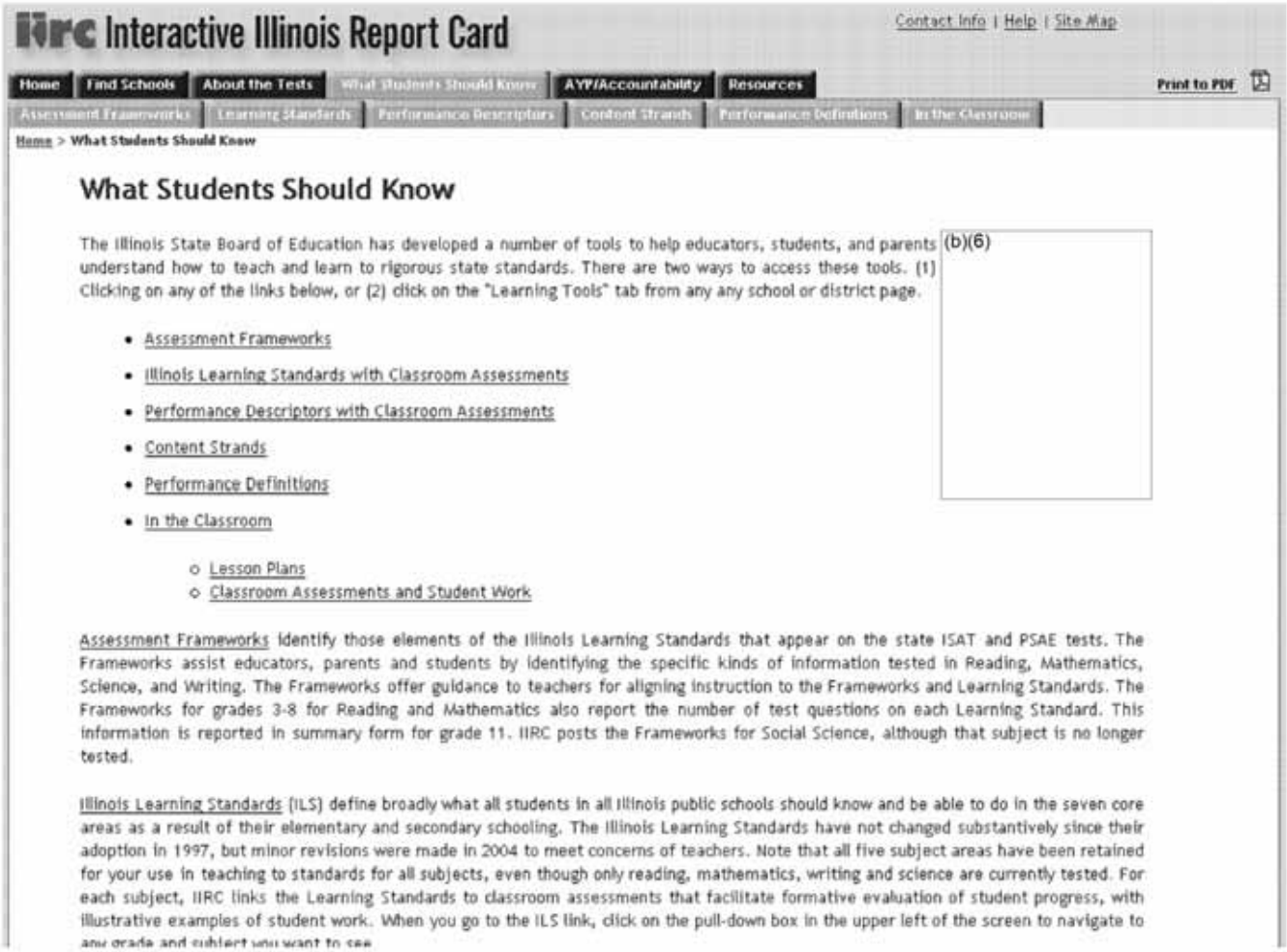
IAA
ACT
Scatter Plots
Achievement Gap
Grade Grade 5
Subject Reading
Student Group AYP SubGroups
Go
Content Strands
Print to PDF
2007-09
ISAT Test Scores
Grade 5 - ISAT Performance By AYP SubGroups - Reading 2007-09
Above Standards
Below Standards
100%
80%
60%
40%
20%
0%
07 08 09
All
White
Black
Hispanic
Asian
Native Am.
Multiracial
LEP
IEP
Low Inc.
Percent of Students at Each Level
% Meets & Exceeds 72 71 70 79 88 85 48 54 52 65 54 57 88 88 85 - - - 78 79 71 48 26 25 31 11 34 61 54 57
% Exceeds 25 23 20 34 35 33 12 11 12 14 11 8 28 35 28 - - - 20 24 21 16 2 1 8 0 6 13 11 9
% Meets 48 48 50 45 52 52 36 43 40 51 43 49 59 53 57 - - - 59 56 50 32 24 23 23 11 28 48 43 48
% Below 28 29 30 21 13 15 51 44 48 35 46 43 13 12 15 - - - 22 21 29 52 73 74 66 84 64 39 45 43
% Warning 1 0 0 1 0 0 2 2 0 0 0 1 0 0 0 - - - 0 0 0 0 1 2 4 5 2 1 1 1


ISAT
PSAE
ACCESS
IAA
ACT
Scatter Plots
Achievement Gap
Grade
Grade 5
Subject
Reading & Mathematics
Compare by
% Low Income
Go
Print to PDF
2009
Shows the percent of students in the school meeting and exceeding state standards in Reading by selected grade and comparison category.
Note: This data is for all students tested in the selected grade and subject on the ISAT.
Grade 5 - Reading % Meets and Exceeds By % Low Income - 2009
Overall % Meets and Exceeds Grade 5
AYP Threshold (70.0)
State Avg. % Low Income (42.9)
% Low Income
ELEM SCHOOL
Elementary schools in
Elementary schools in ILLINOIS
School Level
Select All
Elementary
Middle
High
Charter
Submit


IIRC Interactive Illinois Report Card
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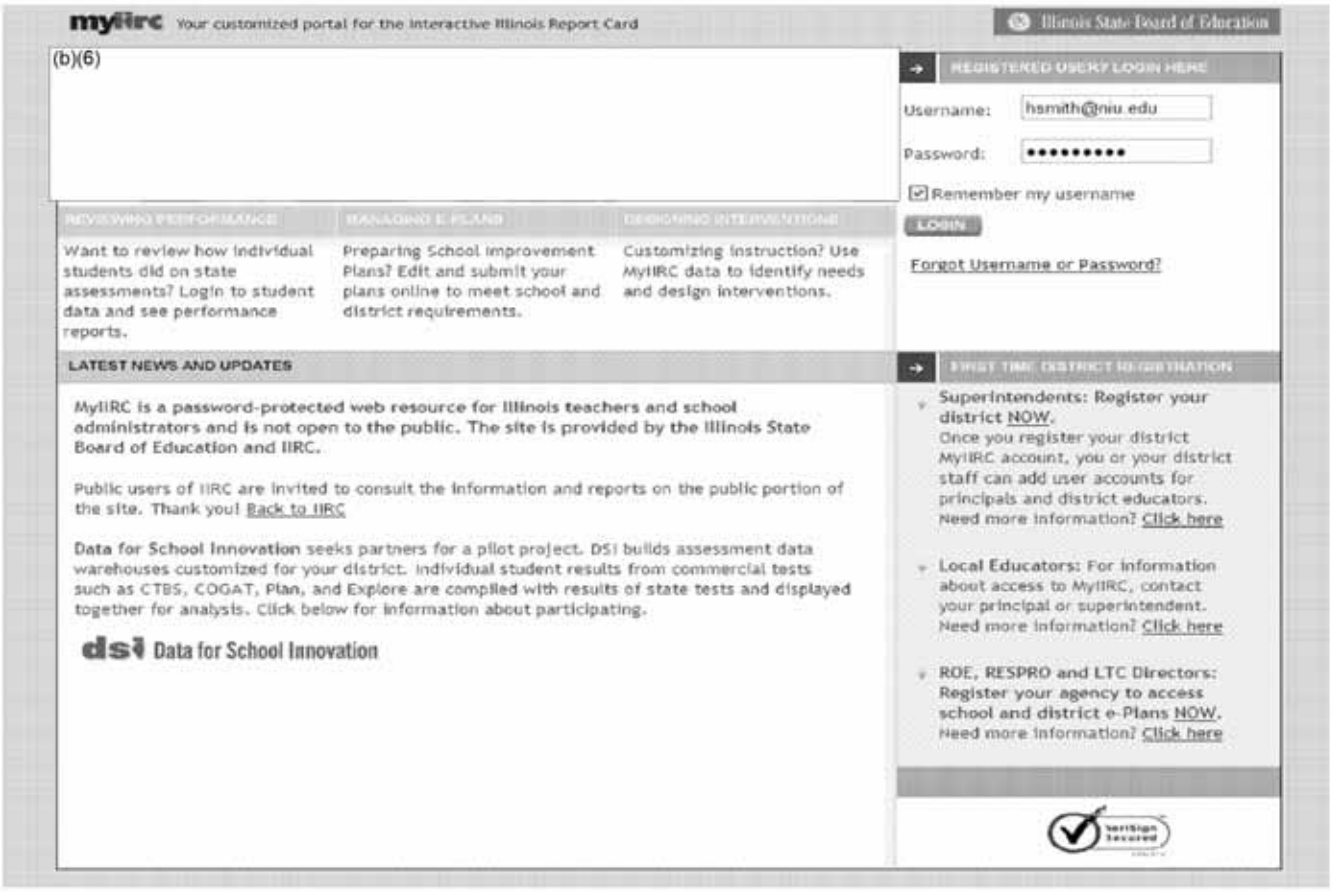
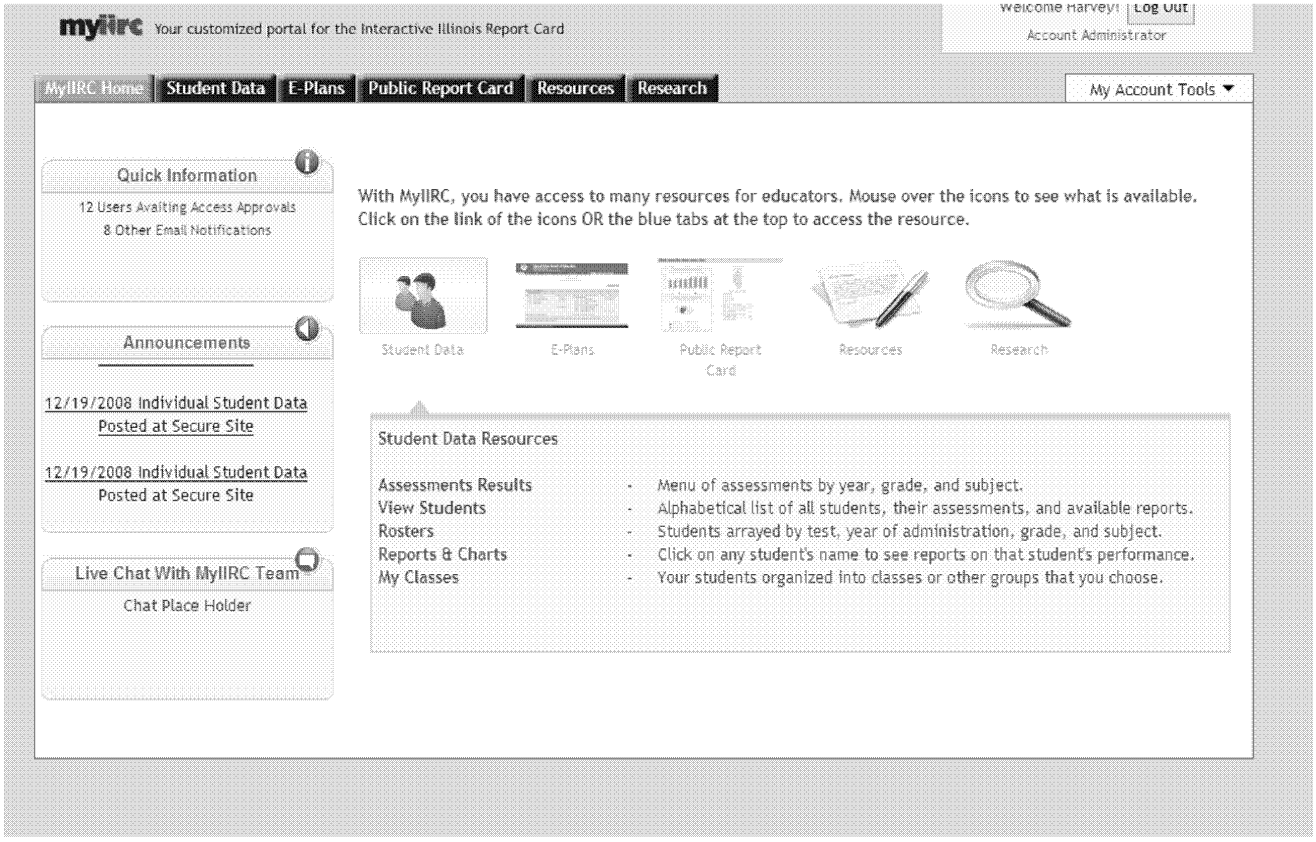
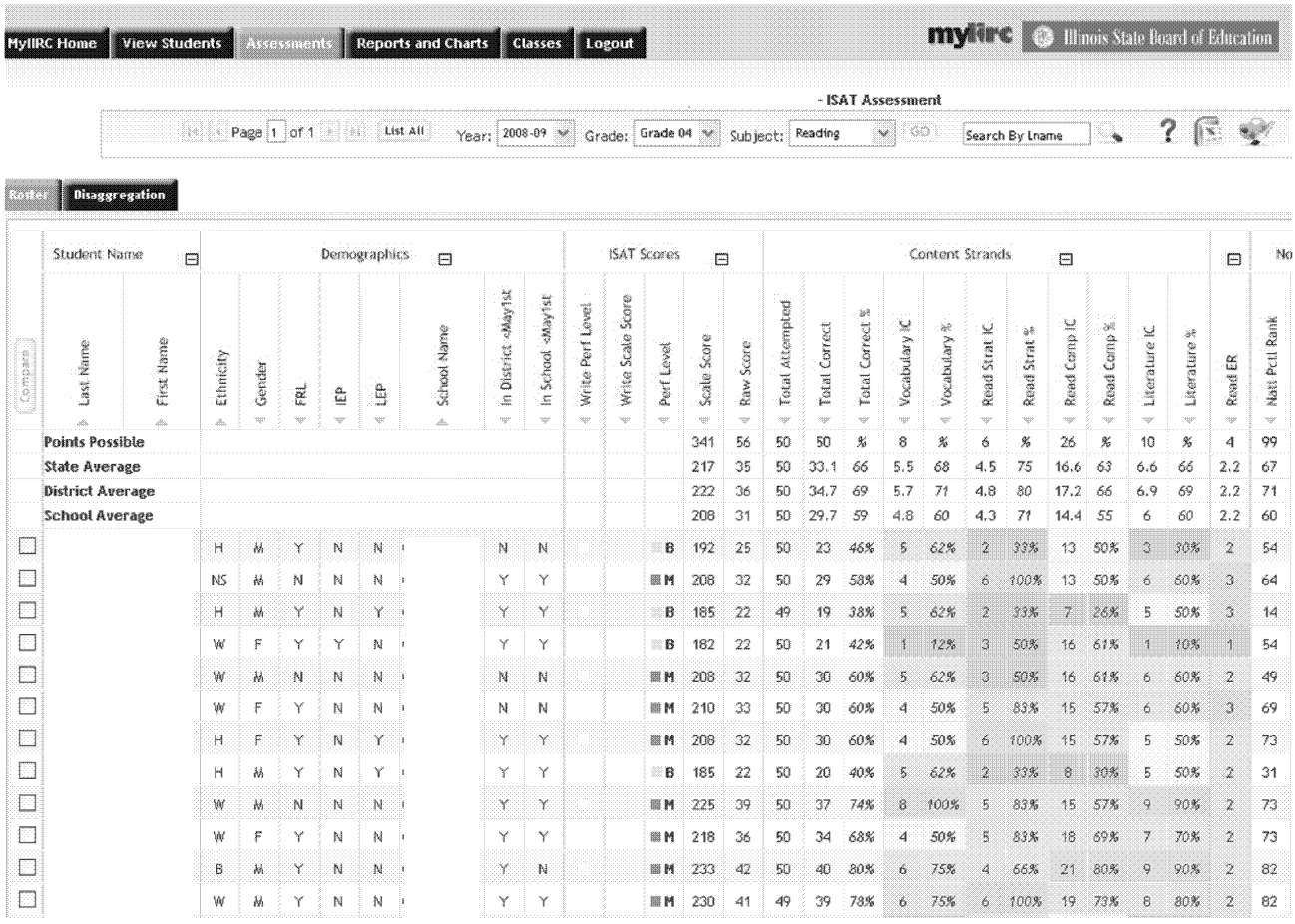
AYP/Accountability
Resources
Print to PDF
Assessment Frameworks
Learning Standards
Performance Descriptors
Content Strands
Performance Definitions
In the Classroom
Home > What Students Should Know
What Students Should Know
The Illinois State Board of Education has developed a number of tools to help educators, students, and parents understand how to teach and learn to rigorous state standards. There are two ways to access these tools. (1) Clicking on any of the links below, or (2) click on the "Learning Tools" tab from any any school or district page.
(b)(6)
Assessment Frameworks
Illinois Learning Standards with Classroom Assessments
Performance Descriptors with Classroom Assessments
Content Strands
Performance Definitions
In the Classroom
Lesson Plans
Classroom Assessments and Student Work
Assessment Frameworks identify those elements of the Illinois Learning Standards that appear on the state ISAT and PSAE tests. The Frameworks assist educators, parents and students by identifying the specific kinds of information tested in Reading, Mathematics, Science, and Writing. The Frameworks offer guidance to teachers for aligning instruction to the Frameworks and Learning Standards. The Frameworks for grades 3-8 for Reading and Mathematics also report the number of test questions on each Learning Standard. This information is reported in summary form for grade 11. IIRC posts the Frameworks for Social Science, although that subject is no longer tested.
Illinois Learning Standards (ILS) define broadly what all students in all Illinois public schools should know and be able to do in the seven core areas as a result of their elementary and secondary schooling. The Illinois Learning Standards have not changed substantively since their adoption in 1997, but minor revisions were made in 2004 to meet concerns of teachers. Note that all five subject areas have been retained for your use in teaching to standards for all subjects, even though only reading, mathematics, writing and science are currently tested. For each subject, IIRC links the Learning Standards to classroom assessments that facilitate formative evaluation of student progress, with illustrative examples of student work. When you go to the ILS link, click on the pull-down box in the upper left of the screen to navigate to

B. IIRC Data Dashboards Screen Shots

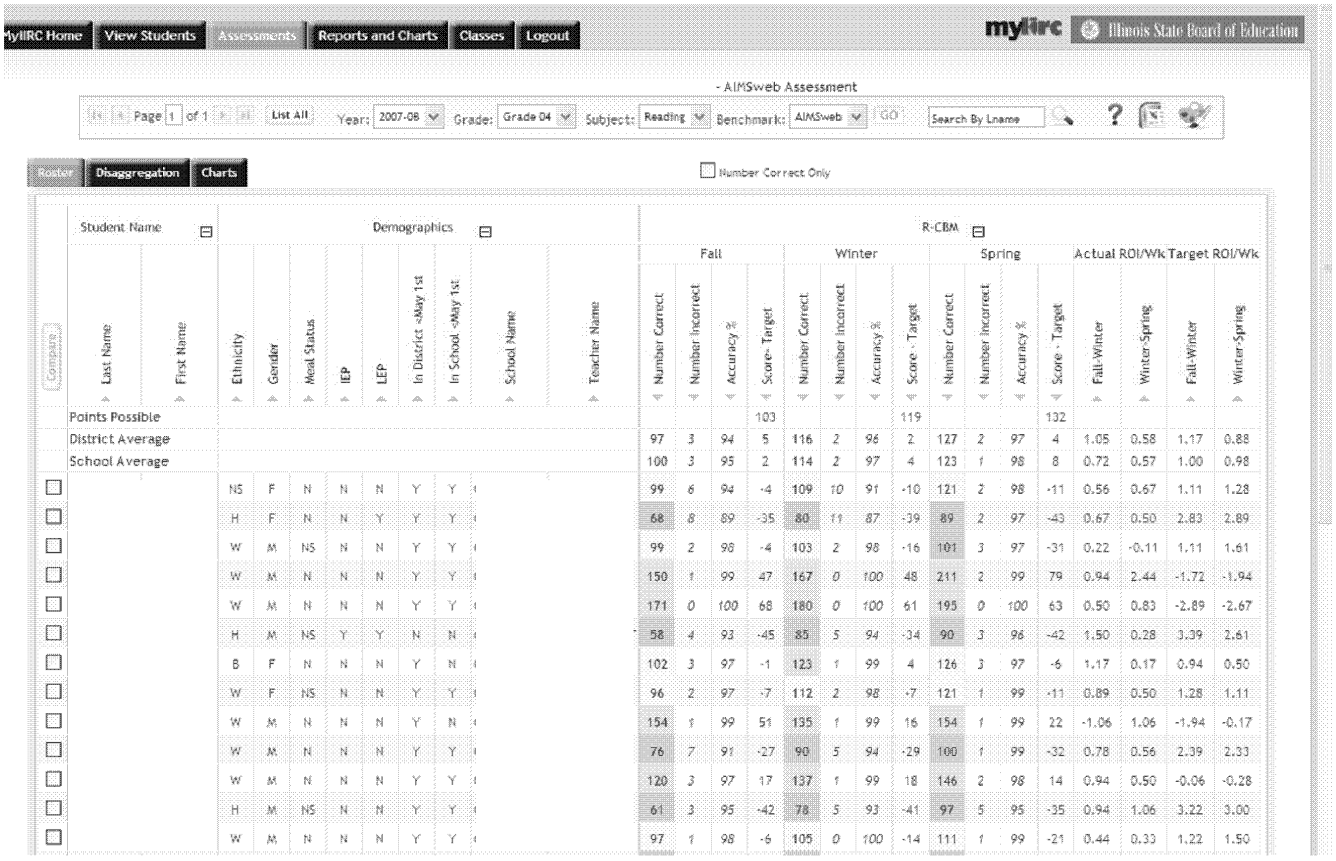
[screen shots on following pages]


myIIRC Your customized portal for the interactive Illinois Report Card
Illinois State Board of Education
(b)(6)
REGISTERED USER? LOGIN HERE
Username: hsmith@niu.edu
Password: ••••••••••
Remember my username
LOGIN
Forgot Username or Password?
Want to review how individual students did on state assessments? Login to student data and see performance reports.
Preparing School Improvement Plans? Edit and submit your plans online to meet school and district requirements.
Customizing instruction? Use MyIIRC data to identify needs and design interventions.
LATEST NEWS AND UPDATES
MyIIRC is a password-protected web resource for Illinois teachers and school administrators and is not open to the public. The site is provided by the Illinois State Board of Education and IIRC.
Public users of IIRC are invited to consult the information and reports on the public portion of the site. Thank you! Back to IIRC
Data for School Innovation seeks partners for a pilot project. DSI builds assessment data warehouses customized for your district. Individual student results from commercial tests such as CTBS, COGAT, Plan, and Explore are compiled with results of state tests and displayed together for analysis. Click below for information about participating.
dsi Data for School Innovation
Superintendents: Register your district NOW.
Once you register your district MyIIRC account, you or your district staff can add user accounts for principals and district educators.
Need more information? Click here
Local Educators: For information about access to MyIIRC, contact your principal or superintendent.
Need more information? Click here
ROE, RESPRO and LTC Directors: Register your agency to access school and district e-Plans NOW.
Need more information? Click here


myIIRC
Your customized portal for the Interactive Illinois Report Card
Welcome Harvey! Log Out
Account Administrator
MyIIRC Home
Student Data
E-Plans
Public Report Card
Resources
Research
My Account Tools
Quick Information
12 Users Awaiting Access Approvals
8 Other Email Notifications
Announcements
12/19/2008 Individual Student Data Posted at Secure Site
12/19/2008 Individual Student Data Posted at Secure Site
Live Chat With MyIIRC Team
Chat Place Holder
With MyIIRC, you have access to many resources for educators. Mouse over the icons to see what is available.
Click on the link of the icons OR the blue tabs at the top to access the resource.
Student Data
E-Plans
Public Report Card
Resources
Research
Student Data Resources
Assessments Results - Menu of assessments by year, grade, and subject.
View Students - Alphabetical list of all students, their assessments, and available reports.
Rosters - Students arrayed by test, year of administration, grade, and subject.
Reports & Charts - Click on any student's name to see reports on that student's performance.
My Classes - Your students organized into classes or other groups that you choose.



Compare	Student Name		Demographics								ISAT Scores					Content Strands														No
	Last Name	First Name	Ethnicity	Gender	FRL	IEP	LEP	School Name	In District <May1st	In School <May1st	Write Perf Level	Write Scale Score	Perf Level	Scale Score	Raw Score	Total Attempted	Total Correct	Total Correct %	Vocabulary IC	Vocabulary %	Read Strat IC	Read Strat %	Read Comp IC	Read Comp %	Literature IC	Literature %	Read ER	Nati Pctl Rank	
	Points Possible													341	56	50	50	%	8	%	6	%	26	%	10	%	4	99		
	State Average													217	35	50	33.1	66	5.5	68	4.5	75	16.6	63	6.6	66	2.2	67		
	District Average													222	36	50	34.7	69	5.7	71	4.8	80	17.2	66	6.9	69	2.2	71		
	School Average													208	31	50	29.7	59	4.8	60	4.3	71	14.4	55	6	60	2.2	60		
☐			H	M	Y	N	N		N	N			B	192	25	50	23	46%	5	62%	2	33%	13	50%	3	30%	2	54		
☐			NS	M	N	N	N		Y	Y			M	208	32	50	29	58%	4	50%	6	100%	13	50%	6	60%	3	64		
☐			H	M	Y	N	Y		Y	Y			B	185	22	49	19	38%	5	62%	2	33%	7	26%	5	50%	3	14		
☐			W	F	Y	Y	N		Y	Y			B	182	22	50	21	42%	1	12%	3	50%	16	61%	1	10%	1	54		
☐			W	M	N	N	N		N	N			M	208	32	50	30	60%	5	62%	3	50%	16	61%	6	60%	2	49		
☐			W	F	Y	N	N		N	N			M	210	33	50	30	60%	4	50%	5	83%	15	57%	6	60%	3	69		
☐			H	F	Y	N	Y		Y	Y			M	208	32	50	30	60%	4	50%	6	100%	15	57%	5	50%	2	73		
☐			H	M	Y	N	Y		Y	Y			B	185	22	50	20	40%	5	62%	2	33%	8	30%	5	50%	2	31		
☐			W	M	N	N	N		Y	Y			M	225	39	50	37	74%	8	100%	5	83%	15	57%	9	90%	2	73		
☐			W	F	Y	N	N		Y	Y			M	218	36	50	34	68%	4	50%	5	83%	18	69%	7	70%	2	73		
☐			B	M	Y	N	N		Y	N			M	233	42	50	40	80%	6	75%	4	66%	21	80%	9	90%	2	82		
☐			W	M	Y	N	N		Y	Y			M	230	41	49	39	78%	6	75%	6	100%	19	73%	8	80%	2	82		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Charts
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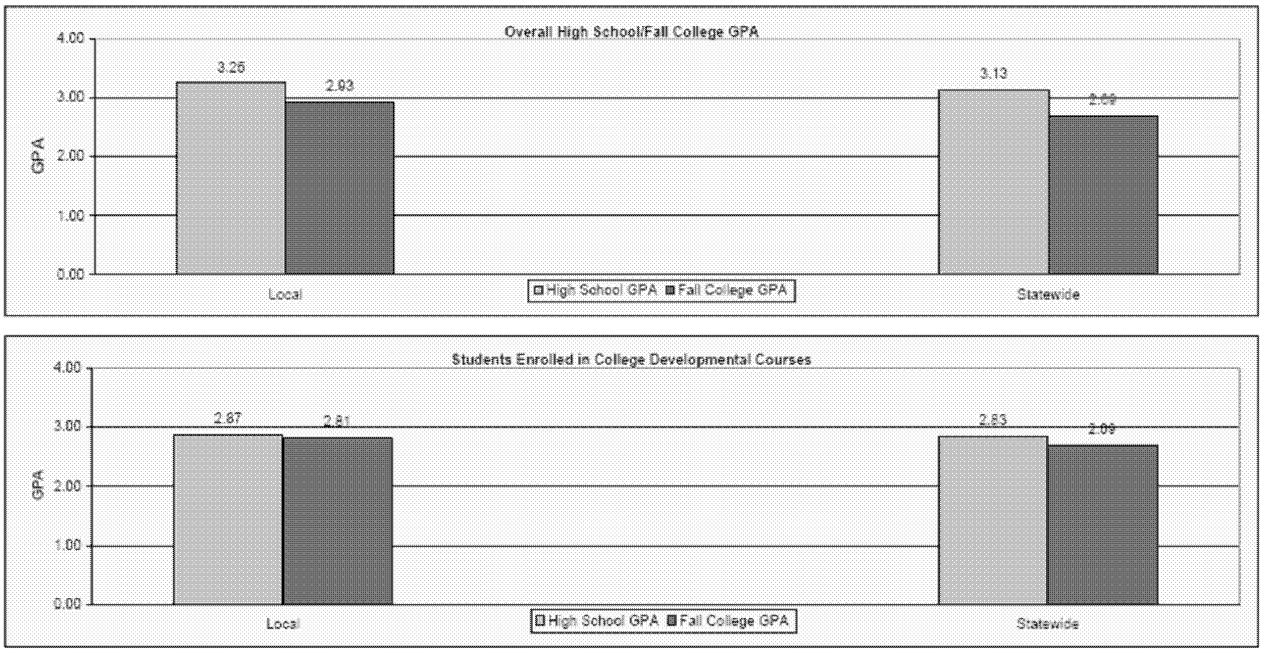
Demographics
R-CBM
Fall
Winter
Spring
Actual ROI/Wk
Target ROI/Wk
Compare
Last Name
First Name
Ethnicity
Gender
Meal Status
IEP
LEP
In District <May 1st
In School <May 1st
School Name
Teacher Name
Number Correct
Number Incorrect
Accuracy %
Score - Target
Fall-Winter
Winter-Spring
Points Possible
103
119
132
District Average
97 3 94 5 116 2 96 2 127 2 97 4 1.05 0.58 1.17 0.88
School Average
100 3 95 2 114 2 97 4 123 1 98 8 0.72 0.57 1.00 0.98
NS F N N N Y Y 99 6 94 -4 109 10 91 -10 121 2 98 -11 0.56 0.67 1.11 1.28
H F N N Y Y Y 68 8 89 -35 80 11 87 -39 89 2 97 -43 0.67 0.50 2.83 2.89
W M NS N N Y Y 99 2 98 -4 103 2 98 -16 101 3 97 -31 0.22 -0.11 1.11 1.61
W M N N N Y Y 150 1 99 47 167 0 100 48 211 2 99 79 0.94 2.44 -1.72 -1.94
W M N N N Y Y 171 0 100 68 180 0 100 61 195 0 100 63 0.50 0.83 -2.89 -2.67
H M NS Y Y N N 58 4 93 -45 85 5 94 -34 90 3 96 -42 1.50 0.28 3.39 2.61
B F N N N Y N 102 3 97 -1 123 1 99 4 126 3 97 -6 1.17 0.17 0.94 0.50
W F NS N N Y Y 96 2 97 -7 112 2 98 -7 121 1 99 -11 0.89 0.50 1.28 1.11
W M N N N Y N 154 1 99 51 135 1 99 16 154 1 99 22 -1.06 1.06 -1.94 -0.17
W M N N N Y Y 76 7 91 -27 90 5 94 -29 100 1 99 -32 0.78 0.56 2.39 2.33
W M N N N Y Y 120 3 97 17 137 1 99 18 146 2 98 14 0.94 0.50 -0.06 -0.28
H M NS N N Y Y 61 3 95 -42 78 5 93 -41 97 5 95 -35 0.94 1.06 3.22 3.00
W M N N N Y Y 97 1 98 -6 105 0 100 -14 111 1 99 -21 0.44 0.33 1.22 1.50

C. Example of High School-to-College Success Reports

[see following pages]

Chart 1: Comparisons of High School GPA and Fall College GPA for All Graduates and Those Assigned to Developmental Courses



What This Chart Tells You:

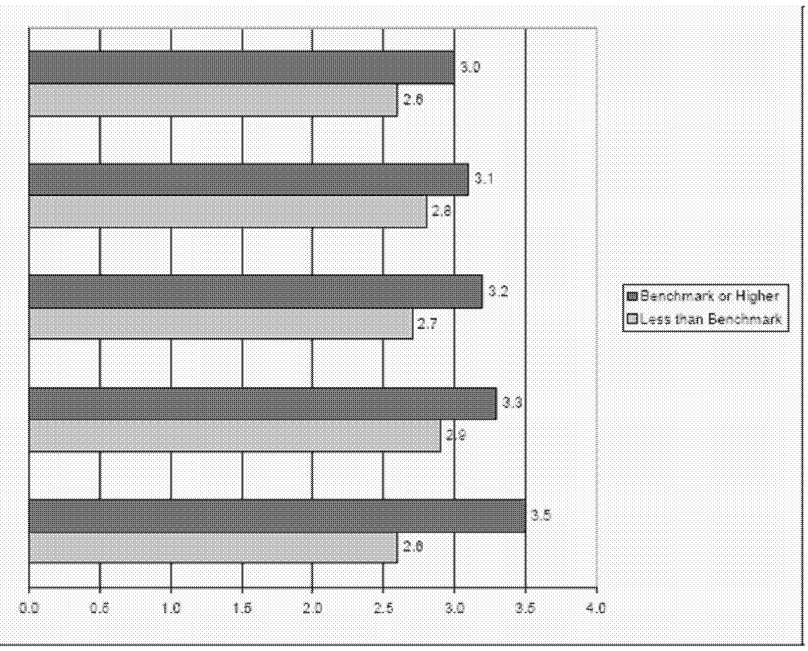
Students who were assigned to developmental cousework generally earn lower grades in both high school and college. The need for developmental courses should be less if students take the recommended college preparatory courses: 4 or more years of English, 3 or more years of mathematics beyond pre-algebra, 3 or more years of science and social studies. Comparisons by campus are shown in Tables 2 and 7 (Appendix).

Your Next Steps:

1. Make sure all students are taking college-preparatory courses and are taught using a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.

Chart 2: Average Fall College GPA for Students Who Did/Did Not Earn ACT College Readiness Benchmark Scores

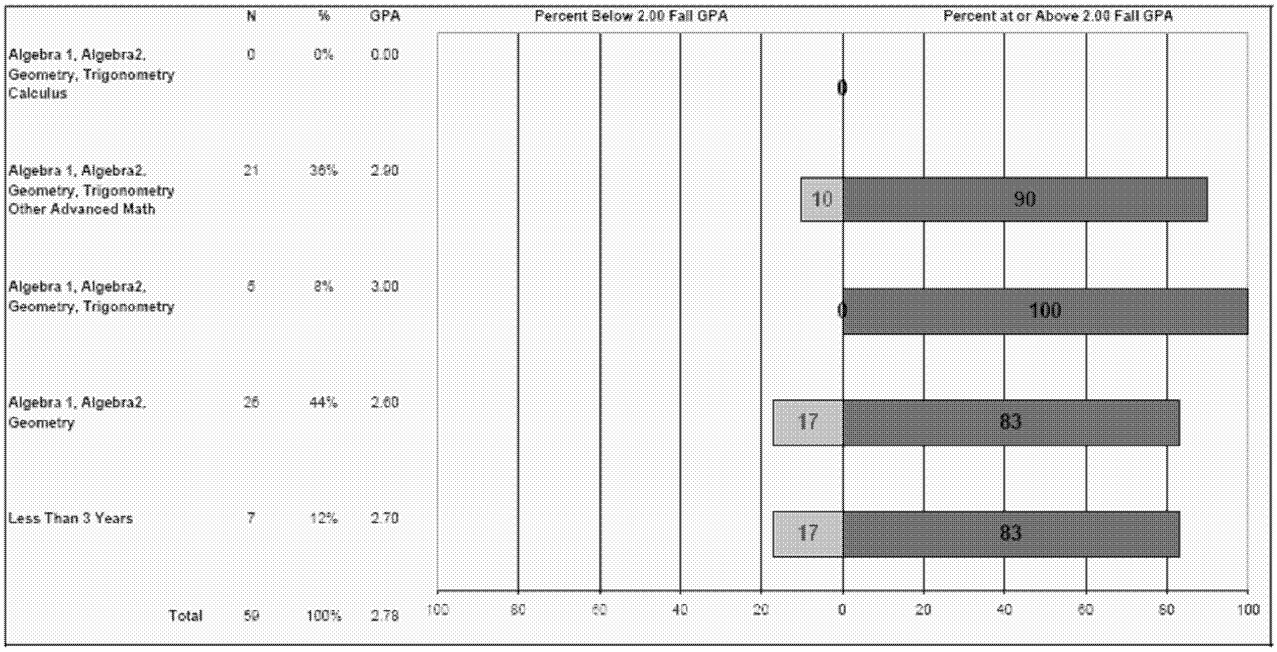
	Benchmark	N	%
English	18 or Higher	80	73%
	Less than 18	29	27%
Mathematics	22 or Higher	29	27%
	Less than 22	80	73%
Reading	21 or Higher	42	39%
	Less than 21	67	61%
Science	24 or Higher	15	14%
	Less than 24	94	86%
Met All Four Benchmarks	Did	10	9%
	Did Not	99	91%



What This Chart Tells You:
Graduates who earned the ACT College Readiness benchmark scores earned higher freshmen grades that those who fell short of the benchmark scores. Comparisons by campus are show in Table 3 (Appendix). The benchmark scores are associated with a 50% or more chance of earning a B or better in selected courses (see Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards, review the skills needed to move your students to a higher score range.
3. Provide students with help both inside and outside the classroom (when needed) with tutors, teachers, and/or other helpers.

Chart 3: Fall College GPA by Mathematics Course Sequence Patterns Studied in High School

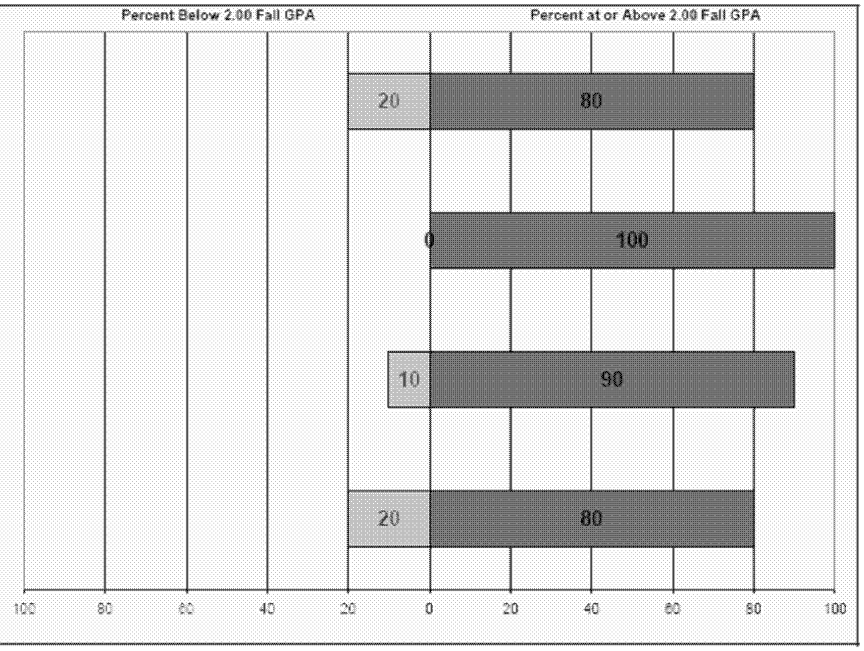


What This Chart Tells You:
Most graduates who took more rigorous mathematics courses in high school earn higher freshmen grades. Students who take more than 3 years of mathematics beyond pre-algebra in high school are more successful in college. See the reference to *On Course for Success* (Appendix). Comparisons by campus are shown in Table 4 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Monitor students' achievement of college-readiness skills using EPAS-EXPLORE (grades 8/9), PLAN (grade 10), and ACT (grades 11/12).
3. Using ACT's College Readiness Standards for Mathematics, help the mathematics teachers in your high school ensure that the skills needed to be successful in first-year college mathematics courses are being taught.
4. Use the information from EXPLORE and PLAN to help students make proper course selections. Encourage all students to take more than 3 years of mathematics beyond pre-algebra.

Chart 4: Fall College GPA by Science Course Sequence Patterns Studied in High School

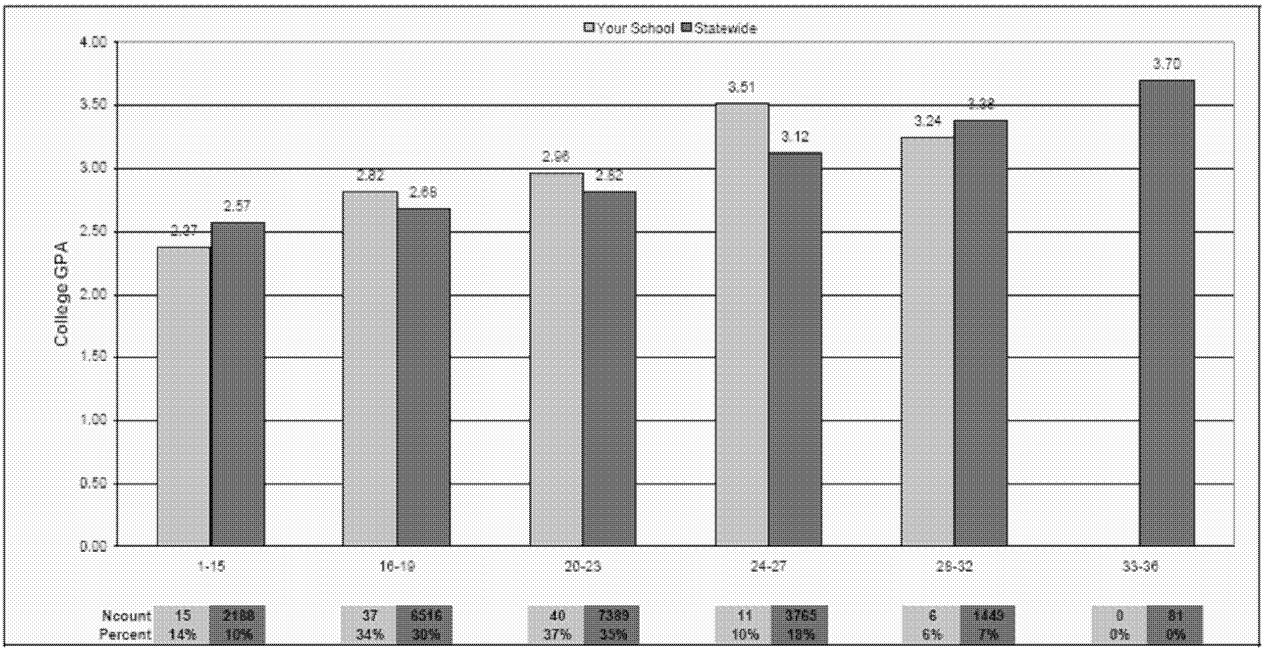
	N	%	GPA
Biology, Chemistry, Physics	14	15%	2.60
General Science, Biology, Chemistry, Physics	6	6%	3.20
General Science, Biology, Chemistry	55	57%	3.00
Less Than 3 Years	21	22%	2.60
Total	82	100%	2.95



What This Chart Tells You:
Graduates who took 3 or more year of science beyond General Science tend to earn higher grades in college. Comparisons by campus are shown in Table 5 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Monitor students' achievement of college-readiness skills using EPAS-EXPLORE (grades 8/9), PLAN (grade 10), and ACT (grades 11/12).
3. Using ACT's College Readiness Standards for Science, help the science teachers in your high school ensure that the skills needed to be successful in first-year college science courses are being taught.
4. Use the information from EXPLORE and PLAN to help students make proper course selections. Encourage all students to take more than 3 years of science beyond General Science.

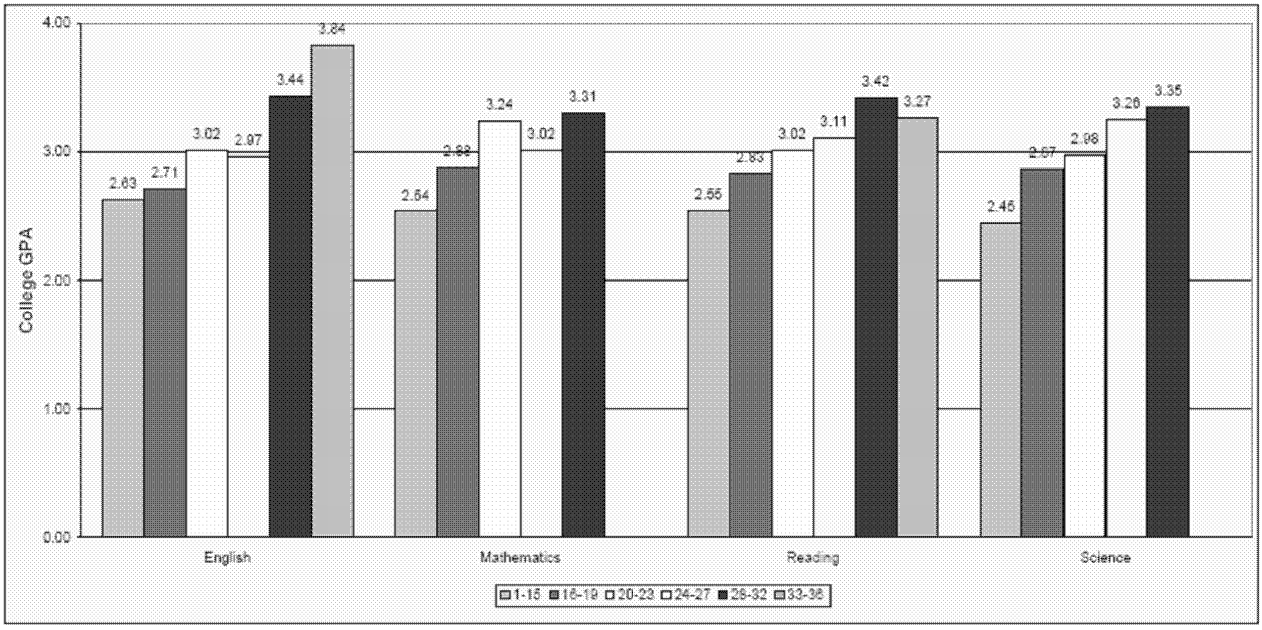
Chart 5: Comparisons of Fall College GPA by ACT College Readiness Standards (CRS) Score Ranges



What This Chart Tells You:
Students in higher ACT CRS Score Ranges tend to earn higher college freshmen grades. College freshmen GPAs earned by your graduates and students statewide are shown by CRS Score Ranges. Comparisons by campus are shown in Table 6 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards for Science, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.
3. Using ACT's College Readiness Standards, review the skills needed to move your students to a higher score range. Higher scores mean better grades in college.

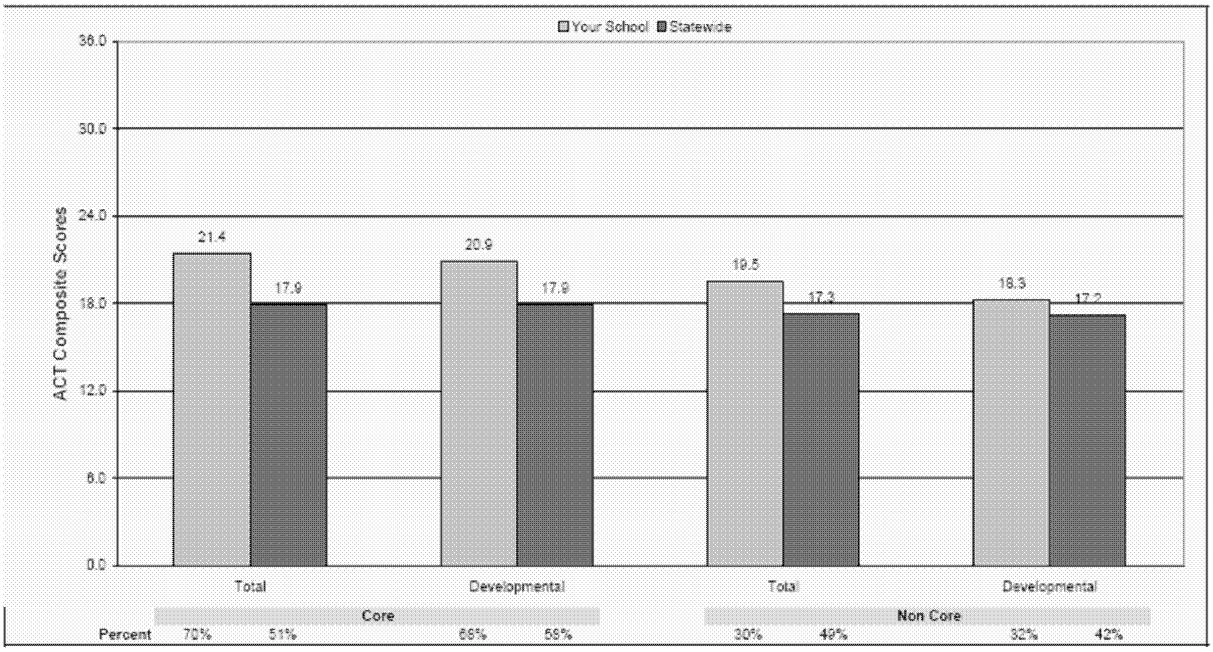
Chart 6: Fall College GPA by ACT College Readiness Standards (CRS) Score Ranges



What This Chart Tells You:
Students with higher scores in each of the ACT CRS Score Ranges earn higher first year college grades. ACT scores are directly associated with freshmen success in college. Comparisons by campus are shown in Table 6 (Appendix).

Your Next Steps:
1. Monitor students' achievement of college-readiness skills using EPAS-EXPLORE (grades 8/9), PLAN (grade 10), and ACT (grades 11/12). Develop experiences for students to improve their skills in grades 8, 9, 10, 11, and 12.
2. Using ACT's College Readiness Standards for Science, review the skills needed to move your students, especially those in the lower two score ranges, to a high score range. Higher scores generally mean higher college GPA.
3. Using ACT's College Readiness Standards, help teacher ensure that the skills needed to be successful in first-year college courses are being taught in their high school courses.

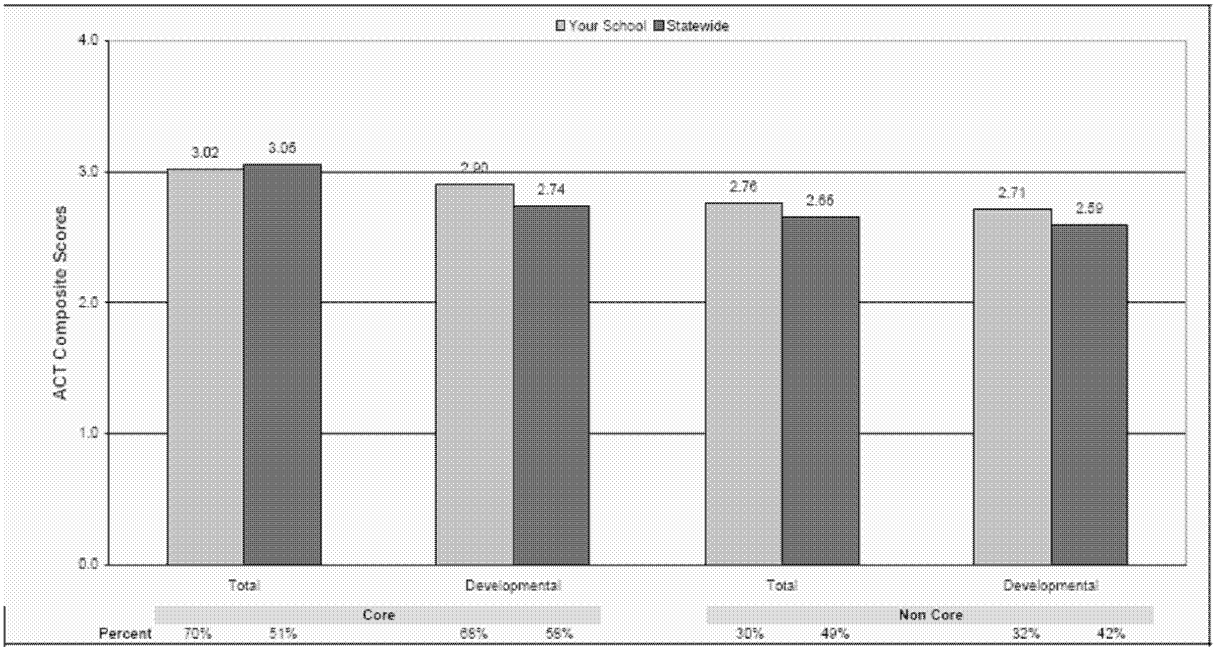
Chart 7a: Comparisons of Composite Test Scores by Core Course-taking



What This Chart Tells You:
Students who completed the recommended core coursework earned higher ACT scores, higher college freshman grades, and are less likely to be assigned to developmental courses. Students assigned to developmental courses earned lower scores and grades compared to all students. The percentage of students listed as developmental are based on the total number in the reference group. Comparisons by campus are shown in Table 2 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards for Science, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.

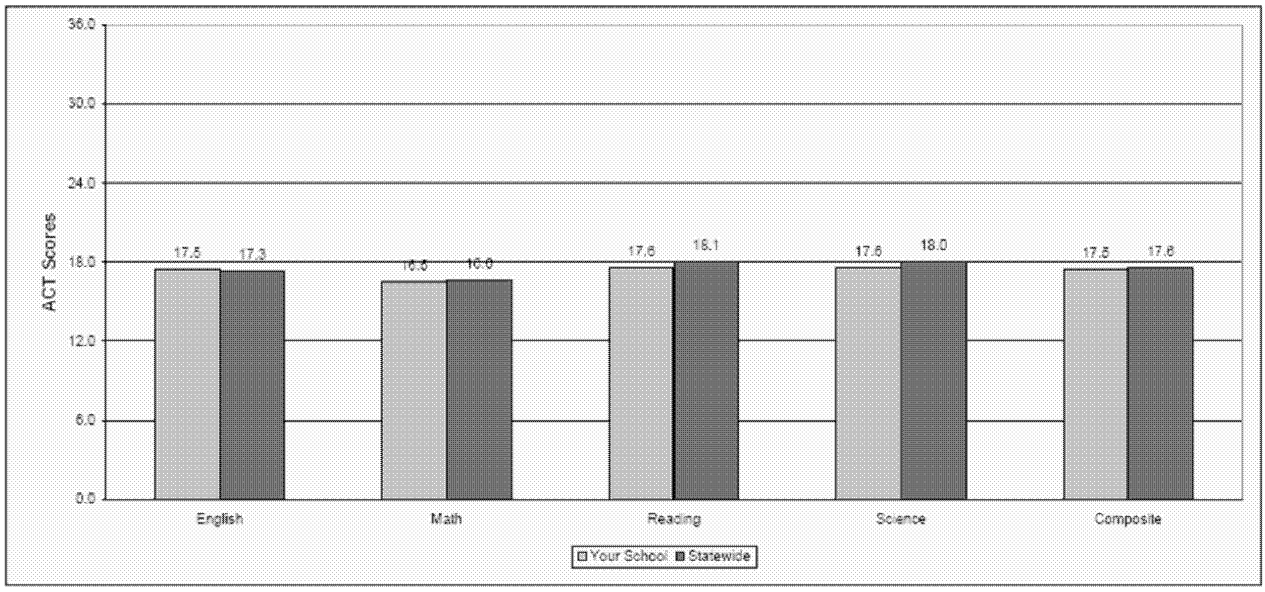
Chart 7b: Comparisons of Fall College GPA by Core Course-taking



What This Chart Tells You:
Students who completed the recommended core coursework earned higher ACT scores, higher college freshman grades, and are less likely to be assigned to developmental courses. Students assigned to developmental courses earned lower scores and grades compared to all students. The percentage of students listed as developmental are based on the total number in the reference group. Comparisons by campus are shown in Table 2 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards for Science, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.

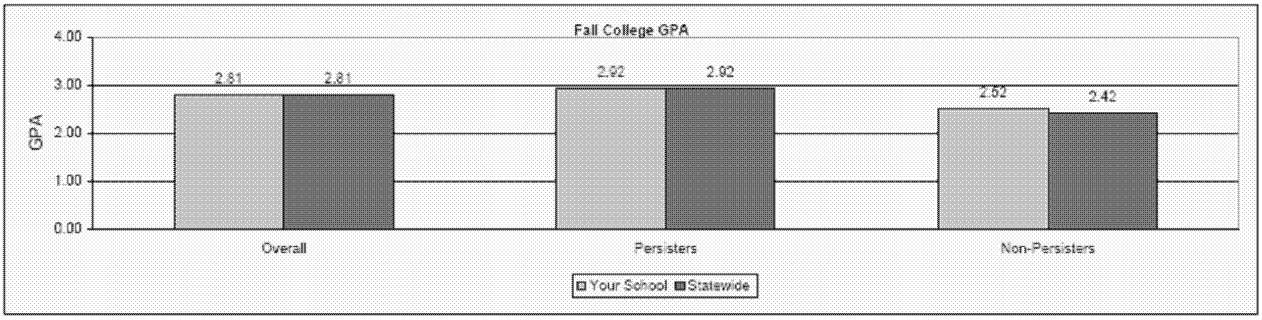
Chart 8: Average ACT Scores for Students Assigned to Developmental Coursework in College

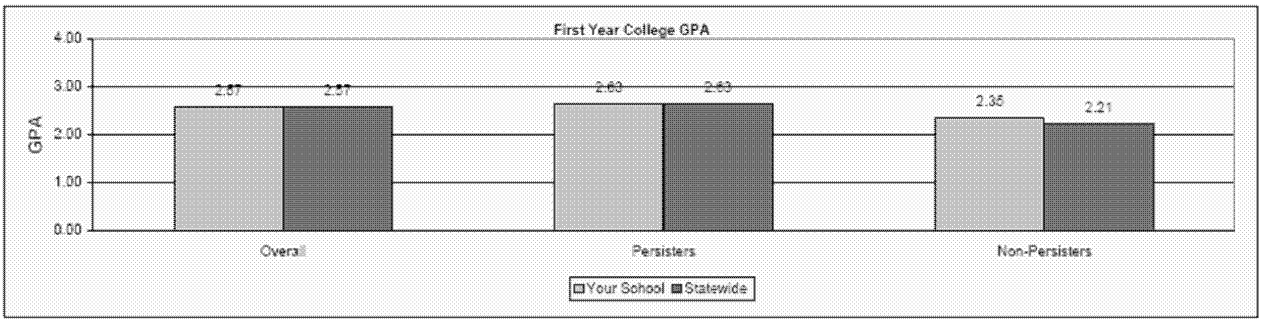


What This Chart Tells You:
Students who were identified as needing developmental coursework in college tend to earn lower ACT scores than those of all freshmen and are less likely to have taken the recommended rigorous coursework in high school. Comparisons by campus are shown in Tables 2 and 7 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Monitor students' achievement of college-readiness skills using EPAS-EXPLORE (grades 8/9), PLAN (grade 10), and ACT (grades 11/12).
3. Using ACT's College Readiness Standards for Science, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content. Should you review content of your courses?
4. Provide students with help both inside and outside the classroom (when needed) with tutors, teachers, and/or other helpers.

Chart 9: Comparisons of {State Name} ACT-Tested Students Enrolled in {State Name} Public Postsecondary Institutions Who Did/Did Not Persist into Year 2

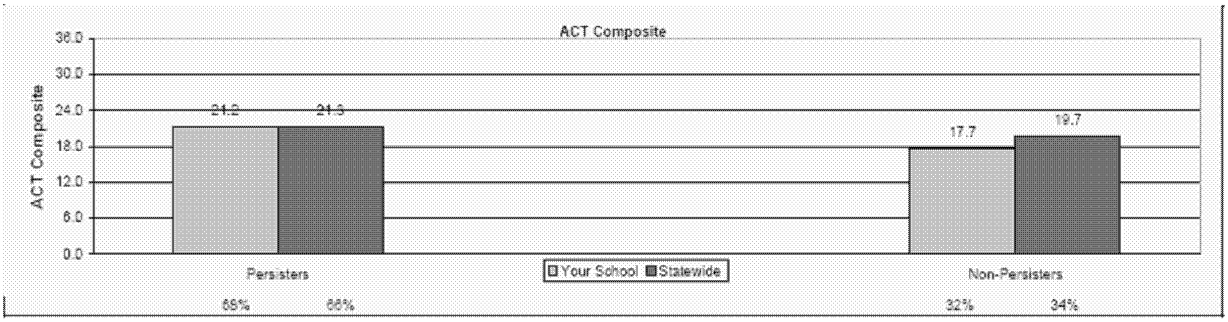


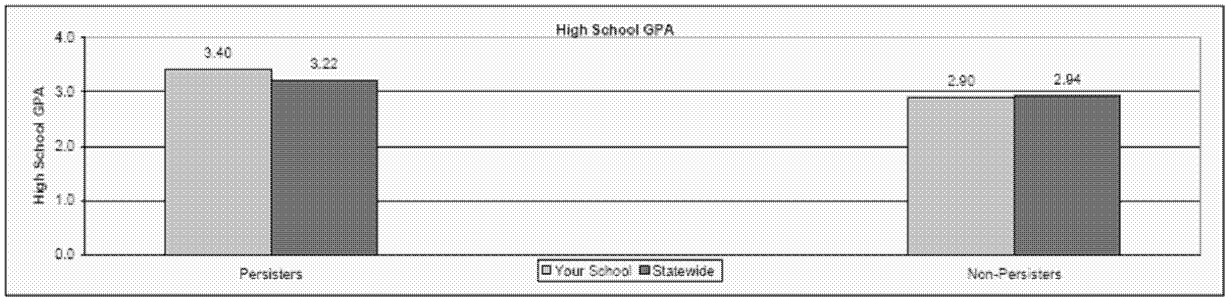


What This Chart Tells You:
This chart enables staff to compare average first term GPA and first year GPA for your graduates as well as those statewide. Comparisons can be made for those who persisted into year 2, as well as those who did not return for year 2. Comparisons by campus are shown in Table 1 and 8 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum. If scores and grades are not satisfactory, review your curriculum for rigor in the courses. Better academic readiness increases persistence.
2. Using ACT's College Readiness Standards, help teachers ensure that the skills needed to be successful in first-year college courses are being taught in their high school courses.

Chart 10: Comparisons of Your School and Schools Statewide for Those Who Returned to Same Campus in Year 2 (Persisters) and Those Who Did Not Return to the Same Campus in Year 2 (Non Persisters) Using ACT Composite Scores and High School GPAs

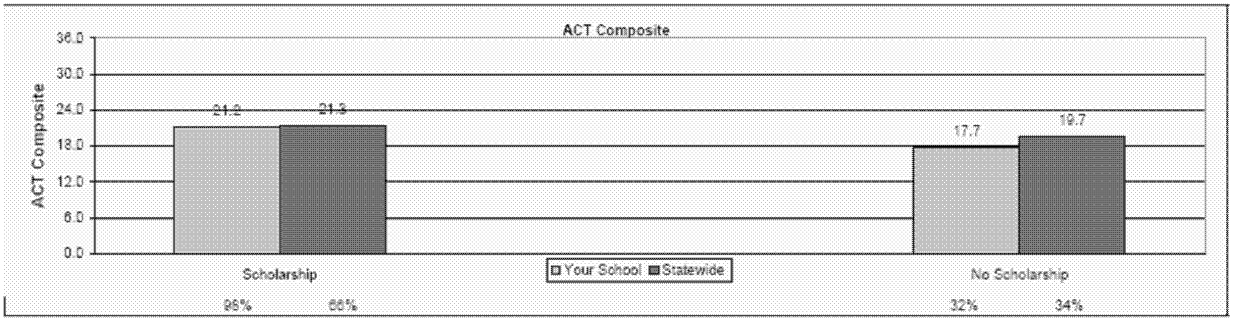


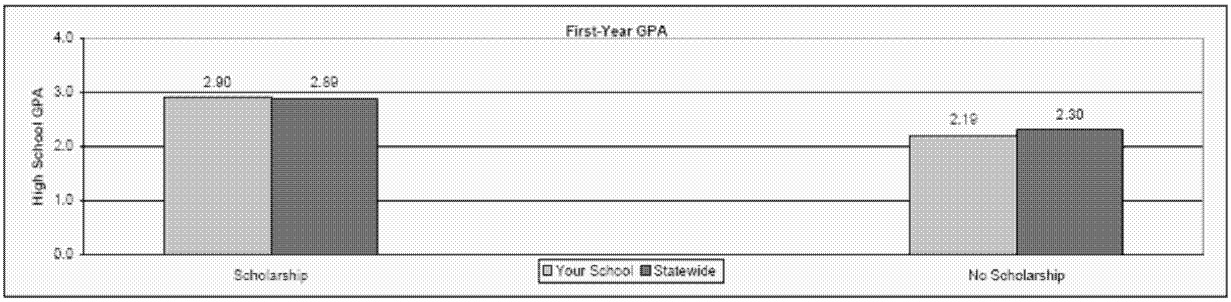


What This Chart Tells You:
Students who completed the freshman year of college, and who returned for the second year tend to have higher ACT scores, and higher high school grades than those who did not return for year 2. Comparisons by campus are shown in Table 8 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.
3. Using ACT's College Readiness Standards, help teachers ensure that the skills needed to be successful in first-year college courses are being taught in their high school courses.

Chart 11: Comparisons of Your School and Schools Statewide for Those Who Did/Did Not Receive State Scholarship Using ACT Composite Scores and First-Year GPAs





What This Chart Tells You:
Students who completed the freshman year of college, and who returned for the second year tend to have higher ACT scores, and higher high school grades than those who did not return for year 2. Comparisons by campus are shown in Table 9 (Appendix).

Your Next Steps:
1. Make sure all students are taking college-preparatory courses and are taught a rigorous college-oriented curriculum.
2. Using ACT's College Readiness Standards, reevaluate your current high school course objectives, their syllabi, and their lesson plans for rigorous college-oriented content.
3. Using ACT's College Readiness Standards, help teachers ensure that the skills needed to be successful in first-year college courses are being taught in their high school courses.

Appendix C3-1

Learning and Performance Management Support System Supplemental Materials:

A. LPMS/IlliniCloud Stakeholder Engagement and Requirements Development

B. Cloud Computing Infrastructure

C. NCSA Overview

D. State and LEA LPMS Data Integration Requirements

E. Student Vault

A. LMPS/IlliniCloud Stakeholder Engagement and Requirements Development

As part of the development of the LPMS requirements, ISBE convened a working group of stakeholders from across the State (including district, state, and union representation) who helped to validate the need for a statewide platform and a transformative data solution as part of the RTTT plan. As shown below, this working group discussed the "now" status of local of State and local systems and the "future" vision that should result from the deployment of the LPMS:

Now	Future
▪ Difficult to integrate data across state and local systems.	▪ Integrated set of data elements, sourced from districts and the state.
▪ 870 district-specific software/hardware solutions due to wide local system variance.	▪ Common platform to launch a myriad of applications and innovations, easily customizable.
▪ Multitude of local systems expensive to maintain and update.	▪ Centrally hosted system with updates for all users. District resources can focus on customization and use of data.
▪ State applications and reporting are not integrated into district views.	▪ Districts receive advanced reporting and instructional tools, with integrated state/local data.
▪ Small districts cannot afford to develop and maintain robust systems.	▪ Standard applications and freely available (or low cost) third-party applications so that all districts have access to have high quality information management tools.
▪ Relevant state data accessible to only a limited number of users.	▪ Appropriate, role-based access to relevant data to a broad number of users. Frequent access to data by teachers/administrators provides a "self-cleansing" mechanism.

An existing Illinois model for a multi-district solution was examined. In Bloomington School District 87 (a Participating LEA) and Unit District 5, the local superintendents worked to create a instructional improvement system (Illini Data) that ensures that all teachers have a clear picture of the students in their classrooms from test scores to special needs to involvement with athletics or clubs. Working with local corporate citizen State Farm, the LEAs built an accessible, user-friendly data interface that teachers are now using to plan and understand student needs and develop targeted lesson plans.

Working Group:

The LPMS Working Group includes the following members. It will continue to meet as necessary to inform the development of the LPMS.

Working Group Member	Organization
Alsop, Amy	Illinois Federation of Teachers
Beever, Scott	Illinois State Board of Education
Bianchini, Sharon	Community Unit School District 220
Boer, Ben	Advance Illinois
Cegelis, Christine	Illinois Century Network
Chamberlain, Terry	Illinois State Board of Education
Chumbley, Bryan	Peoria District 150
Cullen, Marica	Illinois State Board of Education
DeWitt, Vicki	Director, Area 5 Learning Technology Center
Drone, Mark	Regional Superintendent, Fayette, and Effingham Counties
Evans, John	University of Illinois
Frank, Larry	Illinois Education Association
Furr, Jonathan	Holland and Knight
Loveless, Abe	Belleville Township High School District 201
Montoya, Abel	Illinois Student Assistance Commission
Morrison, Daryl	Illinois Education Association
Nielson, Robert	Bloomington Public Schools District 87
Nowell, Amy	Chicago Public Schools
Parke, Scott	Illinois Community College Board
Peterson, Jim	Bloomington Public Schools District 87
Shake, John	Illinois State Board of Education
Sheets, Robert	Department of Commerce and Economic Opportunity
Summers, Warren	Illinois State Board of Education
Tyszko, Jason	Office of the Governor Pat Quinn
Wise, Connie	Illinois State Board of Education

Requests for Information

ISBE also worked with vendors through a process of responses to Requests for Information (RFIs) and a working session to better define scope, priorities, risks, critical success factors, phasing and budget. The RFI processes enabled the State to leverage vendor experiences with hundreds of districts that would otherwise have taken thousands of hours and dollars to collect, and validated that the State's strategy, while ambitious, is achievable.

In July 2010, ISBE issued a Request for Information (RFI) in order to ascertain the number of potential vendors and the various learning and performance management systems available in the marketplace. The RFI requested responses to a series of questions to generate detailed information about the scope of the marketplace. The RFI also asked for four references, including cost and pricing structure for implementation. ISBE received 23 responses from international leaders in technology deployment and development, as well as from companies and universities with extensive experience working with Illinois school districts.

Informed by the responses to the initial RFI and the working group processes, a detailed description of proposed LPMS requirements was drafted and posted by ISBE to the Illinois Procurement Bulletin on December 2, 2009. ISBE received 21 responses to this second RFI with detailed recommendations for better defining the vision and sharpening the proposed requirements. The RFI also invited vendors to a working session on January 5, 2009 to further develop the proposed requirements in advance of this application. During this unique session, which included 35 attendees with leading expertise in this field, ISBE gained further input leading to the LPMS plan components set forth in this application.

History and Overview of the IlliniCloud

Since 1998 Illinois school districts, Illinois State Board of Education and other educational partners have been discussing the feasibility of K-12 school districts sharing and leveraging of instructional technology resources and data. In 2004, the Illinois State Board of Education helped elevate those conversations with their creation of the Student Information System (SIS) which centrally collects various data from all Illinois school districts as well as assigns unique student ID numbers to the 2,000,000 Illinois public school students. Further, Cloud computing and virtual technologies have drastically reduced the barriers of sharing resources, applications, services and infrastructure among K-12 clients.

In October 2009 a core group of district tech coordinators, Learning Technology Center Directors and representatives from the Illinois State Board of Education began to formally meet to support a grassroots effort to explore the need and interest in "building" the IlliniCloud. The intellectual foresight can be seen below:

> *The vision of the IlliniCloud is to provide Illinois schools districts with services and access that will directly improve student learning through a statewide infrastructure and delivery mechanism which leverages lower costs and sharing of applications, data storage and instructional technology resources. This statewide cloud will provide superior levels of instructional technological services and access to students, educators, parents and community.*

With over 860 school districts in the State of Illinois this core group realized there was a great potential for districts to share facilities, hardware, applications, data structures, services and support. Research says, if organized correctly, these shared resources could potentially save Illinois districts between 30% to 50% of the costs districts are presently incurring to operate and maintain data, management and instructional information systems. (Darrell West, Brookings Institute, 2010)

Cost savings are needed for Illinois schools, but the primary goal of the IlliniCloud is to provide the infrastructure to host a Learning Performance Management System (LPMS) for use throughout all classrooms. Multiple silos of data exist across hundreds of Illinois districts that must be accessed to build an effective LPMS. The crucial purpose of the cloud is to consolidate these silos of data into a central location for use/consumption by local districts, teachers, parents as well as for state reporting.

Consortium Member Districts & Partnerships & the Proof of Concept (POC)

As discussed above, the IlliniCloud is a grassroots plan developed by school district technology leaders, with an understanding that centralized resources are more secure, reliable, and economical. The Cloud concept grew from on-going efforts to promote low-cost, shared services as far back as 2004. Due to the current technology in early 2009, it was restructured using a Cloud computing model. The ability to bring in additional school districts under a Proof of Concept effort began in late November 2009.

The official POC Kickoff meeting with over 200 school districts attending was on February 17, 2010. At that time an on-line needs assessment was distributed statewide. Over 100 districts responded with immediate need for Cloud services and 48% of those responded that they are willing to engage in a cost-recovery model immediately. The POC organization reviewed the applications in early March 2010 and selected a set a geographically, economically diverse districts to be part of the testing and ramping up of the POC. These districts matched selection criteria of service needs ranging from disaster recovery to data integration.

Gaining stakeholder buy-in was imperative to this grass-roots effort. Therefore, the K-12 Illinois Cloud Consortium organized itself around that premise by building statewide partnerships among key stakeholders. Also, as the core planning group built partnerships it gathered stakeholders' comments, met with and presented to stakeholders statewide since October 2009. These in conjunction with the formal needs assessment guide the core planning group's efforts. Stakeholders who are playing key roles in the IlliniCloud are: Illinois Century Network, Illinois State Board of Education, National Center Supercomputing Applications, University of Illinois—Department of Education, 14 Area Learning Technology Centers, Illinois Computer Educators, over 200+ School Districts (to be expanded to all Participating LEAs in the RTTT application), Regional Offices of Educations, and other partners.

B. Cloud Computing Infrastructure

"Cloud computing" generally refers to an approach to computing where hardware infrastructure management, software upgrades, and physical location are independent from users who can access the centrally hosted capabilities through a web-based interface. Some of the primary examples of cloud computing models are services offered by Amazon (EC2/S3) and Google (Apps). These commercial examples are commonly considered the public cloud where consumers are empowered to procure and manage various resource with little regard or concern about where the under laying hardware resources exists and how those are managed.

The "Amazon EC2/S3" model provides consumers the ability to acquire dedicated use of one-to-many virtual computer instances that they are able to manage and fully control in terms of the operating system, software resources, and how their resources are exposed (or not exposed) to the world. This type of cloud service can be described as Infrastructure as a Service, as consumers can develop and deploy an entire logical computational enterprise that is tailored to the specific requirements. The primary benefit for consumers is that the service provider, which determines their cost obligations, meters their use and workloads. This attribute is known as pay-as-you-go and allows consumers to dynamically scale their resource pool up or down based on their demands. There are obvious advantages and appeal in this type of arrangement but it also comes with some effective limitations. For example computational resources and interconnects are generally limited to the offerings of the service provider.

In contrast, the "Google Apps" model provides the consumer access and use of a collection of (potentially integrated) software services that they access using the Internet. This type of cloud computing concept is Software as a Service (SaaS) where consumers are complete devoid of any concerns related to hardware infrastructure or management of that category of resources. Consumers engage into a relationship with the vendor and simply utilize the software resources provided under the terms of agreement. Some well-known examples of this kind of cloud computing services from Google are Gmail, Docs, Calendar, and many others. Aside from the free to the public (individual) versions of these services Google also offers educational and business versions as hosted services, the educational versions are free to academic institutions. The appeal of this type of cloud concept is that the burden of information technology infrastructure is completely removed from the consumers that procure these services. One obvious concern for consumers with this type of service might be the reliability and security of their private data assets which are completely under the management of the service provider, however this is not different that entrusting those assets to an internal group of employees.

The examples briefly described are examples of "Public" cloud services that are completely managed and maintained by vendors. A "Private" cloud is also possible which allows an enterprise to employ the underlying technologies to build, manage, and maintain the ability to provide an Amazon like EC2 service for their exclusive use. In this private-cloud the organization could also develop, deploy, and maintain a collection of software services to support their operations, missions, and goals. A hybrid approach to using cloud computing concepts could include both a private cloud and use of service available in the public cloud. The inherit advantage of the hybrid approach lies in the fact that critical infrastructure can be

exclusively managed and maintained by the organization with the ability to dynamically utilize resources in the public cloud where applicable and for handling demand overflow.

The LPMS and IlliniCloud will build on the software foundations of "public", "private", and "hybrid' Cloud models to ensure effective use of the best of breed in software infrastructure and data analysis tools. The National Center for Supercomputing Application at the University of Illinois (NCSA) has offered to partner with the State in the design and deployment of the cloud environment, which would allow the State to leverage NCSA's extensive, world-class expertise in cloud computing concepts and methods of implementation.

C. NCSA Overview

The faculty and staff at the National Center for Supercomputing Application at the University of Illinois (NCSA) have a long and proven track record of innovation and success that include foundational roles in development of the internet browser (Mosaic), significant contributions for high performance computing infrastructures (TeraGrid), and are actively engaged with many local, national, and international collaborators. As a partner, NCSA brings significant expertise in information technology security, engineering, design, and management.

Some on-going and recent background activities are briefly described below:

- The Blue Waters project is expected to be the most powerful supercomputer in the world for open scientific research when it comes online in 2011. It will be the first system of its kind to sustain one petaflop performance on a range of science and engineering applications. The project also includes intense collaboration with dozens of teams in the development of science and engineering applications, system software, interactions with business and industry, and educational programs. This comprehensive approach will ensure that scientists and engineers across the country will be able to use Blue Waters to its fullest potential.

- The Illinois Cloud Computing Testbed is the world's first cloud testbed aimed at supporting both systems innovation and applications research. The testbed, which is run by Illinois' computer science department, is configured with about 500 terabytes of shared storage and more than 1,000 shared cores.

- Lincoln scholars worldwide have access to a life's worth of writings by America's 16th president via the Web, thanks to The Papers of Abraham Lincoln, a project of the Illinois Historic Preservation Agency, the Abraham Lincoln Presidential Library and Museum, and the University of Illinois at Springfield. NCSA provides a permanent storage archive for the project and created tools to make the storage process easier.

- The Institute for Chemistry Literacy through Computational Science (ICLCS) is a program of the University of Illinois' Department of Chemistry, College of Medicine, and NCSA. Partners include 103 school districts across Illinois representing 115 ICLCS Fellows. This program is a 5-year National Science Foundation funded Math Science Partnership program to increase the chemistry literacy and chemistry-related pedagogical skills of rural Illinois high school teachers. The vision for the program is to prepare rural Illinois chemistry teachers and their students for the 21st Century through content, computational tools, teaching methodology, and leadership development to meet the following goals:

    1. Strengthen high school teachers' and students' understanding of chemistry and the application of chemistry to the world around them;

2. Instill in teachers a sense of confidence and competence about their ability to teach chemistry, with a focus on using computational tools, modeling and visualization;
3. Build a strong learning community among research faculty and high school teachers to enable year-round professional development; and
4. Create a cadre of leaders who will become advocates for excellence in mathematics and science.

D. State and LEA Data Integration Requirements

The Learning and Performance Management System (LPMS) will rely on a core dataset as clear and minimal as possible to control project scope and support the integration of multiple applications. Vendors providing systems for the cloud must find the data model easy to adopt, and the model must support migration from the wide variety of systems now in use. In most instances, the LPMS data integration platform will not be a system of record for its core elements. Instead, the LPMS will rely on good data validation and actionable error reporting so that data can be cleansed in the appropriate source systems. For a few user goals -- student grouping for reporting, collaboration, etc. -- the LPMS will provide add/edit/delete functionality. In addition, as local student information systems are migrated to the cloud environment, the LPMS will need to provide a data extension that includes add/edit/delete features to capture data not otherwise captured by the ISBE SIS.

While the next phase of design requirements will include further definition of the core dataset, several requirements and principles will guide its development. First, the LPMS will rely on the State unique identifier for students and staff utilized by all system components. Certain minimum data elements must be included, such as enrollment, student grouping, student outcomes, daily attendance, student formative data, postsecondary data, knowledge object metadata (linked to Common Core Standards), demographics, student biographical, teacher longitudinal identifiers, teacher core attributes (role, education, credentials), and class-level enrollment (teacher-student link). Many of these elements will be captured by the ISBE SIS system, particularly upon its expansion to include transcript data and teacher-student link. Illinois recognizes that other states that have implemented a teacher-student link and transcript data collection system have found that simply possessing the data at the state level does not translate to teachers to being able to access their students' past course enrollments, attendance, course grade and other assessment data. By creating a robust LPMS linked to the SLDS, Illinois will be able to support school and classroom level applications with frequent and timely data to assist teachers in tailoring curricular and instructional responses to the needs of their individual students.

The dataset must be defined to include both "State" domains and "district" domains. State domains will be those for which the State must have access for reporting, accountability, and longitudinal tracking. Within the State domain, data will be further defined based on frequency of upload to specify: (1) constantly refreshed data for core applications, and (2) other data pulled on a predefined schedule to permit prior local data validation. District data domains will include all other data that may be integrated into the LPMS by districts participating in the system. The State will only have access to data within the district domain in accordance with clear governance rules, for FERPA-compliant purposes, and after appropriate LEA authorizations.

A critical function of the Learning and Performance Management System will be to provide LEAs with immediate access to data on students who transfer to or are first entering school within the LEA (e.g, providing districts with data from early learning programs, or providing high school districts with student data from elementary grades). The integration of the LPMS with the longitudinal data system will permit access to this data.

The development of the State's longitudinal data system will also include combining P-12, postsecondary, and employment data to facilitate the evaluation and audit of federal and state programs and longitudinal research. The integration of P-12, postsecondary, and employment data for the longitudinal data system will also ensure this data is available for appropriate reporting and analysis within the LPMS.

E. Student Vault

The Learning and Performance Management System (LPMS) will provide districts with the infrastructure (both hardware and software) to consolidate their data and the tools to leverage this data on an ongoing basis. The value of an integrated data solution goes beyond its use by schools, teachers and districts. The LPMS can also provide a location to focus on the student. With 15% of Illinois students moving each school year (25% in Chicago), providing tools that track students within a district or school does not recognize the reality of the current mobile student. Particularly in Illinois, with its multitude of separate K-8 and 9-12 districts, students that do not change schools will also experience transitions from pre-school, to elementary, to middle school and high school, often with little information exchanged between different institutions.

This lack of a clear student picture impairs a teacher's ability to plan, a parent's ability to understand their student's growth and the student's ability to know where they should be going. Creating an open system that allows data to come from multiple sources to create a clear picture of student's history would alleviate these issues. Additionally, the increased focus on aligned standards from PK-12 should provide students and parents a clear picture of where they are going. This articulation of students' pathways allows participation from the community, business and education supporters beyond school. In addition, this provides students and their parents control over their information, addressing concerns about privacy, clearly delineating who has access to data and providing students and parents the ability to increase or decrease access where appropriate.

A "Student Vault" would be an open system which collects the education history of a student, including data from pre-school through post-secondary; in addition this system can collect student work done in traditional schools and beyond creating a portfolio that can be used for development and assessment. It would provide the protocols and framework to allow organizations to provide an integrated and clear student picture. This would enable functionality for students to:

- Access all of their data held by schools, colleges and related partners (e.g., workforce organizations) and use it for education and career planning.
- Develop career and education plans, develop and transmit college, job and loan applications, transcripts, and required data; receive information from colleges and other partners on career and educational opportunities, analyze alternative career and educational scenarios (e.g., credit transfers, time to degree, return on investment) and other applications that can be incorporated by schools, parents, and students (e.g., applications store).

This platform provides a framework to increase the breadth of education options for a student. Linking data from standardized tests to ongoing student work provides information which can be analyzed to understand their relationship. This platform can provide the basis for "authentic" assessment – allowing evaluation to be based on student work. This system focuses education on the student, not simply on a test score, providing a platform where education can be collaborative and relevant. This platform can deliver functionality such as:

- Access to e-learning resources including on-line courses, assessment and feedback systems, reference materials, software tools (e.g., engineering design software) and data bases (i.e., performance support systems) hosted throughout the world as well as connections to other students, teachers, and mentors and tutors (e.g., performance support systems.)
- Project management resources to work in open collaborative teams to address real-world interdisciplinary problems developed by teachers as well as outside partners and sponsors including businesses, government, non-profit organizations (e.g., Innocentive.com) as piloted in the Illinois Innovation Talent project. This would support the Illinois definition of STEM education.

Tools for teachers and instructional support staff to develop and share learning resources and participate in professional learning communities to support students within specific disciplines (e.g., English, math) and application areas (e.g., Health Sciences).

Appendix D1-1

Alternative Teacher Certification Programs in Illinois

Breakdown by Offering Institution

TEACHER PROGRAMS

Type of Program	Institution	# of teachers that completed program in SY 2008 - 2009
Alternative Teacher Certification Program (CPS) (5/21-5b)		
	Dominican University	50
	National – Louis University	312
	Northwestern University	59
	Quincy University	74
	University of Illinois at Chicago	5
	University of Illinois at Urbana (Discontinued)	0
Alternative Route to Teacher Certification (5/21-5c)		
	Benedictine University	101
	Eastern Illinois University	21
	Governors State University	32
	Illinois state University (Discontinued)	6
	McKendree University	0
	Rockford College	0
	Southern Illinois University Carbondale	12
Resident Teacher Certification (5/21-11.3)		
	Chicago State University	0
	Northern Illinois University (Discontinued)	0
	Total	672

Appendix D2-1

Performance Evaluation Advisory Council

	First Name	Last Name	Agency	Position
Ms.	Kristen	Adams	LaSalle-Peru High School	Teacher
Mr.	Josh	Anderson	Teach For America	Executive Director
Dr.	Bette	Bergerone	Southern Illinois University Edwardsville	Dean of Education
Mr.	Ben	Boer	Advance Illinois	Senior Policy Associate
Mr.	Tim	Daly	The New Teacher Project	President
Dr.	Gail	Fahey	DuPage County Regional Office of Education	Director of Leadership Development
Dr.	Connee	Fitch Blanks	Chicago Teachers Union	Quest Center Coordinator
Dr.	Hector	Garcia	Glenbard District 87	Assistant Superintendant
Mr.	Steven	Isoye	Maine East High School	Principal
Ms.	Stephanee	Jordan	Moline School District 40	Bilingual Coordinator
Dr.	Christopher	Koch	ISBE	State Superintendent
Mr.	John	Luczak	Joyce Foundation	Program Manager
Mr.	Rob	Meyer	Wisconsin Center for Education Research, University of Wisconsin – Madison	Research Professor
Ms.	Susie	Morrison	ISBE	Deputy Superintendent/Chief of Staff
Dr.	Ray	Pecheone	Stanford University	Administration Services Administrator
Mr.	Darren	Reisberg	ISBE	Deputy Superintendent/General Counsel
Ms.	Rachel	Resnick	Chicago Public Schools	Labor Relations Officer
Dr.	Diane	Rutledge	LUDA	Executive Director
Supt.	Jodi	Scott	Henderson, Mercer, Warren Regional Officer of Education	Regional Superintendent
Ms.	Julie	Smith	Office of the Governor	Deputy Chief of Staff – Education
Ms.	Audrey	Soglin	Illinois Education Association	Executive Director

	First Name	Last Name	Agency	Position
Mr.	Dick	Spohr	IPA	INPM Project Director
Ms.	Michelle	Standridge	Illinois Federation of Teachers	
Mr.	Larry	Stanton	L.B. Stanton Consulting, Inc.	CEC Director
Supt.	Joy	Swoboda	Woodland Community Consolidated School District #50	Superintendent
Ms.	Missy	Taylor	Belleville School District 118	Director of Special Education
Dr.	Linda	Tomlinson	ISBE	Assistant Superintendent
Dr.	Steve	Tozer	University of Illinois at Chicago	Professor
Dr.	Rich	Voltz	Illinois Association of School Administrators	Associate Director
Dr.	Phyllis	Wilson	Joliet Public Schools District 86	Superintendent of Schools

Appendix D3-1

Index of Teacher Academic Capital (ITAC)

The Illinois Education Research Council (IERC) has been tracking data on all Illinois public school teachers since 2001 to measure changes in teacher qualifications and whether all students have equitable access to high quality teachers.

The IERC's Index of Teacher Academic Capital (ITAC), measures *only* those teacher attributes which have been shown by previous research to be related to student performance and for which statewide data are readily available. Alongside the ITAC, the IERC also tracks the distribution of inexperienced teachers (those with three or fewer years teaching) in each school throughout the state. The most recent ITAC study utilized the following five school-level measures of teacher attributes:

- The mean ACT composite score of teachers at the school;
- The mean ACT English score of teachers at the school;
- The percentage of teachers at the school who failed the Illinois Basic Skills test on their first attempt;
- The percentage of teachers at the school who were emergency/provisionally certified; and
- The mean Barron's competitiveness ranking of the undergraduate institutions attended by the school's teachers.

The ITAC statistically combines these measures to produce a composite index that maximizes the variation in the component indicators and can be used as an indicator of average teacher quality at each school. In order to measure change in ITAC over time, the IERC produced a measure that is comparable from year to year, and also based on an observed distribution of teacher attributes during a given year. To do this, a base year was used to establish an actual relationship between ITAC components at a set point in time, and then these constant, derived weights were applied to the components observed for each subsequent year. By design, the ITAC has a mean of zero and a standard deviation of one during the base year. Thus, each school's ITAC reflects its standing relative to the distribution of schools during the base year. So, if a particular school had an ITAC of 1.0, this would mean that its teacher academic capital that year was one standard deviation higher than the average Illinois school during the base year.

In a recent ITAC study, IERC calculated ITAC scores for each school in the state for each year from 2001 through 2006 and used these data to explore the relationship between teacher quality and student achievement through several lenses.

First, the IERC replicated an analysis that had been utilized with teacher quality index (TQI) data – the comparison student achievement results for demographically similar schools with varying levels of teacher quality.

ITAC Quartile	High Poverty – High Minority		Low Poverty – Low Minority	
	N	Mean ISAT*	N	Mean ISAT*
Lowest 10%	996	-1.84	27	0.79
Lowest 11-25%	557	-1.61	201	0.76
Middle-Low Quartile	275	-1.44	636	0.86
Middle-High Quartile	75	-1.53	1058	0.87
Highest ITAC Quartile	39	-1.45	1629	1.02
Difference (lowest 10% to highest quartile)		+0.39		+0.23

*Mean ISAT is reported in standard deviation units to control for test differences across years

In doing so, the IERC found that the standardized ISAT score for high poverty, high minority elementary schools in the highest ITAC quartile was 0.39 standard deviations higher than for demographically similar schools in the lowest 10 percent of schools by ITAC. In low poverty, low minority elementary/middle schools, the achievement difference between the highest quartile and lowest 10 percent by ITAC was 0.23 standard deviations, which shows that even more-advantaged schools benefit from high teacher academic capital.

ITAC Quartile	High Poverty – High Minority		Low Poverty – Low Minority	
	N	Mean PSAE*	N	Mean PSAE*
Lowest 10%	78	-2.49	13	0.42
Lowest 11-25%	31	-2.46	37	0.40
Middle-Low Quartile	22	-2.21	134	0.45
Middle-High Quartile	9	1.99	280	0.58
Highest ITAC Quartile	2	N=2	420	1.03
Difference (lowest 10% to middle-high quartile)		+0.50		+0.16
Difference (lowest 10% to highest quartile)		(Small N)		+0.61

*Mean PSAE is reported in standard deviation units to control for test differences across years

At the high school level, it is first important to note that there were very few high poverty, high minority schools in the middle-high and highest ITAC quartiles, which illustrates the limited access that such students have to schools with even above-average teacher academic capital. The implications of this differential access are more striking in light of the differences in achievement seen at different ITAC levels in high poverty, high minority high schools as compared to low poverty, low minority high schools. High poverty, high minority high schools from the middle-high ITAC quartile registered a 0.50 standard deviation advantage in average standardized PSAE scores compared to schools in the lowest ITAC category. The comparable advantage in low poverty, low minority high schools was only 0.16 standard deviations, which suggests that ITAC is especially important in disadvantaged high schools. There are simply not enough high poverty, high minority high schools with ITAC scores in the highest quartile to reliably estimate the achievement differences between the highest and lowest ITAC levels. But one only wonders what could be achieved in our most disadvantaged high schools when we see that, even for advantaged schools, average performance is 0.45 standard deviations higher in high schools with highest quartile ITACs compared to high schools in the second highest ITAC quartile (1.03 compared to 0.58).

Next, the IERC used regression analysis to examine the relationship between ITAC and student achievement while controlling for school context. For these analyses, the IERC combined all six

years of data so standardized achievement measures are used to control for test differences across years. The impact of each of the independent variables can be compared by looking at the standardized coefficient column, which shows the effects of a one standard deviation increase in each predictor on standardized achievement. Independent variables with standardized coefficients further from zero have a larger impact on student achievement levels.

	Standardized Coefficients	
Variable	**Elementary/Middle School**	**High School**
ITAC	+0.09**	+0.23**
% Inexperienced Teachers	-0.08**	-0.02*
% Minority Students	-0.20**	-0.10**
% FRL Students	-0.62**	-0.60**

* = significant at the .05 level; ** = significant at the .01 level.

Looking at the table above, we see that ITAC has a larger impact on achievement levels in high schools than in elementary/middle schools. Each standard deviation increase in ITAC is associated with a 0.09 standard deviation increase in standardized achievement scores in elementary/middle schools, compared to a 0.23 standard deviation increase in high schools. The impact of higher ITAC offsets that of schools' proportions of inexperienced teachers, especially at the high school level, and also is larger than the unique impact of schools' student minority concentrations in high schools (after controlling for percent FRL students). However, ITAC has a smaller impact than schools' minority and FRL student concentrations in elementary/ middle schools, and a smaller impact than schools' FRL student concentrations in high schools.

To this point, we had only illustrated that schools with higher ITAC scores also tended to have higher achievement levels and that this held true even when we looked at schools that were quite similar demographically, such as high poverty, high minority schools or low poverty, low minority schools. But what if this apparent ITAC "effect" simply reflected some other unmeasured and unaccounted for differences between schools, like the presence of a strong principal who can both attract teachers with high academic capital and raise student achievement independently?

Fortunately, the nature of our data—with multiple observations for each school over time—allowed us to construct school "fixed effects" models to answer these questions. With such models, we can estimate the effects of ITAC changes *within* each school while simultaneously controlling for unmeasured differences across schools *and* observed changes to important predictors at each school (such as prior achievement, student demographics, and teacher experience) that may also affect school performance over time. Further, since we are controlling for each school's prior achievement, the models are essentially measuring the distance between one year's school achievement level and the previous year's school achievement level -- i.e., school achievement gains.

We used these fixed effects models to show the relationship between ITAC change and achievement change by school level (Table A below). Since Chicago experienced substantial improvements in ITAC during the period of our study, we also estimate separate models for Chicago elementary/middle schools and Chicago high schools (Table B below). We controlled for each school's changes in percent inexperienced teachers and student minority and poverty concentrations, and we also include dummy variables for each year in our study to account for annual differences in the mean and distribution of test scores due to changes in the proficiency cutoff scores.

The results of these models are presented in terms of standardized coefficients for each predictor, which allow us to compare the effects of these school variables within and across models. The larger the magnitude of the standardized coefficient (its distance from zero) the bigger the effect of that predictor, and negative coefficients mean that as the school variable increases achievement gains get smaller, while positive coefficients mean that achievement gains are larger as the predictor increases. The R-squared statistic indicates the proportion of variability in achievement gains that is explained by the model, so larger R-squared values mean the model is a better fit.

Table A: Illinois

	Standardized Coefficients	
Variable	**Elementary/Middle School**	**High School**
ITAC	0.02**	0.00
% Inexperienced Teachers	-0.01	-0.04**
Previous Year's Test Score	0.23**	-0.12**
% Minority Students	-0.23**	-0.20
% FRL Students	-0.01	-0.10**
R-Squared	0.78	0.19

* = significant at the .05 level; ** = significant at the .01 level.

Table B: Chicago Only

	Standardized Coefficients	
Variable	**Elementary/Middle School**	**High School**
ITAC	0.02*	0.06*
% Inexperienced Teachers	-0.02*	-0.02
Previous Year's Test Score	0.34**	0.26**
% Minority Students	-0.07	-0.38
% FRL Students	-0.05	-0.14
R-Squared	0.80	0.93

* = significant at the .05 level; ** = significant at the .01 level.

Tables A and B above show that ITAC increases were associated with a statistically significant positive impact on achievement gains in elementary/middle schools statewide and a marginally significant positive impact at all school levels in Chicago. This means that, in all but non-Chicago high schools, student performance tends to improve when ITAC scores increase, even after controlling for changes in student demographics and teacher experience.

While the effects of within-school ITAC changes are quite modest, it is important to recognize that we were able to detect these ITAC effects with school-level performance measures that do not enable us to account for the impact of individual teachers or for improvements in student achievement beyond the proficiency threshold set by the state. Despite these limitations, it is clear that hikes in teachers' academic capital have positive ramifications for the state's students.

Taken together, the IERC's analyses reveal substantial evidence of a link between ITAC and achievement. The IERC found a consistent and direct relationship between ITAC and school achievement levels. Among demographically similar schools, the IERC found that ITAC differences are often associated with quite large achievement differences, especially in high poverty, high minority schools. Regression analyses show that ITAC has an independent effect on school achievement levels, even after controlling for other important school conditions, especially at the

high school level. Finally, the IERC found that increases in ITAC were associated with gains in achievement within a school after controlling for changes to student demographics and schools' concentrations of inexperienced teachers. Moreover, others who have investigated these same issues, and with access to student value added data (Boyd et al., 2007) have reached similar conclusions, both about the changing distribution of teacher quality characteristics and their impact on student achievement gains. "More importantly," they conclude, "our results suggest that recruiting teachers with stronger observed qualifications, e.g., math SAT scores or certification status, could substantially improve student achievement." (p. 1)

Numerous research publications and articles have cited the IERC's work on the ITAC. Notably, a 2009 National Council on Teacher Quality report regarding strategies that states, including Colorado, could implement in advance of Race to the Top cited the ITAC as a good example of a strong index that measures the qualifications of a school's teachers (NCTQ, 2009). The table on the following page contains a summary of this and other publications citing IERC's work.

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White, B. R., Presley, J. B., and DeAngelis, K. J. (2008). *Leveling Up: Narrowing the Teacher Academic Capital Gap in Illinois* (IERC 2008-1). Edwardsville, IL: Illinois Education Research Council.

Citation	IERC publication
Carey, Kevin. (2007, January 9). How low teacher quality sabotages advanced high school math. EducationSector. Independent Analysis, Innovative Ideas. http://www.educationsector.org/analysis/analysis_show.htm?doc_id=440781	• Examining the Distribution and Impact of Teacher Quality in Illinois. (IERC 2005-2)
Chicago and New York, and more on NBPTS. *CPRE Strategic Management of Human Capital.* Posted on August 1, 2008 by arodden. http://www.smhc-cpre.org/2008/08/01/chicago-and-new-york-and-more-on-nbpts/	• Leveling up: Narrowing the teacher academic capital gap in Illinois (IERC 2008-1)
Goldhaber, Dan. (November 2008). *Addressing the teacher qualification gap: Exploring the use and efficacy of incentives to reward teachers for tough assignments.* Center for American Progress. http://www.americanprogress.org/issues/2008/11/pdf/teacher_qualification_gap.pdf	• Examining the Distribution and Impact of Teacher Quality in Illinois (IERC 2005-2)
High school reform: How can evidence guide policy and practice? A public policy forum presented by the Center for Education at the National Academies, Education Sector, National Education Knowledge Industry Association on March 24, 2006. The following article was presented: Jerald, Craig D., *Measured progress: A report on the high school reform movement*. Education Sector Reports. http://knowledgeall.com/files/forum_compilation2.pdf	• The Demographics and Academics of College Readiness in Illinois (IERC 2006-2) • Examining the Distribution and Impact of Teacher Quality in Illinois (IERC 2005-2)
Jerald, Craig D. (2006, March). *Measured progress: A report on the high school reform movement.* Washington, DC: Education Sector Reports. http://www.educationsector.org/usr_doc/Measured_Progress.pdf	• The Demographics and Academics of College Readiness in Illinois (IERC 2006-2) • Examining the Distribution and Impact of Teacher Quality in Illinois (IERC 2005-2)

Citation	IERC publication
Orfield, Gary, Frankenberg, Erica, and Garces, Liliana M. (January 3, 2008). Statement of American social scientists of research on school desegregation to the U.S. Supreme Court in *Parents v. Seattle School District* and *Meredith v. Jefferson County*. *The Urban Review*, 40:96-136. http://www.springerlink.com/content/uk0v8567133m6616/fulltext.pdf	• Examining the Distribution and Impact of Teacher Quality in Illinois (IERC 2005-2)
Peske, Heather G. and Crawford, Candace. (February/March 2007). Teaching inequality. *Teachers of Color*. http://www.teachersofcolor.com/teachinginqequality.html	• The distribution of teacher quality in Illinois (IERC 2005-1) • Examining the distribution and impact of teacher quality in Illinois (IERC 2005-2) • Demographics and academics of college readiness in Illinois (IERC 2005-3)
Peske, Heather G. and Haycock, Kati. (June 2006). *Teaching inequality: How poor and minority students are shortchanged on teacher quality.* A report and recommendations by the Education Trust. http://www2.edtrust.org/NR/rdonlyres/010DBD9F-CED8-4D2B-9E0D-91B446746ED3/0/TQReportJune2006.pdf	• Examining the distribution and impact of teacher quality in Illinois (IERC 2005-2)
Smart teachers matter. *TQ Bulletin*, July 30, 2008, 9:7. http://www.nctq.org/p/tqb/viewBulletin.jsp?nlIdentifier=245	• Leveling up: Narrowing the teacher academic capital gap in Illinois (IERC 2008-1)
Walsh, Kate and Jacobs, Sandi. (August 2009). *Race to the Top: Colorado may be used to high altitudes but can it compete in Race to the Top?* Washington, DC: National Council on Teacher Quality. http://www.nctq.org/p/docs/NCTQ_CO_Race_to_the_Top.pdf	• Leveling up: Narrowing the teacher academic capital gap in Illinois (IERC 2008-1)

Appendix D3-2

National Board Certification for Principals

The National Board Certification for principals program is an initial expansion phase of the National Board Certification for Education Leaders program. The initiative builds on the National Board Certification for teachers and counselors program, which has been in existence for 20 years.

National Board Certification for principals is intended to provide a means to consistently and reliably measure the effectiveness of principals. This type of uniform measure of principal performance has not historically been available. According to research conducted by the National Board for Professional Teaching Standards, principals support a certification that recognizes the importance of instructional leadership, organizational change, community involvement, and the essential role of the principal in school management.

Principals who wish to obtain the National Board Certification undergo an intensive 18-24 month process in which the principal is required to demonstrate mastery of the National Board Standards for Accomplished Principals. These standards were designed to reflect professional consensus on the type of practices that distinguish accomplished principals.

The standards center around the collaborative actions principals take to advance learning to the highest level for every child: to recruit, engage, promote and retain accomplished teachers; to improve school culture and performance; to advocate for the profession and needs of their school; and to purposefully engage families and the broader community in the school's vision and mission. Below is a description of the standards.

Skills

1) Accomplished educational leaders continuously cultivate their understanding of leadership and the change process to meet high levels of performance. *(Leadership)*
2) Accomplished educational leaders have a clear vision and inspire and engage stakeholders in developing and realizing the mission. *(Vision)*
3) Accomplished educational leaders manage and leverage systems and processes to achieve desired results. *(Management)*

Applications

4) Accomplished educational leaders act with a sense of urgency to foster a cohesive culture of learning. *(Culture)*
5) Accomplished educational leaders are committed to student and adult learners and to their development. *(Learners and Learning)*
6) Accomplished educational leaders drive, facilitate and monitor the teaching and learning process. *(Instruction)*

Dispositions

7) Accomplished educational leaders model professional, ethical behavior and expect it from others. *(Ethics)*
8) Accomplished educational leaders ensure equitable learning opportunities and high expectations for all. *(Equity)*
9) Accomplished educational leaders advocate on behalf of their schools, communities and profession. *(Advocacy)*

Appendix D5-1

Induction and Mentoring: ISBE Partnering Organizations and

Teacher Induction Policy Advisory Team

A. ISBE Partnering Organizations

Program	Partnering Organization
Academy for Urban School Leadership	Chicago Public Schools
Adams/Pike ROE #1	Northern Illinois University Induction for the 21st Century Educator (ICE 21)
Adams/Pike ROE #1	Northern Illinois University Induction for the 21st Century Educator (ICE 21)
Belvidere CUSD #100-Belvidere	Consortium for Educational Change
Berwyn South School Dist. #100-Berwyn	West40 Intermediate Service Center
Bond County CUSD #2	Bond-Fayette ROE 3
Bond/Fayette/Effingham ROE #3	Induction for the 21st Century Educator (ICE 21)
Boone/Winnebago Kishwaukee Intermediate Delivery System (KIDS)	Induction for the 21st Century Educator (ICE 21) Boone/Winnebago ROE
Boone/Winnebago Kishwaukee Intermediate Delivery System (KIDS)	Induction for the 21st Century Educator (ICE 21) Boone/Winnebago ROE
Bureau/Henry/Stark ROE #28-Atkinson	Induction for the 21st Century Educator (ICE 21)
Calhoun/Greene/Jersey/Macoupin ROE#40-Carlinville	Induction for the 21st Century Educator (ICE 21) Lewis & Clark Community College
Calhoun/Greene/Jersey/Macoupin ROE#40-Carlinville	Induction for the 21st Century Educator (ICE 21) Lewis & Clark Community College
Carroll/ JoDaviess/Stephenson ROE #8-Stockton	Induction for the 21st Century Educator (ICE 21)
Champaign Unit 4	Rantoul Regional Office of Education--Schoolworks Center for Cognitive Coaching Champaign Federation of Teachers
Champaign Unit 4	Rantoul Regional Office of Education--Schoolworks Center for Cognitive Coaching Champaign Federation of Teachers
Champaign Unit 4	Rantoul Regional Office of Education--

Program	Partnering Organization
	Schoolworks
	Center for Cognitive Coaching
	Champaign Federation of Teachers
Chicago PSD #299 (Areas 3, 7, 13, 14, and 17)	Illinois Federation of Teachers
	Chicago New Teacher Center
	New Teacher Center--Santa Cruz, CA
	Chicago Public Schools Board of Education Professional Development Unit
Chicago PSD #299 (Areas 3, 7, 13, 14, and 17)	Illinois Federation of Teachers
	Chicago New Teacher Center
	New Teacher Center--Santa Cruz, CA
	Chicago Public Schools Board of Education Professional Development Unit
Chicago PSD #299 (Areas 3, 7, 13, 14, and 17)	Illinois Federation of Teachers
	Chicago New Teacher Center
	New Teacher Center--Santa Cruz, CA
	Chicago Public Schools Board of Education Professional Development Unit
Chicago PSD #299 (Areas 3, 7, 13, 14, and 17)	Illinois Federation of Teachers
	Chicago New Teacher Center
	New Teacher Center--Santa Cruz, CA
	Chicago Public Schools Board of Education Professional Development Unit
Chicago PSD #299 - Office of New Schools	New Teacher Center--Santa Cruz, CA
Consortium for Educational Change-Marion	Marion IEA
Danville CCSD #118	Consortium for Educational Change
	Danville Education Association
Danville CCSD #118	Consortium for Educational Change
	Danville Education Association
Decatur Public School District #61-Decatur	Consortium for Educational Change
Des Plaines CCSD #62-DesPlaines	Consortium for Educational Change
DeWitt/Livingston/McLean ROE#17-Normal	Illinois State University
DuPage County ROE #19-Wheaton	Induction for the 21st Century Educator (ICE 21)
Elgin School District U-46	Consortium for Educational Change
	Northern Illinois University
	Elgin Teachers Association
Elgin School District U-46	Consortium for Educational Change
	Northern Illinois University
	Elgin Teachers Association
Elgin School District U-46	Consortium for Educational Change
	Northern Illinois University
	Elgin Teachers Association
Evanston/Skokie SD #65	Consortium for Educational Change
Geneseo CUSD #228-Geneseo	Learning Point Assoc

Program	Partnering Organization
Georgetown-Ridge Farm CVSD #4	Rantoul Regional Office of Education--Schoolworks
Glenview Public School Dist. #34-Glenview	Consortium for Educational Change
Hawthorn SD #73	Consortium for Educational Change
I-KAN (Iroquois/Kankakee) ROE #32-Kankakee	Induction for the 21st Century Educator (ICE 21)
J. Sterling Morton HSD #201	Morton Council Union Illinois Federation of Teachers
J. Sterling Morton HSD #201	Morton Council Union Illinois Federation of Teachers
LaSalle County ROE #35	Induction for the 21st Century Educator (ICE 21)
Madison County ROE #41	Induction for the 21st Century Educator (ICE 21)
Marquardt SD #15	Consortium for Educational Change Marquardt Education Association
Marquardt SD #15	Consortium for Educational Change Marquardt Education Association
McLean County CUSD #5-Normal	Consortium for Educational Change
Mid-Illini Educational Cooperative, Professional Development Provider for ROE's 22, 38 and 53	Induction for the 21st Century Educator (ICE 21)
Monroe/Randolph ROE #45-Waterloo	Induction for the 21st Century Educator (ICE 21)
Naperville CUSD #203-Naperville	Consortium for Educational Change
National-Louis University	Chicago Public Schools Office of School Turnaround
Oswego CUSD #308-Oswego	Learning Point Assoc New Teacher Center--Santa Cruz, CA
Oswego CUSD #308-Oswego	Learning Point Assoc New Teacher Center--Santa Cruz, CA
Peoria District #150	Induction for the 21st Century Educator (ICE 21)
Plainfield School District #202 - Plainfield	Learning Point Assoc
Quincy School District #172 - Quincy	Illinois Federation of Teachers
Rock Island County ROE #49-Moline	Augustana College
Rockford School District #205 - Rockford	Consortium for Educational Change
Round Lake Area Schools District #116	Northern Illinois University University Center of Lake County
Round Lake Area Schools District #116	Northern Illinois University University Center of Lake County
South Cook Intermediate Service Center #4	Induction for the 21st Century Educator (ICE 21)
Springfield School District #186 - Springfield	Consortium for Educational Change
St. Clair ROE #50 - Belleville	Induction for the 21st Century Educator (ICE 21)

Program	Partnering Organization
St. Clair ROE #50 - Belleville	Illinois Federation of Teachers Induction for the 21st Century Educator (ICE 21)
Township High School District #214	Illinois Federation of Teachers New Teacher Center--Santa Cruz, CA
West 40 Intermediate Service Center #2	Induction for the 21st Century Educator (ICE 21)
Will County ROE #56 - Professional Development Alliance	Induction for the 21st Century Educator (ICE 21)
Yorkville CUSD #115	Learning Point Assoc

B. Teacher Induction Policy Advisory Team

First Name	Last Name	Agency
Chris	Roegge	University of Illinois Champaign Urbana
David	Osta	New Teacher Center
Dea	Meyer	Civic Committee of The Commercial Club of Chicago
Diane	Rutledge	LUDA
Vicki	Hensley	IKAN
Jason	Leahy	IPA
John	Luczak	Joyce Foundation
Audrey	Soglin	IEA
Sue	Walter	IFT
Linda	Tomlinson	ISBE

Appendix D5-2

Table of Professional Development Supports

This table summarizes, in one location, the primary professional development support systems that will be implemented to carry out this Plan.

RTTT Section	Summary of Supports
(B)(3)	**Alignment of curriculum to the Common Core:** The Center for School Improvement, through its Standards and Aligned Instructional Systems Content Center, will provide LEAs a full continuum of supports that address alignment of curriculum to the revised Learning Standards, including curriculum mapping, aligning instruction plans to learning targets, assessment frameworks, and pacing guides.
	Assessments for Learning Implementation: The State will support educators in Participating LEAs to effectively use data from Assessments for Learning and State assessments for instructional change through: (i) providing data dashboards that integrate Assessments for Learning data and state assessment data, with predictive benchmarking aligned to proficiency targets, through the Interactive Illinois Report Card (IIRC); (ii) enforcing vendor professional development responsibilities as part of its oversight of the statewide contract; and (iii) providing regionally-based, on-the-ground support for incorporating Assessments for Learning into a standards-aligned instructional system through the Center for School Improvement and regional delivery system.
	Integrated Professional Development Across Early Learning – K through 3: The State will support Participating LEAs to use the kindergarten readiness measure to support alignment and create joint and integrated professional development across State-funded early learning programs and grades K-3 in Participating LEAs.
	STEM Learning Exchanges: The STEM Learning Exchanges will provide professional development resources for teachers and school administrators integrated and aligned across middle school, high school, and community college instruction, including STEM externships, support for web-based networks, and integrated professional development for academic and CTE instructors (*e.g.*, including CTE instructors in Advanced Placement (AP) and Pre-AP professional development). The Exchanges will establish externship programs offering educators real-world experience.
(C)(2)	**Interactive Illinois Report Card (IIRC):** IIRC offers a comprehensive professional development system in cooperation with ISBE and the Statewide System of Support to ensure the system's resources are used to engage educators and impact instruction. More recently, IIRC has moved its professional development offerings to webinars to reach an even broader audience, at any time and at any internet accessible location. In addition to the direct training of district administrators, principals, and teachers, IIRC and ISBE have trained regional superintendent staff on the use of the system so that IIRC data and resources are used routinely in their on-the-ground support to districts.

RTTT Section	Summary of Supports
(C)(3)	**Learning and Performance Management System (LPMS):** The LPMS developer will train a cadre of staff from the regional Learning Technology Centers and the Center for School Improvement's Data Use and Analysis Content Center who will work with districts and individual schools. At the district level, the trainers will work with "District Technology Leadership Teams" composed of teachers, tech directors, and principals from each school to guide the change management process involved with moving district systems to the IlliniCloud and to deliver professional development at the school level so that all teachers and principals can become effective users of the LPMS. LPMS professional development will also build off of the existing portable technology institutes led by the Learning Technologies experts at the University of Illinois College of Education in collaboration with staff from districts across the state (known as the "Movable Feasts").
(D)(2)	**Performance Evaluation System Implementation:** Through both the Performance Evaluation Reform Act (PERA) and the Participating LEA MOU, the State has committed to creating a robust support system, including the elements specified in **Table D.2(b)** in the Narrative. The Center for School Improvement will support LEA implementation of redesigned performance evaluation systems through its Educator Talent and Effectiveness Content Center. This Content Center will be tasked with ensuring the regional delivery system offers effective, consistent on-the-ground supports to all Participating LEAs. In addition, the web-based systems and collaboration features of the Learning and Performance Management System will be utilized to provide evaluators with real time, any time support.
	Targeting Deficiencies: Participating LEAs will use evaluation data to directly inform support and professional development resources allocated for teachers and principals. Under PERA, all LEAs are required upon implementation of new teacher evaluations to develop professional development plans and remediation plans that are directly informed by deficiencies identified by the State framework of teaching practice for teachers rated "Needs Improvement" and "Unsatisfactory," respectively. Similarly, principal evaluation data will be used to inform and target district supports and professional development.
	National Board Certification for Principals: The National Board Certification for Principals (NBCP) is a newly launched initiative of the National Board for Professional Teaching Standards that will define and validate the requirements that identify an accomplished, effective, and results-oriented principal (*see **Appendix D3-2** for a further description*).
(D)(3)	**Illinois Math and Science Partnership (IMSP):** The IMSP includes two programs—the IMSP Graduate Program offers a master's degree in math and/or science with a focus on K-12 instruction, and the IMSP Summer Workshop/Institute offers teachers specific professional development in math and science content matter and effective pedagogy in focused areas of math and/or science.
(E)(2)	**Illinois Partnership Zone:** Lead Partners will be responsible for aligning professional development activities within Illinois Priority Schools to ensure ongoing, high-quality job embedded professional development.

Appendix E1-1

State Intervention Authority

(105 ILCS 5/2-3.25f) (from Ch. 122, par. 2-3.25f)

Sec. 2-3.25f. State interventions.

(a) The State Board of Education shall provide technical assistance to assist with the development and implementation of School and District Improvement Plans.

Schools or school districts that fail to make reasonable efforts to implement an approved Improvement Plan may suffer loss of State funds by school district, attendance center, or program as the State Board of Education deems appropriate.

(b) In addition, if after 3 years following its placement on academic watch status a school district or school remains on academic watch status, the State Board of Education shall take one of the following actions for the district or school:

(1) The State Board of Education may authorize the State Superintendent of Education to direct the regional superintendent of schools to remove school board members pursuant to Section 3-14.28 of this Code. Prior to such direction the State Board of Education shall permit members of the local board of education to present written and oral comments to the State Board of Education. The State Board of Education may direct the State Superintendent of Education to appoint an Independent Authority that shall exercise such powers and duties as may be necessary to operate a school or school district for purposes of improving pupil performance and school improvement. The State Superintendent of Education shall designate one member of the Independent Authority to serve as chairman. The Independent Authority shall serve for a period of time specified by the State Board of Education upon the recommendation of the State Superintendent of Education.

(2) The State Board of Education may (A) change the recognition status of the school district or school to nonrecognized, or (B) authorize the State Superintendent of Education to direct the reassignment of pupils or direct the reassignment or replacement of school district personnel who are relevant to the failure to meet adequate yearly progress criteria. If a school district is nonrecognized in its entirety, it shall automatically be dissolved on July 1 following that nonrecognition and its territory realigned with another school district or districts by the regional board of school trustees in accordance with the procedures set forth in Section 7-11 of the School Code. The effective date of the nonrecognition of a school shall be July 1 following the nonrecognition.

(c) All federal requirements apply to schools and school districts utilizing federal funds under Title I, Part A of the federal Elementary and Secondary Education Act of 1965.

(Source: P.A. 93-470, eff. 8-8-03; 94-875, eff. 7-1-06.)

Appendix E2-1

Illinois Priority Schools

Illinois Tier I Schools

Tier I Schools are Title I schools in federal status (i.e., improvement, corrective action, or restructuring) that have been in existence for more than three years. The list consists of:

i. The lowest achieving 5% of those schools, using three-year average performance of the "all students" group on State assessments in reading/language arts and mathematics combined; OR
ii. Any secondary school in federal improvement status with an average graduation rate of less than 60% over the last three years.
iii. Lack of progress which is determined by looking at the Average Performance and the 2009 "all students" group in reading and math. If the 2009 all students group is less than the Average Performance, then there is a lack of progress.

District Name	Tier I School Name
City of Chicago SD 299	Ace Technical Charter School
City of Chicago SD 299	Best Practice High School
City of Chicago SD 299	Bogan High School
City of Chicago SD 299	Bowen Environmental Studies High School
City of Chicago SD 299	Chicago Discovery Academy High School
City of Chicago SD 299	Chicago Vocational Career Academy High School
City of Chicago SD 299	Clemente Community Academy High School
City of Chicago SD 299	Corliss High School
City of Chicago SD 299	Crane Technical Prep High School
City of Chicago SD 299	Dunbar Vocational Career Academy High School
City of Chicago SD 299	Dyett High School
City of Chicago SD 299	Entrepreneurship High School
City of Chicago SD 299	Farragut Career Academy High School
City of Chicago SD 299	Fenger Academy High School
City of Chicago SD 299	Gage Park High School
City of Chicago SD 299	Global Visions High School
City of Chicago SD 299	Hancock College Preparatory High School
City of Chicago SD 299	Harper High School
City of Chicago SD 299	Juarez Community Academy High School
City of Chicago SD 299	Julian High School

District Name	Tier I School Name
City of Chicago SD 299	Kelvyn Park High School
City of Chicago SD 299	Manley Career Academy High School
City of Chicago SD 299	Marshall Metropolitan High School
City of Chicago SD 299	New Millennium Health High School
City of Chicago SD 299	North-Grand High School
City of Chicago SD 299	Phillips Academy High School
City of Chicago SD 299	Raby High School
City of Chicago SD 299	Richards Career Academy High School
City of Chicago SD 299	Robeson High School
City of Chicago SD 299	Roosevelt High School
City of Chicago SD 299	School of Leadership High School
City of Chicago SD 299	School of Technology High School
City of Chicago SD 299	Senn High School
City of Chicago SD 299	Sullivan High School
City of Chicago SD 299	Tilden Career Community Academy High School
City of Chicago SD 299	Wells Community Academy High School
East St. Louis SD 189	East St. Louis Senior High School
East St. Louis SD 189	SIU Charter School of East St. Louis
Madison CUSD 12	Madison Senior High School

Illinois Tier II Schools

A **Tier II school** is a secondary school that is eligible, but does not receive Title I funds that:

i. Is within the lowest achieving 5% of secondary schools that are eligible, but do not receive Title I funds in the state, based on the 3-year average performance of the "all students" group in reading and math combined (35.2% or less in 2009-2010), OR
ii. Has a graduation rate of less than 60% over each of the last 3 years;
iii. Lack of Progress which is determined by looking at the Average Performance and the 2009 all students group in reading and math. If the 2009 all students group is less than the Average Performance then there is a lack of progress.

A **Tier II Newly Eligible School** is a Title I secondary school in improvement, corrective action or restructuring that does not qualify as Tier I that:

i. Is no higher achieving than Tier II schools (35.2% or less in 2009-2010), based on 3-year average performance of the all students group in reading and math combined, OR
ii. Has a graduation rate of less than 60% over each of the last 3 years;
iii. Lack of Progress

District Name	Tier II School Name
Astoria Community Unit SD 1	Astoria High School
Aurora East USD 131	East High School
Bloom Twp HSD 206	Bloom High School
Bloom Twp HSD 206	Bloom Trail High School
Bremen CHSD 228	Hillcrest High School
Cahokia CUSD 187	Cahokia High School
CHSD 218	DD Eisenhower High School (Campus)
City of Chicago SD 299	Amundsen High School
City of Chicago SD 299	Carver Military Academy High School
City of Chicago SD 299	Chicago Academy High School
City of Chicago SD 299	Douglass Academy High School
City of Chicago SD 299	Foreman High School
City of Chicago SD 299	Harlan Community Academy High School
City of Chicago SD 299	Hope College Prep High School
City of Chicago SD 299	Hubbard High School
City of Chicago SD 299	Hyde Park Academy High School
City of Chicago SD 299	Kelly High School
City of Chicago SD 299	Kennedy High School
City of Chicago SD 299	Mather High School
City of Chicago SD 299	North Lawndale Charter High School
City of Chicago SD 299	Phoenix Military Academy High School
City of Chicago SD 299	Schurz High School
City of Chicago SD 299	Simeon Career Academy High School
City of Chicago SD 299	Steinmetz Academic Centre High School
City of Chicago SD 299	Washington, G High School
City of Chicago SD 299	Youth Connections Charter School
Decatur SD 61	Eisenhower High School
Depue USD 103	Depue High School
Dongola USD 66	Dongola High School
Egyptian CUSD 5	Egyptian Senior High School
Eldorado CUSD 4	Eldorado High School
JS Morton HSD 201	J Sterling Morton East High School
JS Morton HSD 201	J Sterling Morton West High School
Kankakee SD 111	Kankakee High School

District Name	Tier II School Name
Meridian CUSD 101	Meridian High School
North Chicago SD 187	North Chicago Community High School
Patoka CUSD 100	Patoka Senior High School
Peoria SD 150	Manual High School
Peoria SD 150	Peoria High School
Peoria SD 150	Woodruff High School
Proviso Twp HSD 209	Proviso East High School
Proviso Twp HSD 209	Proviso West High School
Rich Twp HSD 227	Rich South Campus High School
Rockford School Dist 205	Jefferson High School
Rockford School Dist 205	Rockford East High School
Sandoval CUSD 501	Sandoval Senior High School
Scott-Morgan C U Sch. Dist 2	Bluffs High School
Springfield SD 186	Lanphier High School
St Anne CHSD 302	St Anne Comm High School
Thornton Fractional Twp HSD 215	Thornton Fractional North High School
Thornton Twp HSD 205	Thornridge High School
Thornton Twp HSD 205	Thornton Township High School
Thornton Twp HSD 205	Thornwood High School
Waukegan CUSD 60	Waukegan High School

Super LEA - Non-Tier I or Tier II Priority Schools

These schools are within the bottom 5% of student achievement statewide; however, they are not within "Tier I" or "Tier II" for School Improvement Grant purposes. Because these LEAS agreed to the Super LEA commitments in Phase 1 and 2 of the State's RTTT application, the State has budgeted RTTT funds for implementation of one of the four SIG intervention models in the schools identified below and will treat them as an "Illinois Priority School" for all purposes of this application and the State's intervention support system.

District Name	Priority School Name
Community Unit School Dist. 300	Dundee-Crown High School
Plano CUSD	Plano High School

Appendix E2-2

Illinois Partnership Zone Supplemental Materials

I. Illinois Partnership Zone Overview of Lead and Supporting Partners

The Lead and Supporting Partners identified on this Appendix have been prequalified by the State Superintendent to support interventions in Illinois Priority Schools through the Illinois Partnership Zone initiative. These Partners have been prequalified to contract directly with a school district or with the State Board of Education.

ISBE intends to undertake additional Lead and Supporting Partner procurements to expand and update the list of pre-qualified entities in future years of the Partnership Zone initiative.

The regions referred to in the chart below refer to ISBE Support Regions in which the entity is prequalified to serve, as shown on the map at the end of these tables.

Lead Partners:

Lead Partner and Service Area	Overview of Implementation Model	Record of Effectiveness
Academy for Urban School Leadership (AUSL) Regions I-A, I-B-B, I-B-C, I-B-D, II, III, and IV	AUSL's mission is to improve student achievement in high-poverty, chronically failing schools through dramatic interventions to comprehensively reset failing schools. In AUSL's Turnaround school model, the district closes a failing school at the end of the school year and reopens it after the summer under AUSL's management. Admission is open to any former student who wishes to attend, as well as all students in the school's geographic boundary area. AUSL replaces the principal with an individual selected by and accountable to AUSL, as well as the district, and also brings in a cohort of specially trained new teachers from AUSL's teacher residency program. AUSL evaluates all incumbent teachers and staff before re-hiring any who are interested in remaining. Typically, more than half of the school's incumbent teachers and staff are replaced.	Since 2002 AUSL has launched eight Turnaround elementary schools and one Turnaround high school in Chicago. AUSL is still managing all of these schools, and all but one have made steady year-to-year gains in student achievement. AUSL has also developed many strong collaborative partnerships, including key partnerships with Chicago Public Schools, Serve Illinois (AmeriCorps), New Leaders for New Schools, City Year, and university partners (National Louis University, Erikson Institute, and the University of Illinois at Chicago).
America's Choice, Inc., and its subcontractor ACT, Inc. All 10 ISBE Support Regions	America's Choice will provide two programs: (1) the America's Choice Comprehensive Intervention Model in elementary schools, designed to prepare all students to enter middle school core instructional programs without need for remediation, and (2) the Rigor & Readiness Comprehensive Intervention Model in middle and high schools, designed to support students' development of college and career readiness.	States and school districts have successfully implemented America's Choice programs throughout the country, including in Georgia, New York, Florida, Arkansas, and Maryland. A study of Rochester, New York schools found that students in America's Choice schools made significantly higher achievement gains than students in other schools, and the performance gap for minority students was narrowed

Lead Partner and Service Area	Overview of Implementation Model	Record of Effectiveness
	These programs include: an examination system aligned with state standards, a rigorous core curriculum with end-of-course examinations aligned to college and career readiness standards, instructional materials aligned to the curriculum, systematic monitoring of student progress, and "safety net" programs designed to accelerate learning.	significantly in both reading and math. Also, a study by outside reviewers found that students in America's Choice schools scored an average of 9 points higher on reading comprehension tests, and 7 points higher on language scales.
Consortium for Educational Change (CEC) Regions I-B-B, I-B-C, I-B-D, I-C, II, III, IV, V, and VI	CEC proposes to implement a School Transformation Model, which will focus on accelerating student learning by aligning resources of the school and district to: add time for student learning and teaching; share leadership through teams; support teacher practice; and establish clear and ambitious performance targets for everyone. This model would be implemented in a school or district using a work plan with the following four steps: -Set goals and standards; -Implement structures and plans; -Implement a learning environment; and -Become results focused.	CEC has more than 20 years of experience in working with Illinois school systems, helping them construct communities of learners and breaking down traditional hierarchies so that all members of the community contribute to the school system. CEC's work is supported by subcontractors and partners who are leaders in union/management collaboration, teacher and school leadership development, classroom instruction, curriculum, and standards assessment. In CEC's years of experience, it has helped schools improve students' grade-level proficiency, improve performance on state assessments, and work toward closing achievement gaps. For example, in CEC's past work with an ethnically diverse suburban Chicago school district, CEC helped increase the percentage of African American eighth-graders who met or exceeded ISAT standards in math from 40% in 2004 to 71% in 2009.
Diplomas Now, a program of Johns Hopkins University Region I-A	The Diplomas Now model integrates four key elements: -Effective whole school reform with instructional, organizational, student, teacher and administrative support components; -A teacher-friendly early warning data system tied to identify students in need of prevention, intervention and recovery strategies; -A team that works closely with teachers and administrators to provide targeted and intensive supports; and -A team-based organizational structure and collaborative work environment.	In the 2008-2009 school year, the Diplomas Now model was implemented in a large, high-poverty middle school in Philadelphia. Working in partnership with school leadership and teachers, this school successfully made Adequate Yearly Progress for the first time in four years and the Diplomas Now model resulted in a 50% decrease in the number of students in grades 6-8 who were off-track to graduate based on the following key indicators: -Attendance (52% decrease in students with less than 80% attendance); -Behavior (45% decrease in students with three or more negative behavior comments); and -Course failure in Math and English (83% decrease in the number of students

Lead Partner and Service Area	Overview of Implementation Model	Record of Effectiveness
		receiving an F in Math and 80% decrease in the number of students receiving an F in English).
EdisonLearning Regions I-A, I-B-B, I-B-C, I-B-D, I-C, II, III, IV, and V.	EdisonLearning proposes to serve as a national and on-site team of specialists dedicated wholly to partnership schools' curriculum, instruction and academic achievement. EdisonLearning will develop programs customized to meet the needs of each partnership school, but comprehensive models include several general components, such as: leadership development, school organization and scheduling support; learning environment management tools to promote a school culture in which students learn effectively; curriculum management and support tools that align to Illinois standards; intensive on-site and national professional development; benchmark assessment systems to track student progress; quality monitoring and management; and support for families who may not have considered the possibility of higher education.	Since 1995, EdisonLearning has partnered with school districts across the country to assist them in meeting student achievement goals. Throughout its history, EdisonLearning has had the opportunity to partner with numerous clients having diverse student bodies, largely serving clients in high-minority, low-income settings (the average school in an EdisonLearning Partnership is 87% minority and 65% socioeconomically disadvantaged). Data and independent reports (including a notable RAND Corporation report released in 2005), confirm that schools partnering with EdisonLearning have improved their students' academic performance over time. The American Institute for Research stated in a 2006 report that EdisonLearning was the most thoroughly researched comprehensive school reform organization in the country.
Illinois Association of Regional Superintendents of Schools (IARSS): representing a consortium of regional offices and intermediate service centers All 10 ISBE Support Regions	IARSS proposes to: -Administer a needs assessment of the district and school; -Coordinate with school and community "stakeholders" (i.e. parents, businesses, community organizations, and public officials) to develop a school intervention model; and -Direct resources and expertise toward intervention planning, capacity building, evaluation of existing staff, professional development, and implementation of the intervention model.	IARSS's Regional Offices of Education (ROE) and Intermediate Service Centers (ISC) have a proven track record of working with underperforming schools through delivering support, coaching and technical assistance to promote academic achievement. The ROE/ISCs specifically work with schools that are identified as not meeting Adequate Yearly Progress and are on the State/Federal Academic Early Warning and Academic Watch status lists. Schools that the ROE/ISCs have worked with have achieved gains in academic growth ranging from 7% to 42% in both reading and math on state and local assessments over a three year period and have been removed from warning or watch status, and/or made consistent incremental gains each year. These schools have a range of 200 to 2,300 students and represent a wide range of communities and subgroups.
Learning Point Associates and its subcontractor, Pivot	Learning Point's plan focuses on collaborative development and implementation of turnaround strategies to improve student	Learning Point has a long history of working with a broad range of districts, including chronically low-performing

Lead Partner and Service Area	Overview of Implementation Model	Record of Effectiveness
Learning Partners All 10 ISBE Support Regions	achievement and build the capacity of school leaders and staff to sustain improvement. The proposed turnaround design has six general components: a core school leadership team; a research-based diagnostic needs assessment; an instructional model to engage teachers in daily review of student data and weekly collaboration with other teachers; a parent and community engagement plan; a variety of support tools and expert coaching; and targeted intervention for special needs populations.	districts, to design, implement, evaluate, and monitor improvement and transformation efforts. In its past work with low-performing and high-need schools, Learning Point has helped schools achieve improved student test scores, improved national standing, and increased success in meeting academic standards.
Success For All Foundation, Inc. (SFAF) All 10 ISBE Support Regions	SFAF will provide comprehensive turnaround models for target schools through a multi-dimensional set of strategies, focused on: -Leadership support and training for school administrators, staff and community to assist in improving student achievement and addressing school-specific issues; -Professional development and support in core learning areas (reading and math); -Development and implementation of a school-specific reform structure to address the needs of students showing lack of progress in academic, social, and behavioral realms; -Structured communication between schools and SFAF's Illinois Team Manager and consultants.	SFAF programs have been used in over 1,800 schools during the past 20 years, improving the achievement of more than 2 million students. Over 52 studies have assessed the effectiveness of SFAF's program, and independent reviews have consistently found that implementation of SFAF's programming resulted in significant increases in student achievement in various settings. A recent study of 22 comprehensive educational reform programs placed SFAF's program, and only one other, in the highest category awarded.
Talent Development, a program of Johns Hopkins University Regions I-A, I-B-B, I-B-C, I-C, II, III and V	Talent Development proposes to implement two separate but interrelated programs: the Talent Development Middle Grades (TDMG) program for middle schools and the Talent Development High Schools (TDHS) program for high schools. Both programs focus on organizing students into smaller learning communities headed by teaching teams to create a successful learning environment with high student expectations, and to develop and promote the effectiveness of teachers and school leaders. The organization also seeks to promote community and family involvement and engagement through parenting assistance; initiatives to enhance family participation in and support of students, schools, and school programs; and coordination of school and community services and resources.	For the past 15 years, Talent Development has helped schools across the country to reorganize in ways that promote strong relationships for students and adults; implement innovative, evidence-based curricula and instructional strategies; and build professional communities that support distributed leadership, shared decision-making, and increased capacity for continual improvement. Talent Development offers research-based strategies developed by Johns Hopkins University, paired with intense technical assistance from master educators, to facilitate improvement in struggling schools. Schools that implement Talent Development reforms have seen increases in student attendance, reductions in suspension rates, and increased scores on student achievement tests.

Supporting Partners:

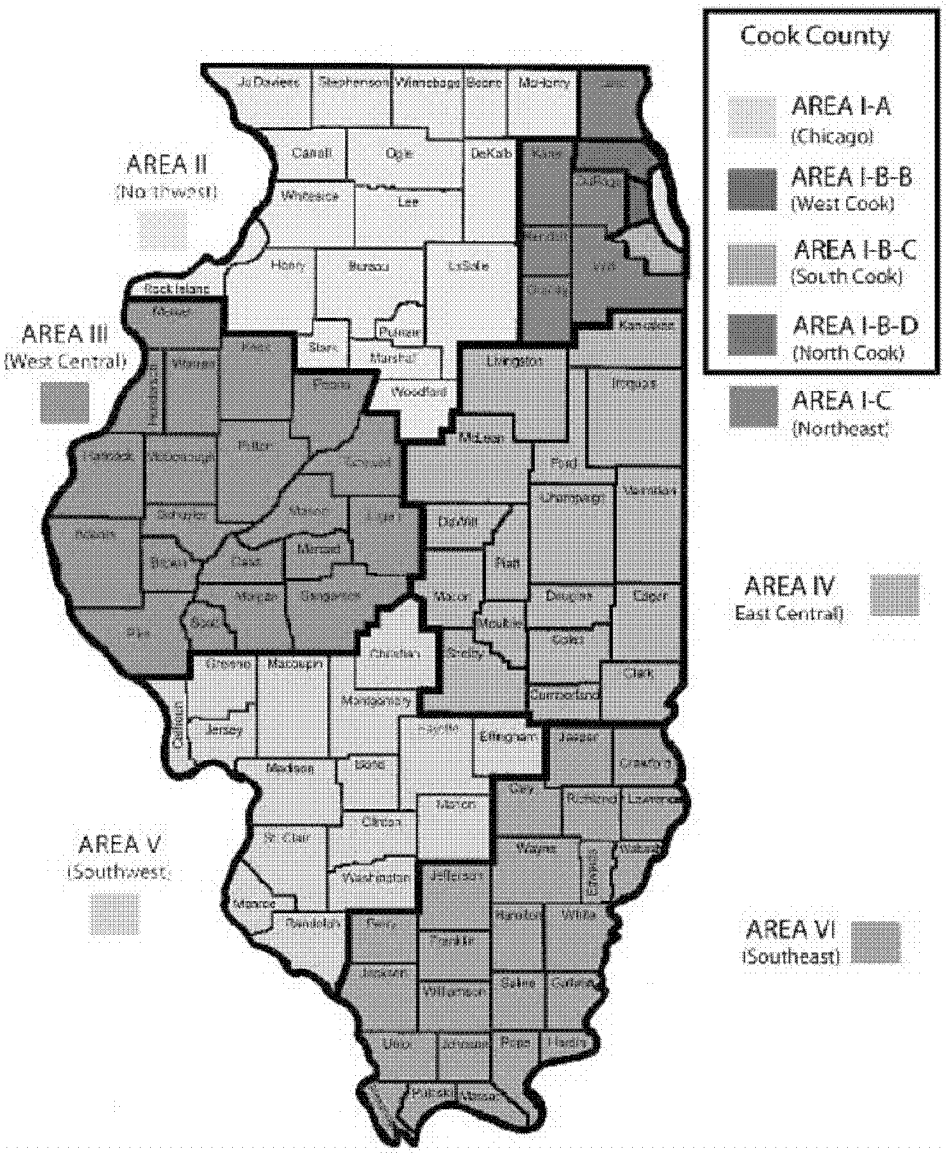
Supporting Partner	Human Capital or District Capacity Building Strategies	Record of Effectiveness
Academy for Urban School Leadership (AUSL) All 10 ISBE Support Regions	AUSL proposes to share its expertise and support the efforts of Lead Partners in the following areas: -Intervention and transformation of underperforming schools through AUSL's Transformation school model; -Operation of a teacher residency training program; -Focused projects related to school management and teacher development; and -Advice and assistance to districts and Lead Partners. AUSL would assist clients in decision-making and capacity building through providing opportunities to observe AUSL's models in action, assisting clients to design their own adaptations of the AUSL model, and providing coaching and training support.	Over the last 8 years, AUSL has built a track record of success in launching and managing turnaround schools in Chicago. AUSL's work has resulted in dramatic gains in student achievement in Turnaround schools, including increasing the percentage of students meeting state ISAT standards and improving school cultures and parent involvement. Through its teacher residency training program, AUSL has trained over 300 new teachers, with 85% still working in education. AUSL has also developed many strong collaborative partnerships, including key partnerships with Chicago Public Schools, Serve Illinois (AmeriCorps), New Leaders for New Schools, City Year, and university partners (National Louis University, Erikson Institute, and the University of Illinois at Chicago).
Consortium for Educational Change (CEC) All 10 ISBE Support Regions	CEC proposes to provide supporting services for human capital including: establishing an intensive induction and mentoring program for teachers and administrators; establishing meaningful performance evaluation and development systems that fairly and accurately differentiate teachers, based in part on student achievement; and establishing meaningful principal and administrator evaluation systems. CEC also proposes to build school board and district central office capacity with respect to: collaborative relationship-building among district anchors (i.e. school board, administration, and local teachers' union); and leadership development and training.	CEC has more than 20 years of experience in working with Illinois school systems, helping them construct communities of learners and breaking down traditional hierarchies so that all members of the community contribute to the school system. CEC's work is supported by subcontractors and partners who are leaders in union/management collaboration, teacher and school leadership development, classroom instruction, curriculum, and standards assessment. CEC has developed ongoing relationships with a number of districts and schools throughout Illinois, including those that have not made Yearly Academic Progress and others that are restructuring. CEC has helped districts and schools to implement comprehensive reforms and to develop and implement school improvement plans. Through its work, CEC has helped schools achieve significant improvements in district, school, and student performance on the ISAT.
Illinois Association	IARSS proposes to:	IARSS's Regional Offices of Education

Supporting Partner	Human Capital or District Capacity Building Strategies	Record of Effectiveness
of Regional Superintendants of Schools (IARSS): representing a consortium of regional offices and intermediate service centers All 10 ISBE Support Regions	-Implement human capital strategies, such as reforming district recruitment and hiring policies and establishing intensive induction and mentoring programs for teachers and administrators; -Establish meaningful performance evaluation and development systems that fairly and accurately differentiate teachers based on student achievement, and train administrators in their use; and -Establish meaningful principal and administrator evaluation systems that incorporate considerations of school climate and are based, in part, on student achievement.	(ROE) and Intermediate Service Centers (ISC) have a proven track record of working with underperforming schools through delivering support, coaching and technical assistance to promote academic achievement. The ROE/ISCs specifically work with schools that are identified as not meeting Adequate Yearly Progress and are on the State/Federal Academic Early Warning and Academic Watch status lists. Schools that the ROE/ISCs have worked with have achieved gains in academic growth ranging from 7% to 42% in both reading and math on state and local assessments over a three year period and have been removed from warning or watch status, and/or made consistent incremental gains each year. These schools have a range of 200 to 2,300 students and represent a wide range of communities and subgroups.
Illinois Association of School Boards (IASB), and its subcontractors Illinois Association of School Administrators, Illinois Association of School Business Officials, and Illinois Principals Association All 10 ISBE Support Regions	IASB will provide expertise and support to Lead Partners, schools, and school districts over a 5 year period. Support will focus on training for superintendents, principals, school business officials, and other administrators, including targeted professional development activities and intensive coaching.	IASB provides regional and in-district professional development activities for school board members. In 2009, more than 1,300 school board members attended one or more of IASB's sessions. During 2008, IASB staff worked with boards of education, superintendents, staff, and community members in 44 districts where either the district or one or more schools within the district where in state academic warning or watch status. Based on 2008 data, 20 past-participating schools were no longer in warning or watch status at the school or district level. In 2009, work was done in 35 similar districts.
Learning Point Associates and its subcontractor, Pivot Learning Partners All 10 ISBE Support Regions	Learning Point will work with turnaround school districts to guide them toward a systematic solution that is successful, both in building capacity and aligning capital management function in the short term, and in developing sustainable, long-term improvements in teaching and learning. Learning Point and its partner have expertise in developing school-specific strategies in: reforming district recruiting, hiring, and retention practices; establishing an alternative incentive and compensation system; creating an intensive induction and mentoring	Learning Point has a long history of working with a broad range of districts, including chronically low-performing districts, to design, implement, evaluate, and monitor improvement and transformation efforts. In its past work with low-performing and high-need schools, Learning Point has helped schools achieve improved student test scores, improved national standing, and increased success in meeting academic standards.

Supporting Partner	Human Capital or District Capacity Building Strategies	Record of Effectiveness
	program; establishing a meaningful performance evaluation system; and providing training and coaching for capacity building.	
New Leaders for New Schools Region I-A	Recruit, identify, and prepare up to 35 Partnership Zone principals over the course of a planning period and two implementation years. The organization's work will focus on an intensive residency model, which includes the field's leading curriculum and training program for aspiring principals and a year of hands-on skills development and practice. New principals are also intensively supported during their entry into a school and during their first school year by an experienced coach.	Over the past six years, New Leaders has partnered with the Academy for Urban School Leadership to train and provide principals to lead turnaround schools. Since 2001, New Leaders has trained and supported more than 550 aspiring principals in urban areas across the country. The programs have a rigorous selection process, accepting fewer than 7% of applicants. Principals who have completed the program are highly-qualified and greatly diverse (participants range in age from 25 to 58 and 55% are African American). New Leaders currently supports 123 principals in Chicago, serving more than 70,000 children. New Leaders principals have achieved dramatic improvement in their schools. Students in elementary and middle schools led by New Leaders principals for at least three years are making academic gains faster than comparable students in their districts. Also, the most improved or highest performing schools in 5 cities and 2 states have been led by New Leaders Principals.
Teach For America (TFA) Region I-A	TFA proposes to provide an entire staff of high-quality teachers for a turnaround school in Chicago. The teachers would come from TFA's corps of first and second year teachers and its base of veteran alumni teachers. TFA recruits and selects talented and diverse new teachers from among the nation's top graduating college seniors, and then trains them through an intensive residential summer institute. TFA also provides ongoing support and professional development to its teachers, and connection and leadership opportunities through its alumni network.	TFA has been recruiting, training, and supporting teachers in low-income classrooms since 1990 and has a track record of making a tremendous impact on student achievement. In Chicago, 500 TFA alumni currently work in education—350 as master teachers, 40 as assistant principals, 30 as school leaders, 22 as public schools administrators, and many as non-profit employees. In 2008, the Urban Institute found that TFA corps members improve student achievement at two to three times the rate of other teachers in the same schools, including veteran teachers with three or more years of experience.
The Associated Colleges of Illinois (ACI)	ACI proposes to address human capital strategy by reforming district recruitment and hiring policies through a High-Need School Internship (HNSI) program. The HNSI	In pilot programs at six Illinois sites, HNSI programs have been shown to motivate pre-service teachers to seek jobs in high-need schools and to develop skills

Supporting Partner	Human Capital or District Capacity Building Strategies	Record of Effectiveness
Regions I-A, I-B-B, I-B-C, I-B-D, I-C, II, III, IV, and V	program will develop a pool of highly qualified teachers, prepared specifically for high-need districts. By partnering with its member colleges and universities, ACI will host LEAs to operate six-week intensive summer internship experiences that prepare and position pre-service teachers to maintain ongoing relationships with their host LEAs . Upon graduation, top candidates from the HNSI program will be offered positions in the host LEAs, as those positions become available.	and dispositions that can make teachers more successful in high-poverty, hard-to-staff schools. Research has shown that internships that foster ongoing relationships with host LEAs can better prepare teachers to successfully assume jobs in those districts, and that those teachers may begin their first year jobs with skills and experience more commonly associated with second-year teachers. ACI has been addressing teacher shortage and quality issues since 2002, when it received a federal grant to fund an initiative to improve teaching and learning in high-poverty schools. ACI offers a portfolio of programs that address teacher recruitment, preparation, and retention.
The Federation for Community Schools, and its subcontractors: Dr. Barbara Radner, Depaul University Center for Urban Development; and David Flatley, Columbia College Center for Arts Programs Regions I-A, I-B-B, I-B-C, I-B-D, I-C, II, III, and IV	The organization will work with lead partners to develop a low-performing school into a "community school" by providing robust enrichment programs before and after school. These programs are an extension, not an add-on, to the regular school day and will address academics and curriculum, healthy minds and bodies, parent support, and community engagement. The programs are implemented in partnership with the in-school day staff to create programming that supports skills and issues being addressed during the regular school day and provides supplemental enrichment programs like arts, music, and physical fitness.	The Federation is the nation's only statewide coalition working on community schools, and is the most experienced and broad-reaching of such organizations in Illinois. Although the community school model is a newer concept, Chicago Public Schools have more than 150 community schools (out of its 600 public schools) and has already seen the benefit of the community school model through improvement in test scores, grades, student attitudes toward school, parent involvement and support, safety, and improved immunization rates, fitness levels, and overall well-being among students. Research shows that community schools have many positive impacts including statistically significant increases in ISAT math and reading scores, a reported 70% increase in students' completion of homework, fewer student behavioral incidences, and increased feelings of connectedness reported in parent surveys.

System of Support Regions



I. Illinois Partnership Zone: Transformation Criteria

1. School culture and climate.

A. Establish a safe, orderly environment that is free from threat of physical harm and conducive to teaching, learning, and schoolwide programs and policies to help maintain this environment.

B. Create a climate of high expectations for success.

C. Clearly articulate the school's mission so that staff share an understanding of and commitment to the instructional goals, priorities, assessment procedures, and accountability.

D. Provide ongoing mechanisms for family and community engagement. Ensure that parents understand and support the school's basic mission and are given the opportunity to play an important role in helping the school to achieve this mission.

E. Provide wrap-around services for low-income students so educators can focus on teaching and learning while ensuring students' social, emotional, and physical needs are met.

2. Developing teacher and school leader effectiveness.

A. Designate a principal or other school-level leader who will act as an instructional leader. Depending on the intervention model, the "school-level leader" may be a principal designated by the district, a leader working under the direction of a Lead Partner, or a person hired by the Lead Partner.
The model must either:*

- Replace the principal who led the school prior to commencement of the transformation model; or
- Use a fair and consistent method to evaluate the effectiveness of the existing principal and determine whether the principal can serve as the instructional leader for the intervention.

** Note: Based on the U.S. Department of Education's requirements for the Section 1003(g) School Improvement Grant program, for interventions in "Tier I" or "Tier II" schools the principal must be replaced as part of the "Turnaround" or "Transformation" model. However, if the principal was replaced during the prior two years as part of a continuing intervention, that principal can remain at the school.*

B. Over the course of the intervention, the school must make a transition to a distributed leadership model with a highly capable leadership team working to build a cohesive, professional teaching culture. The plan for a distributed leadership team must include the school-level leader and teachers with augmented school roles.

C. In coordination with the Lead Partner, the district and school-level leader must use evaluations that are based in significant measure on student growth:

- to improve teachers' and school leaders' performance;

- identify and reward effective performance; and
- identify and address ineffective performance.

D. Provide relevant, ongoing, high-quality job-embedded professional development.

E. Implement strategies designed to recruit, place, and retain high-quality staff, including intensive induction and mentoring support for teachers.

3. Comprehensive instructional reform strategies.

A. Use data to identify and implement comprehensive, research-based, instructional programs that are vertically aligned from one grade to the next as well as aligned with the Illinois Learning Standards. The instructional programs must include:
- development and use of frequent formative assessments permitting rapid-time analysis, feedback, and targeted instruction;
- other data-driven instructional systems and strategies.

B. Differentiate instruction to meet students' needs, including personalized academic and non-academic support services.

C. Integrate all programs that have an impact on instruction:
- Identify all state, district, and school-level instructional and professional development programs;
- Determine whether each program will be eliminated or integrated with the intervention model; and
- Ensure all remaining and new programs directly align with the objectives and structure of the intervention model.

4. Extending learning time.

A. Provide more time for students to learn core academic content by:
- expanding the school day, the school week, or the school year;
- increasing instructional time for core academic subjects during the school day; and
- allocating a significant amount of classroom time to instruction in the essential skills.

B. Provide more time for teachers to collaborate.

C. Provide more time for enrichment activities for students.

5. Providing operating flexibility.

Give the school sufficient operating flexibility to implement fully a comprehensive approach to substantially improve student achievement outcomes. In particular, the school-level leader must have:
- Authority to select and assign staff to the school;
- Authority to control school calendar and scheduling; and

- Control over financial resources necessary to implement the intervention model.

II. Illinois Partnership Zone: Human Capital Strategies

1. Reform district recruitment and hiring policies to support the work of the Illinois Partnership Zone.

2. Establish placement policies that support Illinois Partnership Zone schools:

   - Prioritize interview and hiring decisions for Illinois Partnership Zone schools,
   - Prohibit forced placements into Illinois Partnership Zone schools.

3. Establish incentives for administrators and teachers to work in Illinois Partnership Zone schools, and work with Lead and Supporting Partners to bring top talent to these schools.

4. Establish compensation systems in Illinois Partnership Zone schools that provide performance-based incentives (either individual or collective), particularly if state or federal resources are available to support such programs.

5. Establish an intensive induction and mentoring program for Illinois Partnership Zone teachers and administrators.

6. Establish meaningful performance evaluation and development systems that fairly and accurately differentiate teachers based in part on student achievement, and train administrators and other evaluators in its use.

7. Establish meaningful principal and other school administrator evaluation systems that incorporate considerations of school climate and are based, in part, on student achievement.

8. Establish one or more residency sites within the district where teachers and administrators can participate in an intensive residency program preparing them to serve in Illinois Partnership Zone schools.

   - ISBE may work with the districts and Lead and Supporting Partners to establish a statewide program to attract the "best of the best" from traditional undergraduate, alternative programs, and the existing educator workforce to work in low-performing schools.
   - Eventually, these residency sites will help provide a pipeline of educators to support both existing and new Illinois Partnership Zone schools.

Appendix E2-3

Prior Interventions

A. Prior LEA Interventions

B. Prior State Interventions

Appendix E2-3

A. Prior LEA Interventions

The following chart contains information on turnaround efforts since SY2004-2005 as self-reported by Participating LEAs.

Illinois Historic Performance on Turnaround		
Schools and/or Districts Since SY2004-2005[8]	**Approach Used**	**Results and Lessons Learned**
Murphysboro CUSD 186	Transformation Model: -Principal replaced. -Began staff development on Professional Learning Communities. -Increase planning and use of data to monitor student progress and guide instruction.	School culture is beginning to change and consistency of leadership will be critical for future progress.
Rockford Public Schools	Transformation Model: -2 principals replaced in priority schools. -Curricular alignment and remedial lessons implemented. -Developed formative and summative assessments to ensure students learning required content. -Increased focus on parental involvement. -Implemented comprehensive professional development for teachers and principals. -Developed and implemented teacher/administrator accountability system based on student performance.	These changes were largely implemented during the 2009-10 school year. The district is committed to pursuing systematic change in teaching and learning. Transformation efforts will continue to focus on curriculum alignment to state standards, embedded professional development, robust teacher and leadership evaluations based on student performance, data systems to track student development, comprehensive student assessments, and effective turn-around strategies for low-performing schools.
Kankakee School District	Transformation Model: -Two principals replaced. -Implemented high-quality embedded professional development for staff. -Increased length of school day.	These changes have had little to no effect on student learning based on assessment data to date.
Decatur SD 61	Transformation Model: Two high schools implemented a variety of programs in the last five years: -Implemented a restructuring plan to change school governance, including hiring an assistant superintendant of secondary schools. -Regular observation of teachers in classrooms. -On-site professional development from an	Graduation rates have increased from 69.2% to 86.4% at one school, and from 79.1% to 89.4% at the second school. Although many efforts have been undertaken, data indicates that much more intensive efforts are needed to eliminate the achievement gap. The leadership and teachers are continuing efforts to improve student

[8] Table heading "# Schools Since SY 2004-05" changed to "Schools/Districts Since SY 2004-05" and chart structure altered to conform to data available.

Illinois Historic Performance on Turnaround		
Schools and/or Districts Since SY2004-2005[8]	**Approach Used**	**Results and Lessons Learned**
	instructional specialist in each school. -More rigorous curriculum and additional test preparation. -Compiled student data in centralized system; teachers trained to use data to guide instruction.	achievement.
Thornton Fractional Township High School, District 215	Transformation Model: -Completed year of restructuring including implementing a new "school-within-a-school" model for all 9th grade students. -Implemented rigorous research-based curriculum for all students in English and math.	Positive results have been seen after implementation of the new programs based on review of PSEA scores, student transcripts, and EPAS data.
Chicago Public Schools	Turnaround Model: -Used in 11 elementary schools and 2 high schools. Restart Model: -Closed and re-opened several schools employing different governance structures and school types (e.g. CPS contract school model and CPS performance school model). School Closure Model: -Closed several schools, primarily for enrollment and facility usage reasons. Transformation Model: -Replaced the principal and provided intensive professional development to staff and the principal in at least four schools.	Efforts to transform lowest performing schools have been most effective where students have not been displaced and the school staff is entirely replaced (the turnaround and restart models). These models enable school administrators to create a new school climate with staff members who are invested in turn-around efforts. Successful interventions require that improvements be made to the school's culture and climate and touch on every aspect of a school's operations, including facility, governance, curriculum, social/economic issues, safety and security, hiring, teacher and staff participation in decision making, and staff development. Research has shown that closing a school and sending students to another school (school closure method) did not, on average, impact student achievement. This is especially true where students move from one low-performing school to another. As a result, the school board has taken steps this year to ensure that students whose schools are closed are transferred to a higher-performing school, and to provide transition services at the receiving school.
West Central CUSD # 235	Transformation Model: -Replaced principal. -Developed 16-session Teacher Academy to provide weekly professional development on a range of	The new principal was not effective and will likely be replaced prior to the 2010-11 school year. Effectiveness of professional

Illinois Historic Performance on Turnaround		
Schools and/or Districts Since SY2004-2005[8]	**Approach Used**	**Results and Lessons Learned**
	topics. -Implemented curriculum alignment process and exit outcome reporting strategies. Teachers are required to report on student performance at the end of each quarter and re-teach concepts not mastered by students in each quarter. -Used internal standardized testing programs to monitor student progress.	development has been mixed, with some, but not all, teachers beginning to incorporate new concepts into their daily activities. Changes to curriculum and exit outcome reporting strategies have been quite effective at the K-8 level, but not as effective at the high school level. Monitoring of progress on standardized tests and assessments is ongoing.
East St. Louis High School, District #189	Transformation Model: -Hired new principal, new administrative team, and Principal Coach. -Board members and teaching staff attended career academies; professional development survey and planned professional development in critical areas of concern. -Improved technological resources. -Increased emphasis for teachers on attendance, instruction, supervision, recordkeeping, schedule development, and student support. -Began monitoring teachers with regular observations.	Positive results have been observed in the school culture, attitude toward learning, and achievement of students in academic extracurriculars. The school has not yet made Adequate Yearly Progress, but there has been a significant increase in the number of students scoring over 18 on the ACT.
Country Club Hills School District 160	Transformation Model: -Implemented comprehensive school reform plan. -Secured School Improvement Grant.	During implementation of the Comprehensive School Reform plan, the school met Adequate Yearly Progress. Teacher and principal effectiveness has been observed as a critical element that directly impacts achievement levels.
Zion-Benton Township HSD 126	Transformation Method: -Aligned curriculum with Illinois Learning Standards and ACT College Readiness Standards. -Implemented comprehensive formative and summative assessments. -Improved use of data at institutional level. -Implemented intensive professional development for staff.	Last year, the schools experienced a 10.1% overall increase in reading proficiency and a 5.6% increase in math proficiency.
Champaign Unit 4	Transformation Model: -Implemented new teacher evaluation system with increased focus on student achievement, participation in activities related to student achievement, participation in campus programming,	New evaluation systems are being piloted in three schools this year. Restructuring efforts at a low-performing elementary school were successful. With that school being

Illinois Historic Performance on Turnaround		
Schools and/or Districts Since SY2004-2005[8]	**Approach Used**	**Results and Lessons Learned**
	and identifying needs of at-risk students. -Implemented principal evaluation system that is more directly linked to student achievement, including the school's test scores, graduation rates, enrollment in more rigorous courses, and attendance rates. -Restructured an elementary school that was on the State Academic Watch List and was chronically under-chosen by students and families.	named an Illinois Spotlight School for four consecutive years.
Hillcrest High School, Bremen District 228	Transformation Model: -Restructured students into small learning communities and cohorts. -Administered EXPLORE test to 8th grade students and used results to identify at-risk students. -Extended learning time in math and English. -Scheduled common teacher planning periods for discussion of student progress and best practices.	The school has observed improvement in math and reading remediation, helping keep at-risk students on track with their peers. The first cohort will take the PSEA this spring.
Proviso Township High School, District 209	Transformation Model: -Implemented reform model focused on curriculum, instruction, and assessment. -Implemented 9th grade academic initiative focused on accelerating students on the verge of meeting and exceeding state academic standards. -Administered new district-wide assessments for students in math and English, with incremental tests administered each quarter. -Developed an alternative program to support students in need of interventions in smaller groups. -Implemented a School Administrator Manager model to support principals in two high-priority schools.	The school has observed that a lack of consistent implementation and focus have been major barriers to progress in student achievement in the District. This problem is attributed to a combination of lack of leadership and capacity in the area of curriculum and instruction, lack of focus on student achievement in general, and financial constraints.
Cairo School District #1	Transformation Model: -Restructured classes to give needy students more intensive time on basic academic skills. -Implemented teacher training in differentiated instruction, academic vocabulary, positive behavioral intervention systems, and response to intervention.	The district does not yet have substantial informational data on the results of its efforts, but has observed that monitoring expectations and focusing on individual teacher accountability are key aspects to successful results.
Carrollton CUSD 1	Transformation Model: -Provided comprehensive, continuous professional development. -Required schools to submit school improvement plans. -Implemented a standardized reading assessment	A lack of financial resources and the school community's tendency to deny poor performance have contributed to a past pattern of decline. Recent grant funds have allowed this small, low-income, rural district to acquire some of the infrastructure necessary to

Illinois Historic Performance on Turnaround		
Schools and/or Districts Since SY2004-2005[8]	**Approach Used**	**Results and Lessons Learned**
	program and audits of the math programs. -Aligned math curriculum to ILS and College Readiness standards. -Initiated centralized system to track student assessments, records, and demographics and make student data more accessible to parents. -Extended and improved summer school programs for at-risk students.	implement changes. School improvement efforts have focused primarily on early grades and at-risk students. The high school has still failed to make Adequate Yearly Progress. This year, teachers were trained to analyze, interpret, and apply student data. However, limited financial resources are a problem. For future success, the school will need a support system of mentors and consultants to establish a consistent and comprehensive message.
Rich Township High School, District 227	Transformation Model: -A plan for each of three campuses was submitted to the State in 2007.	In 2008, 2 of 3 campuses made safe harbor for all subgroups in reading and math. In 2009, 2 of 3 campuses made safe harbor for all subgroups in reading and math, and the 3rd campus made safe harbor for all subgroups in reading. Math scores continue to rise as a result of math intervention supports for students. Benchmark assessments in math and science have assisted with targeting skill areas in need of review. The extension of this system to all subject areas will likely increase student achievement. Also, teachers will require access to data and resources to target students for assistance.

Appendix E2-3

B. Prior State Interventions

The following are descriptions of previous and ongoing State interventions:

1. Calumet School District 132. In Calumet School District 132, ISBE established an Oversight Panel in 2006 as the result of severe mismanagement and neglect of critical educational functions (in particular, the district's failure to properly educate its special education and bilingual student populations). The Oversight Panel was recently terminated by ISBE, after finding that the State intervention helped the district meet requirements for compliance, establish financial stability, address board training and responsibility, and establish the local systems necessary to improve student outcomes.

2. Proviso District 209. In Proviso District 209, ISBE and the local Regional System of Support Provider have worked closely with the district to improve student attendance and achievement, district leadership, and district finances. As a result, the district has hired a new superintendent and established new positions to provide leadership support and drive school improvement, and voluntarily agreed to a financial oversight panel that assisted the district in making significant reductions in its deficit.

3. East St. Louis District 189. In East St. Louis District 189, ISBE and the local Regional System of Support Provider have worked closely with the district to develop a District Improvement Plan that addresses improvement activities in all schools, with a primary focus on the high school. The plan addresses the need to re-allocate internal resources and address the systemic low-performance of the high school. Work continues to ensure the plan's successful implementation.

Appendix F2-1

Charter Schools: Reasons for Denials

TOTAL CHARTER SCHOOL APPLICATION DENIALS (between 2004 and 2009): 30

REASONS FOR DENIAL: SY 2008-2009 (5 charter school applications)

	Poorly stated goals, objectives, pupil performance standards.	Poorly developed curriculum, curriculum not aligned with IL	Poorly developed plan for assessment of student achievement and plan to	Management	Governance	Financial terms not correct/realistic	Facility	Lack of proof of liability insurance	Lack of transportation plan for low-income or at-risk students	Provisions for provision of special education are incomplete, inaccurate,	Lack of evidence of support from the community the school is	Financial mismanagement of the charter school director.	Incomplete	Withdrawn
SY 08-09														
Charter 1	X	X	X		X	X	X	X		X	X			
Charter 2				X				X				X		
Charter 3		X			X				X	X				
Charter 4	X	X	X			X			X	X				
Charter 5	X	X	X		X	X	X	X	X		X			

[continued on next page]

REASONS FOR DENIAL: SY 2007-2008 (3 charter school applications)

	Poorly stated goals, objectives, pupil performance standards.	Poorly developed curriculum, curriculum not aligned with IL	Poorly developed plan for assessment of student achievement and plan to	Management	Governance	Financial terms not correct/realistic	Facility	Lack of proof of liability insurance	Lack of transportation plan for low-income or at-risk students	Provisions for provision of special education are incomplete, inaccurate,	Lack of evidence of support from the community the school is	Financial mismanagement of the charter school director.	Incomplete	Withdrawn
SY 07-08														
Charter 1													X	
Charter 2											X			
Charter 3	X	X	X	X	X	X	X		X		X			

REASONS FOR DENIAL: SY 2006-2007 (3 charter school applications)

	Poorly stated goals, objectives, pupil performance standards.	Poorly developed curriculum, curriculum not aligned with IL	Poorly developed plan for assessment of student achievement and plan to	Management	Governance	Financial terms not correct/realistic	Facility	Lack of proof of liability insurance	Lack of transportation plan for low-income or at-risk students	Provisions for provision of special education are incomplete, inaccurate,	Lack of evidence of support from the community the school is	Financial mismanagement of the charter school director.	Incomplete	Withdrawn
SY 06-07														
Charter 1						X	X		X	X	X			
Charter 2	X					X		X	X	X	X			
Charter 3	Conversion of private school to charter status.													

REASONS FOR DENIAL: SY 2005-2006 (4 charter school applications)

	Poorly stated goals, objectives, pupil performance standards.	Poorly developed curriculum, curriculum not aligned with IL	Poorly developed plan for assessment of student achievement and plan to	Management	Governance	Financial terms not correct/realistic	Facility	Lack of proof of liability insurance	Lack of transportation plan for low-income or at-risk students	Provisions for provision of special education are incomplete, inaccurate,	Lack of evidence of support from the community the school is	Financial mismanagement of the charter school director.	Incomplete	Withdrawn
SY 05-06														
Charter 1		X		X	X									
Charter 2		X		X		X								
Charter 3				X	X	X								
Charter 4						X				X				

REASONS FOR DENIAL: SY 2004-2005 (30 charter school applications)

	Poorly stated goals, objectives, pupil performance standards.	Poorly developed curriculum, curriculum not aligned with IL	Poorly developed plan for assessment of student achievement and plan to	Management	Governance	Financial terms not correct/realistic	Facility	Lack of proof of liability insurance	Lack of transportation plan for low-income or at-risk students	Provisions for provision of special education are incomplete, inaccurate,	Lack of evidence of support from the community the school is	Financial mismanagement of the charter school director.	Incomplete	Withdrawn
SY 04-05														
Charter 1	X	X		X	X		X	X		X	X			
Charter 2		X		X	X	X	X							
Charter 3		X		X	X	X	X							
Charter 4		X		X										
Charter 5		X		X	X									

Charter 6		X		X	X	X	X						
Charter 7		X		X	X	X	X						
Charter 8												X	
Charter 9		X		X	X								
Charter 10		X		X	X								
Charter 11		X		X	X	X							
Charter 12								X					
Charter 13		X			X						X		
Charter 14		X			X	X							
Charter 15											X		
Charter 16		X		X	X	X					X		
Charter 17												X	
Charter 18												X	
Charter 19												X	
Charter 20												X	
Charter 21													X
Charter 22													X
Charter 23		X	X	X	X	X							
Charter 24		X	X		X	X							
Charter 25							X						
Charter 26		X									X		
Charter 27				X	X								
Charter 28	Ineligible – submitted same year												
Charter 29		X	X	X	X	X							
Charter 30												X	

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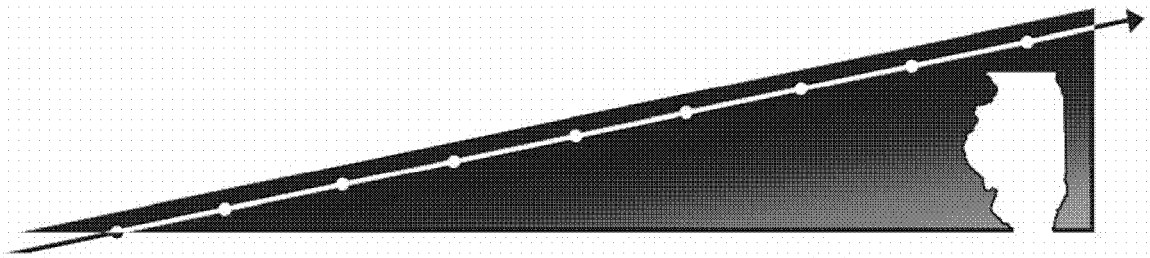

The State of Illinois

RACE TO THE TOP

APPLICATION FOR PHASE 2 FUNDING

APPENDICES

JUNE 1, 2010

Volume II

CFDA Number: 84.395A

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STATE OF ILLINOIS

JRTC, 100 WEST RANDOLPH, SUITE 16-100
CHICAGO, ILLINOIS 60601

May 17, 2010

Christopher A. Koch, Ed.D.
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Re: Letter of Support for State of Illinois Race to the Top Application

Dear State Superintendent Koch:

We are writing to express our strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top ("RTTT") application.

We believe that the RTTT competition presents a unique opportunity for Illinois to continue advancing its education agenda, which closely aligns with the RTTT priorities of high standards, data-based decision making, improving human capital, and intensive support for the lowest-performing schools and districts. If awarded a grant in the RTTT competition, Illinois will be able to accelerate and intensify critical work that is already underway.

Illinois has a demonstrated commitment to advancing education reform in RTTT priority areas. Despite the challenges faced by Illinois, strong leadership and collaborative support among key stakeholders have enabled the state to undertake implementation of bold reforms. Within the last eighteen months, the General Assembly has passed and Governor Quinn has signed legislation that:

- Establishes a comprehensive state longitudinal education data system;
- Allows for alternative certification programs to operate independently from higher education;
- Creates new, rigorous teacher and principal evaluation systems that incorporate student growth as a significant factor; and
- Doubles the number of charter schools in Illinois and formally explores the concept of an independent charter school authorizer.

We are confident that the education reform initiatives facilitated by RTTT funding will positively impact Illinois students well beyond the grant period. The Illinois General Assembly has a proven track record of bipartisan support for education reform, and we will provide our continued support to ensure that every child in Illinois is prepared for success in postsecondary education and employment.

Sincerely,

John J. Cullerton
The Honorable John J. Cullerton
Illinois Senate President

Christine Radogno
The Honorable Christine Radogno
Illinois Senate Republican Leader

Michael J. Madigan
The Honorable Michael J. Madigan
Illinois House Speaker

Tom Cross
The Honorable Tom Cross
Illinois House Republican Leader

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BILL BRADY
for GOVERNOR
JASON PLUMMER FOR LIEUTENANT GOVERNOR

May 17, 2010

Mr. Arne Duncan
Secretary
U.S. Department of Education
LBJ Education Building
Room 7W311
400 Maryland Avenue, SW
Washington, DC 20202

Dear Mr. Secretary:

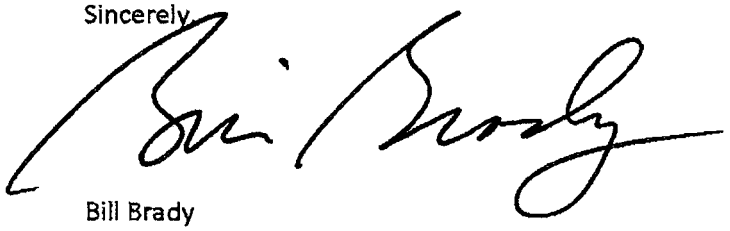
Upon careful review of Illinois' Race to the Top application of January 2010, I am pleased to offer this letter of endorsement of the strategies and reforms reflected in it.

A strong education for all of our citizens is essential to rebuilding our economy for the long term. Ensuring that all students have access to world-class schools is the first step toward securing our future. The reforms in this application are a reflection that we are thinking differently about how to improve our schools and bring about a new level of accountability.

As the Republican nominee for Governor of Illinois, it may well fall to my Administration to execute the terms of the state's application. The reforms outlined make sense across the political spectrum and I support the culture of higher expectations, innovation and accountability that are hallmarks of the application. I hope to bring those same elements across all of Illinois state government.

Once again, I am pleased to offer my support for Illinois' application, due to be re-submitted this June. No matter the outcome, Illinoisans will continue to work together, in a bipartisan manner, to support the reforms outlined and oversee their careful implementation to bring success to our schools.

Sincerely,



Bill Brady
State Senator
Bloomington, IL

500 W Monroe
First Floor NE
Springfield, IL 62704

Office of the Vice President
Educational Services

May 10, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, IL 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") which you are submitting to the U.S. Department of Education. I, on behalf of ACT, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, ACT, intends to support the implementation of the following components of the State's RTTT plan:

- Developing and Adopting Common Standards
- Establishing new capacities to assist LEAs with the adoption and implementation of Assessments for Learning
- Building off the strengths of the current State high school assessment to promote alignment of middle and high school instruction with college- and work-ready expectation
- Implementing a statewide longitudinal data system
- Supporting research initiatives such as the Index of Teacher Academic Capital
- Conducting workshops and providing resources to support professional development initiatives for teachers and principals
- Implementing the Illinois Partnership Zone initiative, one of the four proposed school intervention models

500 ACT Drive P.O. Box 168 Iowa City, Iowa 52243-0168 319/337-1055
jon.erickson@act.org www.act.org

In October 2009, ACT recognized the Illinois State Board of Education with a "Systems of Excellence" award for its commitment to advancing college and career readiness. We are proud to be collaborating with the State on numerous initiatives and look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Jon L. Erickson
Senior Vice President
Educational Services

Advance
ILLINOIS
EVERY STUDENT WORLD READY

May 14, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application, Phase 2

Dear Governor Quinn,

Advance Illinois would like to reinforce its strong support for the comprehensive education reforms outlined in the State of Illinois' Race to the Top ("RTTT") Phase 2 application.

As you know, our advocacy group represents a broad range of Illinoisans, with bipartisan political leadership (co-chaired by former Gov. Jim Edgar and former Secretary of Commerce Bill Daley) and a board of business leaders, community leaders, policy experts and educators. We have recommended Illinois enact many of the reforms called for in RTTT and endorse the state's efforts wholeheartedly.

These reforms will transform the state's schools, replacing an input-driven, compliance-focused system that is failing with an outcome-based, results-oriented system that helps prepare every child in the state to be world-ready.

We offer our continued support in many of the areas of the application. In particular, we offer to continue playing a role in your plan to overhaul the teacher evaluation system in the state. Your plan, passed into law in January, sets Illinois on a path to where teachers are no longer treated like widgets, but given the kind of professional feedback and development they deserve. And, by linking student achievement data to their teachers, we can make the best decisions about instruction and staffing. Advance Illinois has commissioned a study by the National Council on Teacher Quality to assess the caliber of our teacher preparation programs. This process has been in collaboration with the State Board.

Further, we support the State Board's work ahead of this Phase 2 application to redesign principal preparation, creating a performance-driven system that raises and focuses standards and promotes excellence. By tightening the requirements to become a principal and by aligning principal preparation more closely with the precise needs of our schools, the state is taking a strong step toward improving the corps of leaders who are central to the success of our schools.

We continue to support the state's efforts to use data to inform instruction and school improvement. In particular, we hope to keep playing a central role on the working group that is developing the Learning and Performance Management System, founded on a cutting-edge, user-

friendly data system to drive instruction across the state. If RTTT reforms are enacted and successful, our educators will have the support, from quality instructional tools and connections to their colleagues facing the same challenges, to use the data. In addition, improved data quality throughout the state will enable us to track progress and indicators to ensure the state is on track to achieve its education goals from Birth through Career.

Indeed, it's important that the state focus on developing standards for kindergarten readiness and college readiness. Advance Illinois is proud to work together on the team developing the kindergarten readiness standard, along with Illinois-based early education leaders such as Ounce of Prevention and the Erikson Institute. Also, we've called for formative assessments to improve instruction and are heartened to see that captured in the Assessments for Learning section of your RTTT application. In addition, a smart, rigorous model for growth is at the heart of a sound accountability system, allowing us to answer the fundamental question of whether our students are improving over the course of a school year, and from year to year.

We are eager to help you and the State Board with the challenging work of turning around our lowest-achieving schools. We are proud that Illinois was selected by MassInsight as one of three states chosen for the opportunity to focus much-needed outside expertise and resources on this issue. In coordination with the powerful Partnership Zone initiative in the RTTT application, this work promises to dramatically improve the chances for success among our most at-risk populations.

Finally, we congratulate you on the process of the application. By embracing the challenge from the U.S. Department of Education to fully engage our state stakeholders, you have built a robust plan that will endure changes in leadership, be they at the state, district or school level. By working as a team, we believe a new day has dawned, and that Illinois can fulfill its promise to educate all of its children, and prepare them well for the challenges they'll face as adults.

We stand ready to continue working with your office and your strong, progressive team at the State Board. We are eager to keep up the constructive dialogue that has driven this process from the start, and to assist in the implementation of a plan that promises to bring so much good to the citizens of our great state.

Sincerely,

(b)(6)

Robin Steans
Executive Director
Advance Illinois

ALLIANCE
FOR ILLINOIS MANUFACTURING

8430 West Bryn Mawr
10th Floor
Chicago, Illinois 60631
Phone: 773-594-9292
Fax: 773-594-9416
www.norbic.org

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Alliance for Illinois Manufacturing, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Alliance for Illinois Manufacturing recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Alliance for Illinois Manufacturing is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

Pamela McDonough
President/CEO
Alliance for Illinois Manufacturing

Alternative Schools Network
1807 W. Sunnyside Suite 1D
Chicago, IL 60640

Phone: 773-728-4030
Fax : 773-728-3335

Creating Futures Every Day

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

May 3, 2010

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Alternative Schools Network, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Alternative Schools Network intends to support the implementation of the Dropout-Prevention and Re-Enrollment Support component of the Illinois RTTT proposal. With the passage of the Illinois Hope and Opportunities Pathways through Education (IHOPE) and five multi-site high school charters for dropouts in Chicago, Illinois is a strong leader in the country to address the growing crisis of youth who leave school before they earn a high school diploma. The commitment of the Illinois RTTT proposal to allocate $25 million to this component will significantly help thousands of youth who are now on our streets with no hope to return to school and earn a diploma. Also, this will help the graduation rate in the state and many school districts across the state.

Over the last three years, Alternative Schools Network has worked in a close partnership with the Illinois Council on Re-Enrolling Student Who Dropped Out of School and in developing the IHOPE plan and five multi-site charters for high school dropouts. We will continue this partnership to work on implementing these programs through the funding provided in RTTT, particularly for the IHOPE plan.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Jack Wuest
Executive Director

Argonne NATIONAL LABORATORY

Division of Educational Programs
Argonne National Laboratory
9700 S. Cass Avenue, Bldg. 223
Argonne, IL 60439

630-252-4114 Phone
630-252-3193 Fax

May 14, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of *Argonne National Laboratory, Division of Educational Programs,* am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, *Argonne National Laboratory, Division of Educational Programs* recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Argonne National Laboratory, Division of Educational Programs is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Harold W. Myron

Harold W. Myron, Director
Division of Educational Programs

The Associated
Colleges of Illinois
Established 1952

27 North Wacker Drive
Suite 521
Chicago, Illinois 60606

www.acifund.org

May 12, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

The Associated Colleges of Illinois (ACI) supports the Illinois State Board of Education's goal of turning around low-performing schools through its Race to the Top Application for Initial Funding ("RTTT"), which you are submitting to the U.S. Department of Education. On behalf of the Associated Colleges of Illinois, I am excited about the opportunity to support the work of the Illinois State Board of Education in addressing a key Human Capital Strategy: reform district recruitment and hiring policies -- by providing participating school districts (LEAs) with a *High-Need Schools Internship* (HNSI) program that develops the pipeline of highly qualified teachers prepared specifically for those districts.

Immediate benefits to participating LEA districts include: reducing recruitment costs, relieving teacher shortages, and shrinking attrition rates (and costs) arising from engaging teachers who may not be well prepared or well suited to low performing schools. In addition, *HNSI* advances transformation of teaching to a clinical practice profession, which can result in long-term benefits in the form of a more qualified teacher corps for under performing schools.

ACI will accomplish these goal by partnering its member colleges and universities (IHEs) with host LEAs to operate six-week *High-Need Schools Internships* (HNSIs) -- intensive summer experiences that prepare and position preservice teachers to maintain ongoing relationships with host LEAs, including completing their student teaching and assuming teaching positions in the LEAs in which they have served as interns.

Designed to advance teaching as a professional practice profession, *HNSIs* will 1) actualize the characteristics of clinical practice in the context of Carnegie Corporation's *Teachers for a New Era* (TNE) model for a clinical practice profession (Hinds, 2002); 2) conform to Charlotte Danielson's Framework for Teaching (Danielson, 2007); and 3) combine instruction that addresses content, pedagogy, and socioeconomic and social-emotional factors with hands-on teaching experience -- to build a new pipeline of preservice teachers prepared both for the challenges of

teaching in low performing schools, *and* for the specific cultural, socioeconomic, and intellectual challenges posed by the partner LEAs.

Illinois' RTTT proposal supports the state's education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers, and school leaders by providing educators with access to the data and tools necessary to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that by providing every child with the knowledge, skills, abilities, and attitudes required to succeed in postsecondary education and careers, we can ensure that every student will become a productive citizen in our ever-changing world.

ACI member colleges and universities are committed to the *High-Need Schools Internship* strategy. In addition to the six IHEs with established *HNSI*s, in response to the positive data documenting the success of these internships and the opportunity created by RTTT, many other ACI institutions literally are clamoring for funding to help launch new *HNSI* sites. The institutional commitment of ACI IHEs to *HNSI* represents a significant resource in support of both the internships and of Illinois' anticipated RTTT initiative.

Sincerely,

Jerry Fuller
Executive Director

astellas
Leading Light for Life

January 14, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

On behalf of Astellas I am writing to express strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application. At Astellas science is not only the foundation of our business, it's our passion. We are committed to playing an active role in science education and strongly believe that by doing so we can help drive medical innovation in the future. Through RTTT, Illinois can dramatically improve student performance in science, technology, engineering, and mathematics (STEM) disciplines and prepare them to tackle the challenges of the 21st century.

Our commitment to the Illinois RTTT application expands upon our long standing commitment to foster science educators' needs and help improve science education within Chicago and the surrounding communities. Astellas strongly supports an emphasis on high school reform and the focus on improving transitions into both college and careers—ensuring the development of a well-educated workforce ready for a modern global economy.

We believe the State has identified important and effective high school reform initiatives in its RTTT application including establishing a statewide program for the National Career Readiness Certificate, developing and scaling STEM-related Programs of Study, and building STEM Learning Exchanges. STEM Learning Exchanges, in particular, are important to the success of

Astellas Pharma US, Inc.
Three Parkway North, Deerfield, IL 60015-2537

students because they will bring together the resources and expertise of a wide range of business and industry, education and government partners.

We are committed to partnering with the State to implement the NCRC program and STEM-related Programs of Study throughout the state. Astellas is also willing to serve as a partner with the State in the planning and implementation of STEM Learning Exchanges for health sciences.

We understand that the future of scientific innovation lies in our children and that a child's interest in science is sparked in the classroom. We look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application.

Sincerely,

Seigo Kashii
President and CEO
Astellas Pharma US, Inc.

at&t

Paul V. La Schiazza
President
AT&T Illinois

225 West Randolph
Floor 27 B
Chicago, IL 60606

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F: 312.558.1210
pl2576@att.com

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application. I believe that RTTT presents an unparalleled opportunity to position Illinois to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

I support the strong emphasis on high school reform and the focus on improving transitions into both college and careers which will ensure the development of a well-educated workforce ready for a modern global economy. I believe the State has identified important and effective high school reform initiatives in its RTTT application, including: establishing clear college-ready expectations with standardized placement scores, establishing a statewide program for the National Career Readiness Certificate (NCRC), increasing student preparation and rigor in math, and developing and scaling STEM-related Programs of Study.

The NCRC will be an important career readiness credential relevant to a wide range of careers. The STEM-related Programs of Study offer a promising approach for high school reform that will enable students to make real-world connections with their academic and career interests. STEM Learning Exchanges are critical to the success of STEM-related programs of study because they will bring together the resources and expertise of a wide range of business and industry, education and government partners.

I look forward to working with the State of Illinois and other stakeholders to help implement the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and any opportunities to assist in implementation of the RTTT plan.

Sincerely,

Paul La Schiazza
President – AT&T Illinois

Cc: Eileen Mitchell

USA Proud Sponsor of the U.S. Olympic Team

Baxter

Norbert Riedel
Corporate Vice President / Chief Scientific Officer

January 15, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application. We believe that RTTT presents an unparalleled opportunity for Illinois to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

As a global corporation that manufactures and markets products that save and sustain lives, Baxter International is committed to helping students become inspired and excited by science. We believe students deserve every opportunity to experience science first hand. And, in connection with talented Baxter professionals, we hope to enable them to advance medicine, technology and engineering for generations to come.

To that end, in 2008 Baxter launched *Science @ Work: Expanding Minds with Real-World Science* in partnership with Chicago Public Schools (CPS), Renaissance Schools Fund (RSF) and Illinois Institute of Technology, as a five year, three-part program aimed at providing enhanced biotechnology science education opportunities for CPS students and teachers. In its first year, the program has reached hundreds of teachers and thousands of students with biotechnology curricula.

We support the strong emphasis on high school reform and the focus on improving transitions into both college and careers—ensuring the development of a well-educated workforce ready for a modern global economy. We believe the State has identified important and effective high school reform initiatives in its RTTT application including establishing a statewide program for the National Career Readiness Certificate (NCRC) and developing and scaling STEM-related Programs of Study.

The NCRC will be an important career readiness credential relevant to a wide range of careers. The STEM-related Programs of Study offer a promising approach for high school reform that will enable students to make real-world connections with their academic and career interests. STEM Learning Exchanges are critical to the success of STEM-related programs of study because they will bring together the resources and expertise of a wide range of business and industry, education and government partners.

Baxter Healthcare Corporation
One Baxter Parkway / Deerfield, Illinois 60015
T 847.948.2000

Norbert Riedel
Corporate Vice President / Chief Scientific Officer

Through existing partnerships Baxter has with the iBIO Institute, we are committed helping implement the NCRC program and STEM-related Programs of Study.

We are also willing to help plan and implement STEM Learning Exchanges for Health Sciences where applicable. We are committed to supporting STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers. In our first year working with CPS, we have provided biotechnology education support to more than 24,000 Chicago Public School students and 352 teachers in 109 schools. We look forward to furthering involvement in science education initiatives where Baxter's support can play a role in developing young minds.

We have seen the critical role our corporation plays in furthering educational opportunities, and we look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and any opportunities to assist in implementation of the RTTT plan.

Sincerely,

Norbert G. Riedel, Ph.D.
Corporate Vice President
Chief Scientific Officer

Cc: David Miller, iBIO Institute
Valery Gallagher, Baxter Government Affairs and Public Policy

NGR:er

cc: R. Parkinson
D. Scharf

Baxter Healthcare Corporation
One Baxter Parkway / Deerfield, Illinois 60015
T 847.948 2000

May 11th, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. On behalf of ***Bison Gear & Engineering Corporation and as a member of the Illinois P-20 Council***, I'm excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, ***Bison Gear & Engineering*** recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students that will increase both their global competitiveness and ultimately companies like ours that depend on a pipeline of STEM practitioners at both entry and professional levels . The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

In addition, as the Immediate Past Chairman of the ***Illinois Manufacturers Association***, please be assured that the manufacturing community in Illinois is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely

Ronald D Bullock

Ronald D Bullock
Chairman

Paul E. Nowicki
Assistant Vice President
Government & Public Policy

BNSF Railway Company
547 West Jackson Blvd., Ste. 1509
Chicago, IL 60661-5717
tel 312-850-5678
fax 312-850-5677
email paul.nowicki@bnsf.com

May 25, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of BNSF Railway am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, BNSF Railway recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

BNSF Railway is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Paul Nowicki

Paul E. Nowicki

Board of Education

CITY OF CHICAGO

125 SOUTH CLARK STREET • 6TH FLOOR
CHICAGO, ILLINOIS 60603

TELEPHONE (773) 553-1600
FAX (773) 553-1601

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May 26, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Initial Funding ("RTTT") which you are submitting to the U.S. Department of Education. As President of the Board of Education of the City of Chicago, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

In particular, I am pleased to see the extent to which the RTTT proposal supports and aligns with current reform initiatives in the Chicago Public Schools. This includes closing or turning around underperforming schools, working with CPS teachers and administrators and private sector partners to open new schools, creating more choice for parents and guardians in neighborhoods that historically have been served by underperforming schools, and using student growth data to measure teacher and principal performance. Much of our work has been done with local funds. We view the Illinois RTTT proposal as an important source of additional funding that will allow us to improve and expand these programs.

At the same time that we look forward to the continued development of these programs in Chicago, we also believe that the knowledge and experience we have gained over the past several years will be of significant value to Illinois as it implements similar strategies at the state level. We look forward to partnering with ISBE in the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Mary B. Richardson-Lowry
President

cc: Jesse Ruiz
Ron Huberman

THE CHICAGO COMMUNITY TRUST
AND AFFILIATES

EXECUTIVE COMMITTEE

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Michael Tang

Terry Mazany
President & CEO

May 13, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

We are writing to applaud you for your efforts to secure funding from the U.S. Department of Education's "Race to the Top" ("RTTT") Fund. We are excited about the opportunity the federal RTTT grant would provide to help the State of Illinois make some needed reforms to improve education. The sorely needed resources will allow Illinois to continue to develop an educational system, from preschool to high school, which will prepare each and every child in Illinois for success in postsecondary education and the workforce and to lead a productive life.

The RTTT proposal supports the Illinois education reform agenda by assuring that we adopt world class standards and assessments for students, teachers and school leaders; by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes; by supporting the development of effective principals and teachers; and, by providing supports to turn around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes will succeed in postsecondary education and careers and will become a productive citizen.

The 18 members of The Race to the Top Initiative – a short-term collaborative fund of The Chicago Community Foundation—have already demonstrated our financial support to the Illinois State Board of Education (ISBE) for this important endeavor by providing a grant to develop this application. The foundations remain committed to continued conversations with the state to share ideas and strategies for the long-term improvement of education in Illinois.

On behalf of The Race to the Top Initiative collaborative fund, we look forward to continuing this partnership with the Illinois State Board of Education to improve education for all children.

Sincerely,

Nora Moreno Cargie
Director of Global Citizenship
The Boeing Company Charitable Trust
Co-chair, Illinois Race to the Top Initiative

Gudelia López
Senior Program Officer
Chicago Community Trust
Co-chair, Illinois Race to the Top Initiative

111 East Wacker Drive, Suite 1400, Chicago, IL 60601 | 312.616.8000 | Fax 312.616.7955 | www.cct.org

RECEIVED
MAY 17 2010 #6
State Superintendent of Education

CHICAGOLAND
CHAMBER OF COMMERCE

May 12, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. On behalf of the Chicagoland Chamber of Commerce, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the Chicagoland Chamber of Commerce recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

The Chicagoland Chamber of Commerce is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Gerald Roper
President & CEO

200 E. Randolph Street, Suite 2200, Chicago, IL 60601 www.chicagolandchamber.org 312.494.6700 fax: 312.861.0660

Commonwealth Edison Company
Chase Tower
10 S. Dearborn St., 50th Floor
Chicago, IL 60603

www.exeloncorp.com

An Exelon Company

May 14, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of ComEd, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, ComEd recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

ComEd is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Paula Conrad
Corporate Citizenship Manager

CompTIA.

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express the Computing Technology Industry Association's (CompTIA's) support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. CompTIA is excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will increase Illinois' opportunity to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, CompTIA recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

CompTIA is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Todd Thibodeaux
President and CEO

1815 S. Meyers Road Suite 300 Oakbrook Terrace, IL 60181-5228 Phone: 630.678.8300 Fax: 630.678.8384

www.comptia.org

CONSORTIUM ON
CHICAGO SCHOOL RESEARCH
CCSR

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Chris:

I am writing to express our enthusiastic support for Illinois's Race to the Top Application for Initial Funding ("RTTT") which you are submitting to the U.S. Department of Education. On behalf of the Consortium on Chicago School Research (CCSR) at the University of Chicago, I am excited about the opportunity the federal RTTT grant provides for the State of Illinois to move forward on a set of ground-breaking education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

CCSR will work to support the implementation of a number of components of the state's plan including its efforts to develop data systems to support instruction, produce and support great teachers and leaders, and turn around the state's lowest achieving schools. Specifically, CCSR will work as an active partner on the proposed Illinois Collaborative for Education Policy Research (ICEPR), an innovative state research and development partnership modeled directly on the experience of CCSR in Chicago. We believe the ICEPR will play a crucial role in shaping the state's learning about the implementation of RTTT priorities, help communicate these findings widely to key stakeholders in the state and assist practitioners in developing their own research capacity for data collection and analysis.

Our work in Chicago teaches us that careful, rigorous research on key policy priorities—research that is grounded in the problems practitioners face—can effectively build the capacity of education systems to improve over time. We are confident such a model can work equally well in a state committed to the kinds of far reaching reforms described in the Illinois plan.

We look forward to enthusiastically partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms.

Sincerely,

Paul Goren
Lewis-Sebring Director

Council of Supply Chain Management Professionals
333 East Butterfield Road, Suite 140 Lombard, IL 60148-5617
phone 630.574.0985 fax 630.574.0989

CSCMP

May 19, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Council of Supply Chain Management Professionals (CSCMP), am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

CSCMP intends to support the implementation of the following components of the State's RTTT plan:

- Planning and implementation of supply chain, transportation, distribution and logistics education curriculum
- Development of e-learning curriculum resources (where applicable)
- Professional development programs for teachers, and expanding internships and career development opportunities for students.

CSCMP will specifically undertake to support the State's RTTT plan through the following actions of support:

- Provide people/resources from industry
- Expand real-time knowledge through assistance to companies (e.g. facility tours, briefings from industry experts, etc.)

www.cscmp.org

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Burt Blanchard

Mr. Burt Blanchard
Director, Business Relations and Solutions
Council of Supply Chain Management Professionals

CSC LEARNING
Research-based, Web-enabled Academic Interventions for RTI

May 5, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of CSC Learning, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, CSC Learning intends to support the implementation of the following components of the State's RTTT plan by providing teachers and principals with:

- Real-time access to data and reduce duplicative reporting requirements
- High quality mentoring, including intensive training in the use of data to improve student growth
- Detailed student growth data to support the development/implementation of frameworks and processes to support teachers and principals in the implementation of new evaluations
- Implementation planning services and research-based, web-delivered academic interventions for RTI into the State's RTTT plan (e.g. Lexia, Reading Plus)
- Site/District/Regional professional development opportunities in the use of online formative assessments to support the State's Proposed Technology Infrastructure
- Develop and deliver training for teachers and principals through our numerous existing partnerships, including ROE's, Special Education Cooperatives and Professional Organizations (e.g. ROE 21, LEASE, WCISEC, TCSEA, TMCSEA, FDSE, Champaign, Infinitec Coalition).

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

Name: Caroline Sanchez Crozier
Title: President

CSC Learning
1613 S. Michigan Ave. • Chicago, IL 60616
Phone: 877-211-3998 • Fax: 877-211-8623
www.csclearning.com

ED-RED
EDUCATION • RESEARCH • DEVELOPMENT

Erika N. Lindley
Executive Director
"The voice of suburban schools"

1131 South Dee Road
Park Ridge, Illinois 60068
Voice: 847-692-8048
Fax: 847-696-3254
http://www.ed-red.org

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

May 24, 2010

Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") which you are submitting to the U.S. Department of Education. ED-RED is excited about the opportunities provided by the federal RTTT grant. These funds will move the State of Illinois forward on ground-breaking, transformative education reforms.

Illinois' financial situation will make it difficult to increase funding and necessary support to our districts over the next few years. The RTTT funding is especially important this year. The Illinois State Board of Education and education stakeholders have created a true reform agenda for the State with the support of the Illinois General Assembly and Governor Pat Quinn. The RTTT funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague chronically low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools. Thanks to the agency's leadership, the Illinois General Assembly passed two related pieces of legislation: strengthening the significance of teacher and principal evaluations and expanding the number of entities that can offer alternative certification programs. Both bills were signed into law by Governor Pat Quinn with his strong support. You and your staff successfully negotiated with education stakeholders and legislators and achieved a rare outcome – a collaborative legislative effort. **I believe this illustrates your interest in working with stakeholders during the implementation process to ensure our districts have the necessary tools to comply with the vision set forth by the U.S. Department of Education and Illinois State Board of Education.** ED-RED strongly supports the legislation and will continue to support the agency's reform efforts.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers will become a productive citizen in our ever-changing world. In addition to RTTT, ED-RED will continue to support the agency's work to develop a statewide longitudinal data system and pursue the Common Core standards. We are excited about the potential of a data system networking local districts, higher education, and the state agency. This system will provide valuable information to our schools and assist our policy makers in determining priorities. As far as standards, there is much that Illinois can share and learn from other states, and this nationwide effort at has tremendous possibilities. Thank you, Dr. Koch, for your leadership in this national effort.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Erika Lindley
Executive Director

Samuel J. Meisels, President
Irving and Neison Harris President's Chair
451 North LaSalle Street
Chicago, Illinois 60654-4510
312-893-7100 t 312-755-0133 f
www.erikson.edu

May 4, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Erikson Institute, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Erikson Institute intends to support the implementation of the following components of the State's RTTT plan: the Kindergarten Readiness assessment program and the training of K – 3 teachers. We have been the lead agency for planning the Kindergarten Readiness assessment development taking place in the state at this time and we look forward to sharing this information on a larger plane. Similarly, we have been working with 11 schools in CPS regarding K – 3 issues. It will be a pleasure to scale this work up to the state as a whole.

Erikson Institute will specifically undertake to support the State's RTTT plan through the following actions of support: Development of a plan for state-wide Kindergarten Readiness assessment and professional development of teachers, K – 3.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

Samuel J. Meisels
President

SJM:dm

Fermilab

Marjorie G. Bardeen
Education Office
Workforce Development and Resources Section
630.840.2031
630.840.8248 fax
mbardeen@fnal.gov

May 12, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

On May 12, the first National Lab Day, I am pleased to write in support of the Race to the Top Application for Phase 2 Funding (RTTT) that you are submitting to the U.S. Department of Education. On behalf of Fermilab, I want to express our excitement regarding the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The funds will allow Illinois to continue to develop an educational system that will prepare Illinois children for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world-class standards and assessments for students, teachers and school leaders. The proposal provides teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turn around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen.

As a national science research institution, Fermilab recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and mathematics.

We look forward to the opportunities that this proposal offers Illinois students.

Sincerely,

Marjorie G. Bardeen

Marjorie G. Bardeen
Manager

The Field Museum exploring the earth and its people

May 17, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of The Field Museum of Natural History, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools. Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, The Field Museum recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The Field Museum serves hundreds of thousands of children each year, throughout the region and the state, through our education programs, exhibitions, outreach programs, and digital programs. Improving the quality of instruction in science is a key focus for us. We focus in particular on early elementary and high school professional development for science educators, seeking to improve educators' content knowledge, inquiry teaching skills, and use of museum resources.

The Field Museum's and The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

1400 S. Lake Shore Drive
Chicago, Illinois 60605-2496
Telephone 312.922.9410

Printed on recycled paper

The Field Museum is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Elizabeth C. Babcock, Ph.D.
Vice President of Education and Library Collections

1400 S. Lake Shore Drive
Chicago, Illinois 60605-2496
Telephone 312.922.9410

Printed on recycled paper

May 15, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application. I believe that RTTT presents an unparalleled opportunity for Illinois to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

I support the strong emphasis on high school reform and the focus on improving transitions into both college and careers—ensuring the development of a well-educated workforce ready for a modern global economy. I believe the State has identified important and effective high school reform initiatives in its RTTT application including establishing a statewide program for the National Career Readiness Certificate (NCRC) and developing and scaling STEM-related Programs of Study.

The NCRC will be an important career readiness credential relevant to a wide range of careers. The STEM-related Programs of Study offer a promising approach for high school reform that will help enable students to make real-world connections with their academic and career interests. STEM Learning Exchanges are critical to the success of STEM-related programs of study because they will bring together the resources and expertise of a wide range of business and industry, education and government partners.

I am committed to collaborating with the State to foster STEM-related Programs of Study throughout the state. IBM has a long history of fostering STEM education in the State of Illinois. As an IT company, we want to encourage the education community in training a workforce that is capable of using computing effectively. Facilitating STEM careers is the foremost societal concern of the IBM Corporation.

I look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and any opportunities to assist in implementation of the RTTT plan.

Sincerely,

Robert D. Reid, III

IBM Corporate Citizenship and Corporate Affairs
71 South Wacker Drive
20th Floor
Chicago, IL 60606

ILLINOIS ACADEMY OF PHYSICIAN ASSISTANTS

RECEIVED
MAY 19 2010 #1
State Superintendent of Education

May 17, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

On behalf of myself, the Illinois Academy of Physician Assistants' board of directors and the PA profession in Illinois, I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") submission to the U.S. Department of Education.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Illinois Academy of Physician Assistants recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment.

The STEM efforts will provide critical life-long learning skills for students continuing their undergraduate and graduate level courses. The PA profession takes pride in their dedication to healthcare excellence by providing PA students with the knowledge and skills necessary to deliver quality healthcare and increase access to care in the changing healthcare environment. The number of PAs is growing in Illinois as the profession is recognized as one of the top five medical professions. As the PA profession grows, so too will the number of Illinois PA programs. Not only will RTTT provide the basic learning skills of our future PA students, but also the future PA Program staff and faculty.

The Illinois Academy of Physician Assistants is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges. We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Sarah Smalley, MMS, PA-C

Sarah Smalley, MMS, PA-C
President, 2010

225 East Cook Street, Springfield, Il 62704 800-975-9344 217-241-0232 www.IllinoisPA.org info@IllinoisPA.org

534 S. Second Street, Suite 200
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217/544-4014 • Fax: 217/544-0225

999 McClintock Drive, Suite 100
Burr Ridge, Illinois 60527-0844
312/251-1414 • Fax: 312/251-1420

OFFICERS
Michael T. Carrigan, President
Timothy E. Drea, Secretary Treasurer

www.ilafl-cio.org

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Re: Letter of Support for State of Illinois Race to the Top Phase II Application

Dear Dr. Koch:

As the president of the Illinois AFL-CIO, I am writing to express support for the State of Illinois' Race to the Top (RTTT) Phase II application. The Illinois AFL-CIO represents one million union members and is the voice of all working families in the state, and we welcome the opportunity to be a key partner in building a stronger workforce for Illinois.

I believe that the State's RTTT application will position Illinois as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines including careers in the construction industry.

STEM-related Programs of Study offer a promising approach for helping students build strong math and science skills by making real-world connections with their academic and career interests. STEM Learning Exchanges are critical to the success of STEM-related programs of study because they will bring together the resources and expertise of a wide range of industry, government, education and the labor community to be partners in this effort.

The Illinois AFL-CIO is willing to serve as a partner with the State in the planning and implementation of the STEM Learning Exchange for Architecture and Construction. We are committed to supporting STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and expanding internships and career development opportunities for students.

Sincerely,

(b)(6)

Michael T. Carrigan
President

MTC/br
LIUNA362aflcio

IAASE Illinois Alliance of Administrators of Special Education

A subdivision of the Council of Administrators of Special Education http://www.iaase.org
P.O. Box 357 – Vandalia, Illinois 62471

RECEIVED
MAY 17 2010 #5
State Superintendent of Education

May 6, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Illinois Alliance of Administrators of Special Education am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Illinois Alliance of Administrators of Special Education intends to support the implementation of the following components of the State's RTTT plan: providing effective support to teachers and principals, and intensive support educator support for critical transition points as outlined in MOU support documentation.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

Susanne Carrescia
President
IAASE

Illinois Association of
Regional Superintendents of Schools

Illinois State Superintendent Dr. Chris Koch
Illinois State Board of Education
100 N First St
Springfield, IL 62777-0001

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Association of Regional Superintendents of Schools (IARSS), am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the IARSS intends to support the implementation of the following component of the State's RTTT plan: IARSS will assist in the regional delivery of services for the system of support for under-performing schools.

The IARSS will specifically undertake to support the State's RTTT plan through the following actions of support: The IARSS will take the lead in regional delivery of services to schools, and serve as a Lead and Supporting Partner for schools in the Turn-Around process.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Gilbert E Morrison, Jr.
President, IARSS

☆ ILLINOIS
IASA
ASSOCIATION OF SCHOOL ADMINISTRATORS

BRENT CLARK, Ph.D.
Executive Director

May 27, 2010

Via Electronic Transmission and First Class Mail

Dr. Christopher A. Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street
Springfield, Illinois 62777

Re: Illinois Association of School Administration/Race to the Top Application

Dear Dr. Koch:

The purpose of this letter is to assist in Illinois' Race to the Top Application for Initial Funding ("RttT") as developed by the Illinois State Board of Education and submitted to the U.S. Department of Education on behalf of all Illinois children.

First, the IASA commends the Board, Administration and Staff of ISBE for all of its time, dedication and tireless effort in the development of Illinois' RttT Application for Initial Funding. The IASA recognizes and appreciates the work product given ever-decreasing funding and resources. It is our honor to work together in our collective quest to better public education in Illinois.

Furthermore, the IASA commits to work collectively and collaboratively with ISBE and all education stakeholders on behalf of Illinois school communities. The IASA will continue to lead and participate in meetings, committees and task forces, such as the Education Stakeholders Meeting, IASA/ISBE Advisory Committee, P-20 Council and Performance Evaluation Advisory Council, once established. It is the intent of the IASA to continue to work together with all education stakeholders to develop the best educational environment for all Illinois administrators, staff and children.

Last, the IASA will strive to facilitate development and implementation of laws, regulations, policies, protocols and procedures for the betterment of public education, given adequate supports, sustainable funding and all committed responsibilities of ISBE and the State and Federal government are provided. However, the IASA will not support legislation, regulations and/or policies which will negatively impact the employment of educational employees without justifiable cause or due process under the law. To this end, the IASA will make every effort to commit its time, talents and resources to ISBE and other education stakeholders for the sustained improvement of education in Illinois.

Yours for better schools,

Brent Clark

Dr. Brent Clark
Executive Director
Illinois Association of School Administrators

2648 Beechler Court ★ Springfield, Illinois 62703-7305 ★ 217/753-2213 ★ FAX 217/753-2240
Email: iasa@iasaedu.org World Wide Web: http://www.iasaedu.org

ILLINOIS
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS

Northern Illinois University (IA-103)
108 Carroll Avenue, DeKalb, IL 60115

May 27, 2010

Via Electronic Transmission

Dr. Christopher A. Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to provide support for the Race to the Top Application for Initial Funding ("RTTT"), which you are submitting to the U.S. Department of Education.

On behalf of the Illinois Association of School Business Officials ("Illinois ASBO") I pledge our continuing commitment to assist you and the Illinois State Board of Education ("ISBE") in the implementation of the RTTT grant. In addition, we will be pleased to collaborate with ISBE and other stakeholders and legislators to provide additional guidance toward the development and communication of related policies. We also pledge to work together with ISBE and other committees or task forces such as the Education Stakeholders, Illinois Education Roundtable, P-20 Council, and the Performance Evaluation Advisory Council as each has a role in recommending legislation, regulations, procedures and practices to support RTTT.

As you know, we share the concerns of all school districts and policy makers regarding the need for sufficient, reliable and sustainable funding to support the current and future system of public schools in Illinois. This includes both the initiation and maintenance of any new or continuing practices. RTTT is surely intended to make a difference for the children of Illinois and the receipt of this grant will assist many districts in taking initial steps toward implementation. That said, we believe it is critical that we also be doubly committed to collectively maintaining the focus of policymakers and legislators on the need for sustainable and reliable funding from the State of Illinois to support these reforms.

Finally, as particular legislation, regulations, procedures and practices emerge, we will be dedicated to support those elements that do not unjustly impact the employment of teachers and school leaders. This is an excellent opportunity in Illinois to encourage sound policy and reform that will positively impact the future of children and we look forward to being an ongoing partner in RTTT.

Sincerely,

Michael Jacoby
Executive Director

ph: **815.753.1276** | fax: **815.753.9367** | online: **www.iasbo.org**

ILLINOIS BOARD OF HIGHER EDUCATION

431 EAST ADAMS STREET, 2ND FLOOR
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Oak Lawn

Executive Director
Judy Erwin

May 5, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 North First Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I wish to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") which the Illinois State Board of Education is submitting to the U.S. Department of Education. As Executive Director of the Illinois Board of Higher Education, I am excited about the opportunities the federal RTTT grant will provide to advance ground-breaking, transformative education reforms for the State of Illinois. These funds will enable Illinois to persist in the development of an outstanding educational system that will prepare each and every child in Illinois for success in postsecondary education and the workforce. In addition, RTTT funds will support Illinois' work in addressing the problems continually plaguing persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders. It will support Illinois' goals of providing teachers and school leaders with access to essential data, developing vital tools and resources to improve student outcomes, and turning around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the Illinois Board of Higher Education intends to support the implementation of the following components of the State's RTTT plan: Improving Teacher and Principal Effectiveness; Expansion and Adaptation of Statewide Longitudinal Data Systems; and P-20 Coordination, Vertical and Horizontal Alignment.

Phone: (217) 782-2551 • Fax: (217) 782-8548 • TTY: (888) 261-2881 • www.ibhe.org

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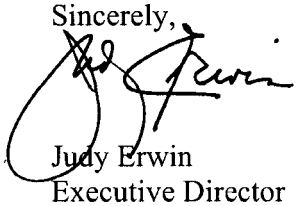
The Illinois Board of Higher Education will specifically undertake to support the State's RTTT plan through the following actions of support: Work in partnership with the ISBE to strengthen teacher and principal qualifications by assisting with preparation work teams; work with institutions of higher education to ensure essential data and information is available for inclusion in and expansion of the statewide longitudinal data system; and work with member postsecondary institutions to implement standardized ACT placement scores for credit-bearing coursework in the State's public universities.

We at the Illinois Board of Higher Education look forward to partnering with, and assisting, the Illinois State Board of Education on the development and the implementation of the Race to the Top proposed reforms and programs.

Sincerely,



Judy Erwin
Executive Director

ILLINOIS BIOTECHNOLOGY
INDUSTRY ORGANIZATION

Kris Lutt
CHAIRMAN, BOARD OF DIRECTORS

January 14, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express the iBIO Institute's strong support for—and pledge our assistance to—the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application.

World-class education is necessary for Illinois to develop a workforce able to meet the challenges of the global economy. At iBIO, as at Archer Daniels Midland Company (ADM), we believe that RTTT presents an unparalleled opportunity for Illinois to serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

I also support the application's strong emphasis on high school reform and the focus on improving transitions into both college and careers. I believe the State has identified important high school initiatives in its RTTT application including establishment of a statewide program for the National Career Readiness Certificate (NCRC) as well as development and scaling of STEM-related Programs.

iBIO Institute and its corporate partners successfully partnered with the State of Illinois' Department of Commerce and Economic Opportunity and State Board of Education on Illinois Innovation Talent, a STEM-focused, industry-led, problem-based learning pilot program. This novel program demonstrated the transformation possible when students connect academic learning with real-world careers and professionals.

65 East Wacker Place
Suite 1600
Chicago IL 60601

Phone 312-422-1111

Fax 312-422-1145

Each day, the employees of ADM transform crops such as corn, oilseeds, wheat and cocoa into food ingredients, animal feeds, and agriculturally derived fuels and chemicals that serve vital needs of the global marketplace. The NCRC will be an important career readiness credential relevant to a wide range of careers. And STEM Learning Exchanges are important to the success of STEM-related programs of study, because they bring together the resources and expertise of a wide range of business and industry, education and government partners.

The iBIO Institute is willing to serve as a partner with the State in the planning and implementation of STEM Learning Exchanges for Health Sciences and Agriculture and Natural Resources. Specifically, we are committed to growing and leveraging our existing Institute programs—such as SCI: Science Career Investigation®, and TalentSparks!® teacher professional development in biotechnology to support the RTTT plan. We will continue to assist STEM Learning Exchange activities promoting the development of e-learning curriculum resources, professional development programs for teachers, and expanding internships and career development opportunities for students.

Governor Quinn, I look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and let me know if there is anything further I and the iBIO Institute can do to support this important work.

Sincerely,

Kris Lutt
Advisor-Office of the Chairman
Archer Daniels Midland Company
Chairman, board of directors, iBIO

iBIO INSTITUTE
EDUCATION • TRAINING • RESEARCH

David E. Miller
PRESIDENT & CEO

January 14, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express the iBIO Institute's strong support for—and pledge our assistance to—the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application.

World-class education is necessary for Illinois to develop a workforce able to meet the challenges of the global economy. At the Institute, we believe that RTTT presents an unparalleled opportunity for Illinois to serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

I also support the application's strong emphasis on high school reform and the focus on improving transitions into both college and careers. I believe the State has identified important high school initiatives in its RTTT application including establishment of a statewide program for the National Career Readiness Certificate (NCRC) as well as development and scaling of STEM-related Programs.

iBIO Institute and its corporate partners successfully partnered with the State of Illinois' Department of Commerce and Economic Opportunity and State Board of Education on Illinois Innovation Talent, a STEM-focused, industry-led, problem-based learning pilot program. This novel program demonstrated the transformation possible when students connect academic learning with real-world careers and professionals.

The NCRC will be an important career readiness credential relevant to a wide range of careers. And STEM Learning Exchanges are important to the success

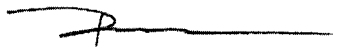
65 EAST WACKER PLACE SUITE 1600 CHICAGO IL 60601 PHONE 312-422-1111 FAX 312-422-1145 www.ibioinstitute.org

of STEM-related programs of study, because they bring together the resources and expertise of a wide range of business and industry, education and government partners.

The iBIO Institute is willing to serve as a partner with the State in the planning and implementation of STEM Learning Exchanges for Health Sciences and Agriculture and Natural Resources. Specifically, we are committed to growing and leveraging our existing Institute programs—such as SCI: Science Career Investigation®, and TalentSparks!® teacher professional development in biotechnology to support the RTTT plan. We will continue to assist STEM Learning Exchange activities promoting the development of e-learning curriculum resources, professional development programs for teachers, and expanding internships and career development opportunities for students.

Governor Quinn, I look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and let me know if there is anything further I and the iBIO Institute can do to support this important work.

Sincerely,



David Miller
President & CEO
iBIO Institute

The Illinois Business RoundTable

200 East Randolph Street
Suite 2200
Chicago, IL 60601
Ph: 312-228-0731 | Fx: 312-228-0732
www.IllinoisBusinessRoundtable.com

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Dr. Koch:

On behalf of the members of the Illinois Business Roundtable, I am writing to express our strong support for the comprehensive education reforms outlined in Illinois' Race to the Top ("RTTT") application.

Having been involved in education improvement efforts in Illinois for the last two decades, this application represents both a stretch and a road map for meaningful improvement strategies. This is completely in keeping with the intent of the RTTT challenge. It is my expectation that local districts choosing to participate in the state application will be equally stretched.

Illinois' application builds rationally upon some of the great things we've been able to accomplish recently in Illinois. Just last spring we put in place a longitudinal data system. This application will enhance it and move it forward faster. With better data, a statewide performance management system is proposed that will link student performance to teacher evaluations and program effectiveness. Illinois' newly constituted P-20 Council will guide future state efforts to build the seamless education and workforce development system, using these enhanced tools.

This application will also offer students multiple rigorous and valid pathways to college and careers. Toward this end, it establishes clear college and work-ready expectations with both the ACT standardized assessment and the ACT's National Career Readiness Certificate ("NCRC"), built into our Prairie State Achievement Exam taken by all Juniors in high school. I am committed to partnering with the State to implement the NCRC program, and look forward to participating in NCRC-related career development programs for students and working to promote the NCRC as a tool for verification of workplace skills.

Members of the Illinois Business Roundtable are encouraged by the bold new state and local partnership vision advanced in the application. This application uniquely positions STEM-related Programs of Study with Learning Exchanges in nine targeted industry clusters to offer a useful structural approach for high school reform that will enable students to make real-world

Chairman
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President
JEFFREY D. MAYS
Illinois Business Roundtable

Chairman Emeritus
THOMAS M. PATRICK
Peoples Energy Corp.

connections with their academic and career interests. Indeed, our members have pledged significant resources to assist the state in the creation of this STEM learning exchange network statewide.

Our members look forward to working with the State of Illinois and other stakeholders to implement the programs outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and any opportunities to assist in implementation of the RTTT plan.

Sincerely,

Jeffrey D. Mays, President
Illinois Business Roundtable

ILCAE *Illinois Leadership Council for Agricultural Education*

ICAE *Illinois Committee for Agricultural Education*

RECEIVED
MAY 12 2010 #4
State Superintendent of Education

May 11, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

We are writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. We, on behalf of Illinois Committee for Agricultural Education (ICAE) and Illinois Leadership Council for Agriculture Education (ILCAE), are excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, ICAE and ILCAE intend to support the implementation of the following components of the State's RTTT plan: Agriculture and Natural Resources Stem Program of Study and Learning Exchange.

ICAE and ILCAE will specifically undertake to support the State's RTTT plan through the following actions of support: E-learning curriculum development and alignment to Common Core standards; internships and work-based learning; career development and outreach K-12; teacher professional development; partnerships with agricultural businesses; sponsored

challenges and project management resources for student team work development; review and research assessment performance.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Dave Mouser
ICAE Chair

Mike Massie
ILCAE Chair

p.c. Dave Mouser
Mike Massie

Illinois Community College Board

Guy H. Alongi
Chairman

Geoffrey S. Obrzut
President/CEO

proudly serving the
Illinois Community College System

RECEIVED
MAY 19 2010 #11
State Superintendent of
Education

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Community College Board, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the Illinois Community College Board intends to support the implementation of the following components of the State's RTTT plan: College and Career Readiness Initiative and the STEM Programs of Study.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Geoffrey S Obrzut

Geoffrey Obrzut
President/CEO

401 East Capitol Avenue ● Springfield, IL 62701-1711 ● (217) 785-0123 ● www.iccb.state.il.us
Fax: (217) 524-4981 TDD: (217) 782-5645

dceo Illinois Department of Commerce and Economic Opportunity

Pat Quinn
Governor

Warren Ribley
Director

May 24, 2010

The Honorable Pat Quinn
Governor, State of Illinois
James R. Thompson Center
100 West Randolph Street
Chicago, IL 60601

RE: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn:

I am writing to express support for the Race to the Top Application for Phase 2 Funding (RTTT) that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Department of Commerce and Economic Opportunity (DCEO), am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms.

I believe the RTTT application will position Illinois as a leader in preparing students in science, technology, engineering, and mathematics (STEM) careers that are critical to growth and development of all major critical sectors in Illinois, including agriculture, construction, information technology, manufacturing, logistics, finance, and healthcare, as well as the emerging energy sector.

DCEO is strongly committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study, as well as the proposed STEM Learning Exchanges. To ensure the success of the education reforms proposed in the State of Illinois' RTTT application, DCEO will commit up to $15 million through the *Illinois Jobs Now!* bill (State of Illinois Public Act 096-0039) upon successful awarding of Department of Education funds. The fund can be used for capital related expenses and will support the following:

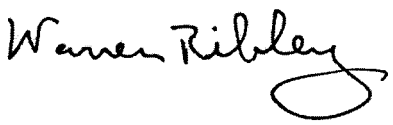
1) Up to $10 million from the Broadband Development Fund (Section 45) to support broadband development in rural communities to assist with connecting school districts to the proposed Learning & Performance Management System; and

2) Up to $5 million from the ARRA Matching Fund (Section 85) to support critical information technology initiatives under the proposed Learning & Performance Management System, in particular the STEM Learning Exchange.

In addition, DCEO is committing up to $300,000 in federal Workforce Investment Act funds to support the development of career pathway applications as part of the core functions of the STEM Learning Exchanges.

Finally, as co-chair of the Illinois Workforce Investment Board (IWIB), I will work with other public and private partners to ensure the STEM initiatives receive the support of our business and labor community.

Sincerely,



Warren Ribley
Director

Illinois Department of Transportation
Office of the Secretary
2300 South Dirksen Parkway / Springfield, Illinois / 62764
Telephone 217/782-5597

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top (RTTT) application for Phase 2 funding that you are submitting to the U.S. Department of Education.

The Illinois Department of Transportation (IDOT) is excited about the opportunity the federal RTTT grant provides to move the state of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turn around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, IDOT recognizes science, technology, engineering and math (STEM) education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The state of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

IDOT is committed to supporting the state's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

Thank you for the opportunity to comment on this issue. We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Gary Hannig
Secretary

www.ieanea.org

Illinois Education Association-NEA

Ken Swanson, President
Robert Blade, Vice President
Cinda Klickna, Secretary-Treasurer
Audrey Soglin, Executive Director

100 East Edwards Street
Springfield, IL 62704-1999
(217) 544-0706 Fax 217.544.7383

May 27, 2010

Dr. Christopher Koch, State Superintendent
Illinois State Board of Education
100 North First Street
Springfield, IL 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase Two Funding (RTTT), which you are submitting on the state's behalf to the U.S. Department of Education.

The RTTT grant has the potential to move our state forward through the implementation of ground-breaking, transformative education reforms. This federal funding would allow Illinois to continue to develop an educational system that will prepare every child in Illinois for postsecondary education and the workforce.

On behalf of the more than 133,000 Illinois Education Association (IEA) members, I want to express my appreciation to you and the Illinois State Board of Education (ISBE) for your willingness to work closely with IEA in the development of the RTTT grant proposal. Because you and the board considered the expertise of our classroom educators, Illinois was able to submit a high-quality proposal that gives the students in our state the best opportunity to benefit from this grant program.

Should the Illinois proposal be selected for funding, we will be prepared to continue the collaboration between ISBE and the educators who have agreed to participate in RTTT.

The mission of the IEA is "to effect excellence and equity in public education." The RTTT application, because it was developed collaboratively, aligns very well with the IEA mission.

In addition, IEA believes it is important to recognize that our public schools, the dedicated staff who work in them and the school boards who oversee them, cannot be exclusively held accountable for student achievement. Students themselves, parents, communities and those at the state and federal level who are responsible for providing the resources necessary for EVERY school and EVERY child to succeed, must also be held accountable. Only when every stakeholder fully participates and lives up to his/her obligations will we truly provide an opportunity for every child to attain success.

We are committed to supporting our local associations who have agreed to participate in Illinois' grant application.

The Illinois Education Association, whose executive director and top leadership have considerable experience in the development of new evaluation systems (including systems that incorporate student growth), has pledged to work with the Illinois State Board of Education to help establish fair and effective evaluation systems across the state in response to the plan.

We will encourage all involved in the grant to work collaboratively to develop and implement their local plans. As always, we will wholeheartedly support our members in their efforts to continue to improve Illinois' public schools and the teaching profession.

Sincerely,

Ken Swanson, President

KS/mjb

Illinois Education Research Council

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE, EDWARDSVILLE, ILLINOIS 62026-1064
Telephone: 866-799-IERC (4372) or 618.650.2840. E-mail: *ierc@siue.edu* Web site: ierc.siue.edu

May 3, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Education Research Council, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the Illinois Education Research Council intends to support the implementation of the following components of the State's RTTT plan: updating and refining the IERC Index of Teacher Academic Capital (ITAC) to analyze the equitable distribution of highly effective teachers and principals throughout the state.

The IERC will specifically undertake to support the State's RTTT plan through the following actions of support: participate in the Educational Research Collaborative Steering Committee and Board, and will continue to serve on the Technical Advisory Group for the Illinois Longitudinal Data System.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Kathleen S. Brown

Kathleen S. Brown
Executive Director

A Union of Professionals

Illinois Federation of Teachers

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Westmont, IL 60559
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Ed Geppert, Jr.
PRESIDENT

Marilyn Stewart
SECRETARY-TREASURER

An affiliate of the AFT, AFL-CIO

May 13, 2010

Dr. Chris Koch, Superintendent
Illinois State Board of Education
100 North 1st Street
Springfield, IL 62777

Dear Dr. Koch:

On behalf of the 103,000 members of the Illinois Federation of Teachers, I am writing to express support for Illinois' Race to the Top (RttT) Application for Phase II Funding which you are submitting to the U.S. Department of Education. Thanks to the work of the Illinois State Board of Education (ISBE), the Illinois General Assembly and Gov. Pat Quinn's office, Illinois has in place many innovative projects to satisfy the assurance areas of the Race to the Top grant.

The IFT recognizes that ISBE and Illinois' 870-plus diverse school districts are in even more dire need of funding to support the state's ongoing strong education reform initiatives. There is a need for federal funds to fill the gap until an equitable and sustainable source of state funding is achieved. RttT funds can help fill these gaps for ISBE to bolster efforts to provide supports and systems that will benefit all districts in Illinois. These initiatives include:

- a fully-functioning longitudinal data system and learning and performance management system that every classroom teacher can access throughout the school day;
- induction/mentoring programs for all new teachers;
- an effective, research-based Response to Intervention process implemented in every school; and
- continued work to align the Illinois Learning Standards to the Common Core initiative, to revise K-12 standards and to implement updated learning standards in every classroom, as well as develop new state and local assessments aligned to updated standards.

The IFT believes that the conditions placed on states to access these funds are driven by a reform agenda that does not necessarily include a strong foundation in all of the critical supports for educators and school systems.

Sustained, effective initiatives can have a long-term impact on students' education and post-secondary success. That impact will be severely diminished if the following concerns are not addressed:

- Illinois' state education agency itself must have the necessary capacity and staffing levels in place to provide needed supports to school districts and educators as reforms are implemented.
- Sustained funding sources at the state level must be in place for education initiatives to be able to operate beyond RttT.
- Research-based improvement strategies beyond RttT grant guidelines must be included as well, with an emphasis on the necessary supports and collaboration time required for implementation.
- Inclusion of student growth as a significant factor in teacher evaluation without strong, research-based evidence to show positive impacts on student achievement must not be allowed to divert local resources and focus from vital education initiatives.

The IFT supports the state's RttT efforts and appreciates the collaborative manner in which ISBE engaged with stakeholders to develop its application for RttT grant funds. The IFT is committed to supporting the implementation of Illinois' RttT plan by working at both a state and local level. The IFT will participate in state-level work in a collaborative way with ISBE and other education stakeholders to implement the state's proposed initiatives in the four major areas of RttT. Moreover, the IFT commits to working with our local unions to provide information and assistance as they work on RttT initiatives with their school districts. The IFT recognizes that effective state and district leadership in collaboration with union leaders and school staff will bring about real and positive changes that will have a lasting impact on both educator professional growth and student outcomes.

The Illinois Federation of Teachers looks forward to partnering with the Illinois State Board of Education on the implementation of the state's Race to the Top proposal.

Sincerely,

Ed Geppert Jr.
President

Illinois Manufacturers' Association

May 17, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 North 1st Street, S-405
Springfield, IL 62777

Dear Dr. Koch:

On behalf of the Illinois Manufacturers' Association I am writing to express our support for the State of Illinois' application for Phase 2 Funding in the federal Race to the Top program administered by the U.S. Department of Education. As you already know, the Illinois Manufacturers' Association is planning to be designated as STEM Leadership Exchange leader for the manufacturing sector and is committed to participating in developing and implementing the programs of study benefitting manufacturing.

The Race to the Top comes at a critical time for our state's manufacturing sector. Since the beginning of the century just ten short years ago, Illinois has lost more than 320,000 manufacturing jobs; almost a 45 percent decline. Over the next five years, experts tell us that manufacturing will need to replace more than 30,000 workers every month to account for retiring baby-boomers. Clearly our task is unmistakably defined.

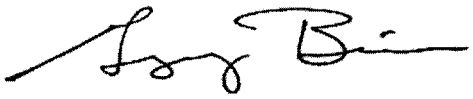
Using Race to the Top funding to engage and energize the interest of students to explore rewarding careers in manufacturing will help keep Illinois manufacturing strong. Presently, manufacturing accounts for 13 percent of the state's gross domestic product and is the single largest contributing sector to our economy. It is our understanding the Illinois' Race to the Top application supports the belief that every student who is provided rigorous and relevant curricula and skills training that challenges creativity and innovation develops the abilities and attitudes to succeed in post-secondary education and their chosen career. We wholeheartedly endorse that approach and know its adoption will result in effectively preparing tomorrow's workforce.

220 East Adams, Springfield, IL 62701
217.522.1240 – 217.522.2367 (fax)
www.ima-net.org

Illinois needs to be second to none in developing world class standards for educating and testing of our students, faculty and administrators. The Race to the Top will help assure those goals are achieved everywhere in Illinois by weeding out underachieving teachers and administrators.

Count the Illinois Manufacturers' Association as a strong supporter of the Illinois application.

Yours truly,



Gregory W. Baise
President & CEO

220 East Adams, Springfield, IL 62701
217.522.1240 – 217.522.2367 (fax)
www.ima-net.org

INCS
ILLINOIS NETWORK OF CHARTER SCHOOLS

205 West Randolph Street
Suite 1340
Chicago, Illinois 60606

tel 312 235 0798
fax 312 235 0679
www.incschools.org

May 17, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express our support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Network of Charter Schools ("INCS") am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. We in the charter sector have been engaged in this work for some time and want to see broad reform that impacts the lives of all students. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, INCS intends to support the work on school turnaround and on ensuring an effective teacher in every public school classroom in Illinois. We also hope to work with state leadership to implement a high-quality, independent authorizer so that more transformative charter schools can be approved across our state.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Andrew Broy
President
Illinois Network of Charter Schools

cc: Darren Reisberg, Illinois State Board of Education
Jonathan Furr, Holland & Knight

ILLINOIS SCIENCE &
TECHNOLOGY COALITION

200 East Randolph, Suite 2200
Chicago, IL 60601
T 312 494 6747
F 312 861 0660
ISTCoalition.org

May 19, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Superintendent Koch,

On behalf of the Illinois Science & Technology Coalition, I am writing to re-affirm strong support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) Phase 2 Funding application. We believe that RTTT presents an unparalleled opportunity for Illinois to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

The Illinois Science & Technology Coalition (ISTC) cultivates economic development in Illinois by advocating for increased resources for Research & Development initiatives at Illinois-based institutions and businesses and is active in the industries of advanced manufacturing, agriculture, energy, information technology, life sciences, and supercomputing.

Improvement in student performance in STEM disciplines will help build a workforce educated to meet the demands to ensure a bright economic future for Illinois. The ISTC also offers our services as a planning and implementation partner for the STEM Learning Exchanges for Research & Development. In particular, the ISTC and our partners are committed to supporting STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers and expanding internships and career development opportunities for students.

The ISTC supports the strong emphasis on high school reform and the focus on improving transitions into both college and careers—ensuring the development of a well-educated workforce ready for a modern global economy. The important and effective high school reform initiatives identified are consistent with the interests of the ISTC, including establishing a statewide program for the National Career Readiness Certificate (NCRC) and developing and scaling STEM-related Programs of Study.

The NCRC promises to be an important career readiness credential relevant to a wide range of careers. The STEM-related Programs of Study offer a promising approach for high school reform that will enable students to make real-world connections with their academic and career interests. STEM Learning Exchanges are critical to the success of STEM-related programs of study because they will bring together the resources and expertise of a range of business and industry, education and government partners.

The ISTC is committed to partnering with the State to implement the NCRC program and STEM-related programs of study throughout Illinois. We look forward to working with the State of Illinois and other stakeholders to implement the initiatives outlined in Illinois' Race to the Top application.

Sincerely,

Matthew Summy
President & CEO

Illinois Speech-Language-Hearing Association

230 E. Ohio Street, Suite 400, Chicago, IL 60611-3265
Phone: 312/644-0828 Fax: 312/644-8557 Web: www.ishail.org
Voice and TT/TDD

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois Speech-Language-Hearing Association (ISHA) am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, ISHA recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

ISHA is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

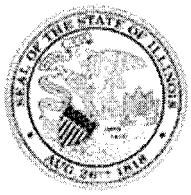
We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Nancy D. Anderson

Nancy D. Anderson
President

Professionals Serving People with Communication Disorders



OFFICE OF THE SECRETARY OF STATE

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May 28, 2010

Christopher A. Koch, Ed.D.
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear State Superintendent Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois State Library am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms.

In support of the RTTT application, the Illinois State Library will partner with the Illinois State Board of Education (ISBE) to launch the "Know More About Your Schools" campaign. With one-third of United States residents 14 and older using public library computers to connect to the web, the campaign's goal is to ensure universal access to school and district performance data, available through the Illinois Interactive Report Card (IIRC), by utilizing Illinois' 600+ public libraries through our multitype library network. Specifically, the campaign will focus on educating librarians and providing them with the necessary tools, including a librarians' IIRC user guide and web-based video presentations, to be able to effectively assist users in navigating the IIRC. The Illinois State Library will support this campaign by:

1. Partnering with ISBE to serve as an information conduit and promote training opportunities in our weekly e-news;
2. Encouraging public libraries to participate in ISBE web based training opportunities, facilitate public access to this information, and assist users' inquiries regarding this information.

I, on behalf of the Illinois State Library, look forward to partnering with ISBE on the "Know More About Your Schools" campaign as part of Illinois' RTTT plan.

Sincerely,

Jesse White

Jesse White
Secretary of State
and State Librarian

ILLINOIS STATE UNIVERSITY
Illinois' first public university

Center for Renewable Energy

Campus Box 5020
Normal, IL 61790-5020
Phone: (309) 438-7919
Fax: (309) 438-5653

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Center for Renewable Energy at Illinois State University, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The Center for Renewable Energy at Illinois State University works to meet the growing needs for education, outreach and research in the area of renewable energy. The Center has three major functional areas: 1) to enhance the renewable energy major at Illinois State University, 2) to serve the Illinois renewable energy community by providing information to the public, and 3) to encourage applied research concerning renewable energy at Illinois State University and through collaborations with other universities.

In particular, the Center for Renewable Energy recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

The Center for Renewable Energy is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

David Loomis

David Loomis, Director
Center for Renewable Energy
Illinois State University

An equal opportunity/affirmative action university encouraging diversity

May 24, 2010
Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express my strong support for the Race to the Top Application for Round 2 Funding ("RTTT") which you are submitting to the U.S. Department of Education. On behalf of the Interactive Illinois Report Card project staff, we are excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

In particular, the Interactive Illinois Report Card (http://iirc.niu.edu) intends to engage fully with ISBE in implementing the following components of the State's RTTT plan:

1. Professional Development: IIRC is committed to assisting with developing and hosting the array of improved school performance benchmarks, assessments for learning, and performance measures in the RTTT plan including interactive access to the Common Core standards and STEM learning exchanges; we will partner with the comprehensive professional development system that will deliver effective training for school leaders and teachers in use of the new standards and data applications.
2. Public Access: IIRC will focus on overcoming the digital divide, insuring wider public access to and understanding of schools and learning resources among all Illinois communities by participating in your agency's innovative state-wide partnership with the Illinois State Library system. Further, we will address the linguistic divide by developing and launching multi-lingual versions of key IIRC resource screens, starting with Spanish and moving forward annually with more languages to assist parents and learners from Illinois' diverse linguistic communities.
3. Data Systems to Support Instruction: IIRC will fulfill its role as the foundation for the State's education data accessibility system, and will work with RTTT stakeholders to expand data resources for Illinois schools. We will launch the state's student-level data dashboards for teachers and principals with the new school year, and will implement the access management system giving local control to LEA's, including appropriate links for parents and students. We look forward in successive years to expanding resources that make formative as well as summative assessments quickly available to teachers in their classrooms through user-friendly web resources and instructional materials, including "intervention ready" guides such as predictive benchmarking measures. We will monitor these initiatives by soliciting user-feed back. Finally, IIRC is ready to assist with providing data for research initiatives that can enhance learning outcomes, including projects initiated by the Illinois Collaborative For Educational Policy Research (ICEPR).

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,
[signed]
Harvey Smith, Ph.D.
Director, Interactive Illinois Report Card

Northern Illinois University is an Equal Opportunity/Affirmative Action Institution.

LUDA
Large Unit District Association

2030 Timberbrooke Drive, Suite A
Springfield, Il 62702
217/546-3036 Fax 217/546-3038
ludaschools.org

Alton
Aurora East
Aurora West
Ball Chatham
Barrington
Batavia
Belvidere
Bloomington
Cahokia
Carpentersville
Champaign
Charleston
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Decatur
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Freeport
Galesburg
Geneva
Granite City
Harlem
Huntley
Indian Prairie
Jacksonville
Kaneland
Kankakee
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Oswego
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Rockford
Rock Island
Round Lake
St. Charles
Springfield
Sterling
Urbana
Valley View
Waukegan
Wheaton-
Warrenville
Woodstock
Yorkville

May 13, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street
Springfield, IL 62777

Dear Dr. Koch:

On behalf of the Large Unit District Association (LUDA), this letter serves as support for the Race to the Top Round Two Application for Funding (RTTT), which you are submitting to the U.S. Department of Education. It is with great sincerity and earnestness that this support is offered.

Our member districts, who educate over half of the children of the state of Illinois, will be the recipients of the broad transformation that will occur due to our state's involvement in Race to the Top. This application reflects the education reform agenda that can become reality with the support of federal resources.

The receipt of this grant will ensure the development and implementation of standards and assessment systems, data systems, recognition systems, and support systems. It will ensure new certification, preparation, and evaluation programs. It will address the needs of our highest priority schools, while providing ongoing induction, mentoring, and professional development for our teachers and leaders. It will serve as the lever for making transformation and continuous improvement a reality in the state of Illinois.

It is with confidence that I believe this enormous undertaking will succeed having watched the collaboration among the education stakeholders of our state grow during the tenure of Dr. Koch as our state superintendent. Additionally, the alignment of our P-20 system is guaranteed through the growing relationship among our Illinois State Board of Education, Illinois Community College Board, and the Illinois Board of Higher Education. The increasingly strong relationship among key legislators, the governor's office, and our state board of education will ensure the authentic implementation of this plan.

LUDA members make up a large percentage of participating districts in Race to the Top. As the largest unit districts in our state, these districts reflect some of the greatest need, while recognizing the need to take the boldest steps for reform. They will be revising their performance evaluations, they will be developing new data systems, implementing new assessment, and finding means to get the most effective educators to their most needy schools, among other reforms.

Diana Rutledge, Ph D., *Executive Director*
drutledge@ludaschools.org

Bert Hendee, *Assistant Director*
rhendee@ludaschools.org

Besides the work of individual districts, LUDA, as an organization, has been an active participant in the state's reform efforts and will continue to support the following specific work: revision and implementation of school leader preparation, university and district partnerships, development of principal performance evaluation system, the dissemination of SAM's (a support for principals' use of time to support student achievement), the dissemination of LPPW (a support instrument for principal mentoring), as well as ongoing professional development for superintendents and senior staff members. Additionally, LUDA will continue in its role to inform and support policy makers and legislators in our combined efforts to improve student achievement.

In closing, I want to stress my personal respect and admiration for those individuals who worked tirelessly in developing this application. Through their leadership and hard work, educators from all over our state have communicated and built stronger relationships that will endure this implementation to make education in Illinois enhanced for all of our students.

Most sincerely,

Diane Rutledge, Ph.D.
Executive Director, LUDA

LEARNING POINT
Associates®

800-356-2735 | www.learningpt.org

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, IL 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding that you are submitting to the U.S. Department of Education. On behalf of Learning Point Associates, I am excited about the opportunity the federal Race to the Top grant provides to move the state of Illinois forward on groundbreaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in the state for postsecondary education and the workforce. In addition, Race to the Top funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The Race to the Top proposal supports the Illinois education reform agenda by ensuring that we adopt world-class standards and assessments for students, teachers, and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

The Illinois Race to the Top proposal supports our belief that every student—if provided with the knowledge, skills, abilities, and attitudes to succeed in postsecondary education and careers—will become a productive citizen in our ever-changing world.

In particular, Learning Point Associates recognizes STEM education as a critical part of K–12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The STEM efforts of the state of Illinois are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study, we will engage more students, especially those who historically have not done well in science and math.

Learning Point Associates is committed to supporting the state's Race to the Top plan by participating in the planning, development, and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the Race to the Top proposed reforms and programs.

Sincerely,

Gina Burkhardt
CEO

Chicago
20 North Wacker Drive, Suite 1231
Chicago, IL 60606-2901
P: 312-288-7600
F: 312-288-7601

Naperville
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Washington, DC
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Washington, DC 20036-4632
P: 202-223-6690
F: 202-223-8939

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Legat Architects am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Legat Architects recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Legat Architects is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,
Legat Architects

(b)(6)

Patrick Brosnan, AIA, LEED AP
President/CEO

LOYOLA
UNIVERSITY CHICAGO
AD · MAJOREM · DEI · GLORIAM
1870

David P. Prasse, Ph.D.
Dean, School of Education
820 N. Michigan| Chicago, Illinois 60611
p (312) 915-6992
dprasse@luc.edu

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Loyola University Chicago, School of Education am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

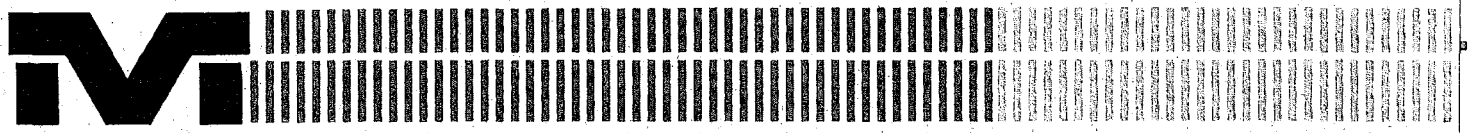
Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the School of Education at Loyola University Chicago intends to support the implementation of the following components of the State's RTTT plan: Improving the Effectiveness of Teacher and Principal Preparation, Implementing a Statewide Longitudinal Data System, and Supporting Enhanced Standards and High Quality Assessments..

The School of Education at Loyola University Chicago will specifically undertake to support the State's RTTT plan through the following actions of support: Support efforts to link teacher candidate preparation to student learning outcomes; provide technical assistance in areas such as data-based decision making, implementation of response to intervention systems, leadership in reforming principal and teacher candidate professional preparation programs.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

David P. Prasse, Ph.D.
Dean
School of Education
Loyola University Chicago



MERVIS INDUSTRIES

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dr. Koch:
I am writing in support of the Illinois effort for the Race to the Top Application for Phase 2 Funding that you are submitting to the U.S. Department of Education. I, on behalf of Mervis Industries, Inc. am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turn around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world. Our local economy, high unemployment, and challenging youth population in Danville needs this support more than ever.

In particular, Mervis Industries, Inc. recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Mervis Industries, Inc. is committed to supporting the State's RTTT plan by our continued participation in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges of which our school district has already engaged.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Lou Mervis

Lou Mervis, Chairman of the Board
Mervis Industries, Inc.

3295 East Main • Box 827—Danville, IL 61834-0827 • (217) 442-5300

MCHC
Metropolitan Chicago
Healthcare Council

222 S. Riverside Plaza, Chicago IL 60606
mchc.org **T** 312.906.6000 **F** 312.506.4900

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President/Chief Executive Officer
Delnor-Community Hospital

May 17, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Re: Letter of Support for the Race to the Top Application Phase 2

Dear Dr. Koch:

On behalf of the Metropolitan Chicago Healthcare Council (MCHC), I am writing to express our support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. We are excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms.

As a membership association representing 95 hospitals in the Chicago that employ more than 158,720 full-time job equivalent employees, making health care the number one employer in the region, MCHC supports the strong emphasis on high school reform and the focus on improving transitions into both college and careers, ensuring the development of a well-educated workforce ready for a modern global economy. We believe the State has identified important and effective high school reform initiatives in its RTTT application including establishing a statewide program for the National Career Readiness Certificate (NCRC) and developing and scaling STEM-related Programs of Study.

We believe that the RTTT offers an unparalleled opportunity to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology engineering, and mathematics (STEM) disciplines and addresses the problems that continue to plague persistently low-achieving schools and districts, within Illinois. We are committed to partnering with the State to implement the NCRC program and STEM-related programs of Study throughout the state.

In particular, MCHC intends to serve as a partner with the State in the planning and implementation of STEM Learning Exchanges for Health Sciences. We commit to coordinating and providing support for STEM Learning Exchange activities including the development of e-learning curriculum resources, professional development programs for teachers, and expanding internships and career development opportunities for Health Sciences students.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Mary Anne Kelly
Vice President, Metropolitan Chicago Healthcare Council

Michael A. Johl, LLC
Consultants

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. On behalf of Michael A. Johl, LLC, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, my firm intends to support the implementation of the following components of the State's RTTT plan: creating and maintaining a robust Learning Exchange dedicated to the transportation sector Program of Study (POS).

Michael A. Johl, LLC will specifically undertake to support the State's RTTT plan by bringing together representatives of transportation industry leaders to open the dialogue, create a viable long-term plan and maintain an ongoing, vibrant discussion to assist the Illinois education system in molding the future leaders of the transportation industry so vital to the Illinois economy.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Michael A. Johl

Michael A. Johl
President and CEO

3038 N. 76th Avenue, Elmwood Park, Illinois 60707 Phone: 312-316-6070
Fax: 708-452-7026 E-Mail: mjohl2@comcast.net

Microsoft Corporation
200 E. Randolph Drive
Suite 200
Chicago, Illinois 60601

Tel 312-920-5693
Fax: 311112-920-5656
http://www.microsoft.com/

Microsoft

May 4, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. On behalf of Microsoft Corporation, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Microsoft would like to support the implementation of the following components of the State's RTTT plan: development of Longitudinal Data Systems, support in the design and outcomes of Learning Exchanges, sharing of Best Practices for teachers, administrators and students.

Microsoft will specifically undertake to support the State's RTTT plan through the following actions of support:

1. Participation with the State's RTTT planning team on an ongoing basis.
2. Participation of Education specialists and technical specialists
3. Recommendations for technology tools to support the program pillars.
4. Access to extended community based programs to accelerate STEM adoption.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Shelley Stern Grach
Central Region Citizenship Director

Microsoft Corporation is an equal opportunity employer.

museum of
science+industry
chicago

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

May 12, 2010

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. The Museum of Science and Industry has a long tradition of supporting science education in Chicago and throughout Illinois, and the federal RTTT grant provides an opportunity to move Illinois forward on ground-breaking, transformative education reforms.

In particular, the Museum recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The Museum has strengthened its commitment to STEM education by establishing a new vision, *to inspire and motivate our children to achieve their full potential in the fields of science, technology, medicine, and engineering.* In order to meet the institutional vision, the Museum launched the Center for the Advancement of Science Education, initiating a multifaceted approach to target students and science teachers, community organizations, and families at a community-wide level. We are also a proving ground, thoroughly analyzing and evaluating our programs and implementing the best ideas.

I am heartened that RTTT funds would assist Illinois in addressing problems at low-achieving schools. The Museum has engaged high-need students in science learning as part of school field trip experiences, hosting nearly 300,000 this past year—more than any other Chicago cultural institution. But the Museum has evolved beyond simply being a destination, and has established itself as a true science education resource for Illinois students and teachers. Central to its effort to be a science education resource for Illinois, the Museum's Institute for Quality Science Teaching provides professional development for over 1,000 teachers each year. Our goal is to provide quality professional development while working with high-need schools towards placing content-qualified teachers in middle grades science classrooms.

The Museum recognizes that teachers, mentors, parents, other caregivers, and peers all play critical roles in supporting a young person's access to and enthusiasm for science learning. By taking a comprehensive approach to science education, we aim to connect the Museum and the community in a sustainable partnership where learning takes place in many different locations. The State's RTTT proposal shares our objectives and goals by allocating funds that will provide STEM programs that support improved teaching and learning in the schools and extend learning beyond the classroom. To this end, the Museum supports the State's RTTT plan to develop and implement STEM programs, and its proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

David R. Mosena
President and CEO

57th Street and Lake Shore Drive
Chicago, IL 60637-2093

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www.msichicago.org

NORTHROP GRUMMAN

Jeffrey Q. Palombo
Sector Vice President & General Manager

May 19, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Northrop Grumman Corporation, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Northrop Grumman recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Northrop Grumman is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Jeffrey Q. Palombo
Sector Vice President and General Manager
Land & Self-Protection Systems Division
Electronic Systems

Northrop Grumman Corporation 600 Hicks Road, Rolling Meadows, Illinois 60008
Telephone 224-625-3500 Fax 224-625-5748

the Ounce

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ounceofprevention.org

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May 14, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I would like to offer my enthusiastic support for Illinois' Race to the Top Application for Phase 2 Funding ("RTTT") that ISBE is submitting to the U.S. Department of Education. As an early childhood education program, policy, and research organization, we at the Ounce of Prevention Fund know that the federal RTTT grant provides a unique opportunity for the State of Illinois. New funds from RTTT will allow Illinois to build on the existing infrastructure that has proved to prepare its children for success in school and in life by continuing to develop an educational system that prepares our state's youngest citizens for success in postsecondary education and the workforce and specifically targets the low-achieving schools and districts that fail to currently meet all of our students' needs.

Illinois is strongly committed to an education reform agenda and has identified the RTTT funds as a mechanism to supplement our efforts to adopt reliable and consistent standards and assessments that will benefit students, teachers, school systems and the community by allowing for transparent and aligned data and tools necessary to improve student outcomes and turnaround even the most challenged schools.

Our specific interest in the state's RTTT application lies in the state's plans to develop and implement a Kindergarten Readiness Measure to promote instructional alignment from Pre-K through third grade. This measure will provide a snapshot of where students are developmentally as they begin kindergarten, allowing parents and educators to address student deficiencies at an early stage in a child's development. Additionally, it will provide statewide comparable data to help us better assess our programs and implement necessary improvements.

The Ounce intends to support the implementation of the state's RTTT plan by actively participating as a partner in planning around Kindergarten Readiness Assessments (KRA) and indeed has begun working with ISBE to staff and

convene statewide KRA stakeholder meetings which have drawn local and national experts in the field. An expanded stakeholders group has had opportunities to question representatives from other states regarding the Kindergarten Readiness processes that they have engaged in and to learn from those efforts. Further conversations are scheduled to determine how to best use a Kindergarten Readiness process to align education systems.

Additionally, we will continue to provide assistance as an active training resource, and through my role as an Ex-Officio member of the P-20 Council.

We look forward to building on our longstanding partnership with the Illinois State Board of Education by assisting in the development and implementation of the RTTT proposed reforms and programs and to continuing our shared work to ensure the success of Illinois' children and schools.

Best Regards,

(b)(6)

Diana Mendley Rauner, Ph.D.
Executive Director

OFFICE OF THE GOVERNOR
JRTC, 100 W. RANDOLPH, SUITE 16-100
CHICAGO, ILLINOIS 60601

PAT QUINN
GOVERNOR

May 28, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of the Illinois P-20 Council, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts. RTTT funding will greatly enhance the effectiveness and impact of the work of the Illinois P-20 Council, whose mission is to guide the development of "a seamless and sustainable statewide system of quality education and support (birth through adulthood) that maximizes students' educational attainment and opportunities for success in the workforce and contributions to their local communities."

The RTTT proposal supports the Illinois education reform agenda and the work of the Council by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, the Illinois P-20 Council has aligned its Committee structure to align with and support the State's RTTT plan. The Joint Education Leadership Committee of the P-20 Council, comprised of the heads of the state's educational agencies, including ISBE, ICCB, IBHE, DCEO and ISAC, oversees the overall implementation of Illinois educational reform. The Council's

standing committees: Teacher and Leader Quality, Assessment and Data Systems, Career and College Success, and Community and Youth Engagement will offer support and guidance for the primary goals of the RTTT initiative.

The Illinois P-20 Council will specifically undertake to support the State's RTTT plan through the following actions of support:

--Establishing and monitoring the implementation of a framework for systemic educational improvement and innovation (including RTTT) that will enable every student to meet or exceed state learning standards and be well prepared for education and careers;
--Working with the ICEPR, IERC, CCSR and other research and evaluation entities to develop and sustain a robust and useful empirical foundation for decision-making and monitoring progress; and
--Advising and making recommendations to the Governor, the Illinois General Assembly, and the state agencies on educational issues at all levels, including the fiscal implications of current and proposed initiatives.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Miguel del Valle
Chair, Illinois P-20 Council

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Initial Funding ("RTTT") which you are submitting to the U.S. Department of Education. I, on behalf of the Parents & Residents Invested in School and Education (PRISE) Reform Coalition am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers will become a productive citizen in our ever-changing world.

In particular, PRISE Reform Coalition intends to support the implementation of the following components of the State's RTTT plan: increasing parent and community engagement and social support for the most challenged low-performing schools.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Patricia Watkins
Patricia Watkins, Ph.D.
Convener

PEARSON

RECEIVED
MAY 14 2010 #3
State Superintendent of Education

Darice Keating
President, State Services
Assessment & Information

Pearson

2510 North Dodge Street
Iowa City, Iowa 52245
Telephone: 319 358 4494
Darice.keating@pearson.com

May 13, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

On behalf of Pearson CEO Doug Kubach and me, and as long time supporters of Illinois' efforts to improve the quality of education for all students, Pearson is supportive of the efforts from your team to secure funding through the Race to the Top Application for Phase 2 Funding ("RTTT").

The funding from this proposal will provide Illinois the opportunity to make transformative education reforms that will positively impact schools and districts, particularly those that are persistently low-achieving. Illinois' application demonstrates that in order for students to become productive members of our society and be successful in the global economy, each student must be prepared for postsecondary education or the workplace.

We support the efforts Illinois is making to improve STEM education. Incorporating STEM into the education reforms will provide a more rigorous and relevant education experience that will lead to higher graduation rates, as well as a better transition to postsecondary education and the world of work.

Pearson is committed to supporting your RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

In support of your efforts, you have our commitment that we will support Illinois in the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Darice Keating
President, State Services

May 12, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Peoria Charter School Initiative (PCSI) am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world-class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turn-around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, PCSI recognizes STEM education as a critical part of K-12 reform and will be a part of our curriculum as we open Quest Charter Academy this coming fall here in Peoria By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

PCSI is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

PEORIA
CHARTER SCHOOL
INITIATIVE

www.peoriacharterschools.org
phone 309 495 5988

100 SW Water Street · Peoria, IL 61602

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

(b)(6)

Glen Barton
Chairman of the Board

PEORIA
CHARTER SCHOOL
INITIATIVE

www.peoriacharterschools.org
phone 309 495 5988

100 SW Water Street · Peoria, IL 61602

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

May 7, 2010

Dear Dr. Koch:

I am writing to express Promethean's support for the Illinois Race to the Top Application for Phase 2 Funding that you are submitting to the U.S. Department of Education. We at Promethean are very excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The RTTT funds will allow Illinois to continue to develop an educational system that will prepare every child for postsecondary education and today's 21st century workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts. The RTTT proposal supports the Illinois education reform agenda by ensuring the adoption of world class standards and assessments for students, teachers and school leaders by providing access to the necessary data and tools to improve student outcomes and to turnaround the most challenged schools.

In addition, the Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world. Further, we believe that every student should have the benefit of learning in a 21st century classroom. Independent research found that using the Promethean ActivClassroom as a primary tool for instruction resulted in an average 17 percentile increase in student performance. If implemented according to evidence-based best practices, teachers in Illinois should be able to achieve even greater results, to the tune of a 30 percentile increase.

In order to ensure that Illinois receives the maximum educational return on investment, Promethean, Inc. is committed to support all four critical areas of Illinois RTTT plan: Improving the use of Standards and Assessment, Increasing the use of Data, Increasing the Effectiveness of Teachers and Improving Struggling Schools. Promethean, Inc. is committed to support the State's RTTT plan through Project Planning and Development, as well as Implementation Support and Professional Development, all critical components to a successful project.

Promethean has a proven track record of success in 21st Century educational transformation and we are delighted to have the opportunity to partner with the State of Illinois to create a successful, sustainable, effective program. We are also prepared to provide special pricing to extend the reach of this important project. Promethean appreciates the opportunity to partner with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs, and look forward to celebrating transformational success.

Sincerely,

Sharon Holton

Sharon Holton
Vice President of Strategic Initiatives
Promethean, Inc.
770.331.4613

RICO

161 N Clark suite 4700

Chicago, IL. 60610

312-587-7426

5-14-2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, John Rico on behalf of *Rico Computers Enterprises, Inc. I* am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular Rico Computers Enterprises Inc. intends to support the implementation of the following components of the State's RTTT plan: *Rico Computers Enterprises, Inc. is an Information Technology Firm that has worked with educational institutions since 1991. John Rico is a member of the P20 and* is dedicated to assisting school districts and struggling students by developing, promoting and implementing ground-breaking technology and educational solutions that will prepare students to compete in the global economy of the 21st Century.

Rico Computers Enterprises, Inc. will specifically undertake to support the State's RTTT plan through the following actions of support: We will provide the technology tools necessary for students to succeed in the Global Economy of the 21st century. Rico is dedicated to assisting school districts and struggling students by developing, promoting and implement ground-breaking technology solutions that will help support those programs. These solutions will include hardware, software, training, maintenance services and educational support.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

John D. Rico
President & CEO
Rico Computers Enterprises, Inc.

ROOSEVELT
UNIVERSITY

RECEIVED
MAY 19 2010
State Superintendent of Education
#2

Holly Stadler
Dean, College of Education
(312) 856-4780
hstadler@roosevelt.edu

May 13, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Initial Funding ("RTTT") which you are submitting to the U.S. Department of Education. On behalf of Roosevelt University's College of Education, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. Our work in the college is driven by a mission of transforming schools and communities in the pursuit of social justice. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers will become a productive citizen in our ever-changing world.

In particular, Roosevelt University's College of Education intends to support the implementation of the following components of the State's RTTT plan:

- *Improving the effectiveness of teacher and principal preparation programs;*
- *Providing effective support to beginning teachers and principals; and*
- *Supporting the high school to postsecondary preparation and transition.*

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Holly Stadler
Dean

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Scholastic Inc. am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Scholastic Inc. intends to support the implementation of the following components of the State's RTTT plan: Scholastic has been at the forefront of an intensive effort to improve literacy and math achievement and reduce the dropout rate for over ten years. As you read this, 345 Scholastic people are at work in 15,000 classrooms across the country serving over one million below proficient students.

Scholastic Inc. will specifically undertake to support the State's RTTT plan through the following actions of support: Over the past 10+ years, Scholastic has developed "best practices" for helping educators turn around the lives of struggling students and their schools. Our best practices are data centric, with a legacy of engaging disenfranchised students, researched-based literacy and math intervention materials, a professional development team of over 225 consultants and proven to work to scale.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Joe Welty

Joe Welty
Vice President
Central Region

SCIENCE OLYMPIAD

Exploring the World of Science

SCIENCE OLYMPIAD
Two TransAm Plaza Drive
Suite 415
Oakbrook Terrace, IL 60181

(630) 792-1251 voice
(630) 792-1287 fax

www.soinc.org

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MAY 06 2010
State Superintendent of Education

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President & Co-Director
Illinois

Jack Cairns
Co-Director
Delaware

Mike McKee
Co-State Director
Florida & N. California

Sharon Putz
Executive Administrator
Illinois

James Woodland
State Science Supervisor
Nebraska

Jennifer Kopach
VP Marketing Communications
Illinois

Advisory Committee

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Lockheed Martin
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DuPont Corporation
Delaware

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Science Consultant
North Carolina State Univ.

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Indiana State Director
Indiana University

Azania Heyward-James
Centers for Disease Control
Georgia

Howard Guenther
2010 Tournament Director
University of Illinois at Urbana-Champaign

Dr. Peter Lu
Science Olympiad Alumnus
Harvard University

Harold Miller
State Director
New York

Michael Osborne
Technology Consultant
Texas

Fred Siegel
State Director
The George Washington University

Tim Taylor
Roseville MS Educator
Ohio

Peggy Vavalla
DuPont Corporation
Delaware

Dr. Bill Wellnitz
2009 Tournament Director
Augusta State University

May 4, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top (RTTT) Application for Phase 2 Funding you are submitting to the U.S. Department of Education. On behalf of Science Olympiad, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world-class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools. Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Science Olympiad intends to support the implementation of the State's RTTT plan by continuing to provide excellent K-12 after-school STEM opportunities for students across the state of Illinois. Currently, the Illinois Science Olympiad serves 263 middle school and high school teams with a rigorous extracurricular activity, and hosts 10 competitive tournaments for thousands of students in Illinois. In 2007, Science Olympiad piloted the Urban Schools Initiative in the Chicago Public Schools, a model that is rolling out across the US in 2010. Specifically, Science Olympiad raises the bar for student achievement in STEM and motivates the best science and math teachers by providing professional development and an excellent engagement activity aligned to the National Science Education Standards.

Science Olympiad, founded in 1984 and currently serving 6,000 school teams in 49 states with 320 academic tournaments a year, is dedicated to improving the quality of K-12 STEM education, increasing male, female and minority interest in science, creating a technologically literate workforce and providing recognition for outstanding achievement by both students and teachers. We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Dr. Gerard J. Putz
President and Co-Founder
Science Olympiad

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of The Security Board, am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, The Security Board recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

The Security Board is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

(b)(6)

Richard G. Arms
Executive Director

Southern Illinois University Carbondale

College of Education and Human Services
www.ehs.siu.edu
www.siuc.edu

May 14, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Round 2 Funding (RTTT) that you are submitting to the U.S. Department of Education. I, on behalf of the College of Education and Human Services at Southern Illinois University Carbondale (SIUC), am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare all children in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts, e.g., in the southern area of Illinois that is characterized by areas of extreme poverty.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data, tools and resources to improve student outcomes and the educational experiences in our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with a learning environment that appropriately addresses knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

Southern Illinois University Carbondale recognizes Science, Technology, Engineering, and Mathematics (STEM) education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more

Wham Education Building, Room 115 - Mail Code 4624 ▪ Southern Illinois University Carbondale
625 Wham Drive ▪ Carbondale, Illinois 62901 ▪ 618 | 453.2415 ▪ Fax: 618 | 453 1646

STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

The College of Education and Human Services at SIUC is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Kenneth Teitelbaum, PhD
Dean

Cc: Dr. Glenn Poshard, SIU President
Dr. Paul Sarvela, SIU Vice President
Dr. Sam Goldman, SIUC Chancellor
Dr. Don Rice, SIUC Interim Provost

Southern Illinois University Carbondale

Office of the Vice Chancellor for Research and Graduate Dean
www.siu.edu/~ovcr/
www.siuc.edu

May 19, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am pleased to write this letter in support of the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. On behalf of Southern Illinois University Carbondale (SIUC), I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt high-quality standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

SIUC recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. SIUC has a record of supporting STEM education, as evidenced by the many K-12 outreach programs that we host on our campus, including the Region 8 IJAS Science Fair, the Illinois Junior Science & Humanities Symposium, and Expanding Your Horizons (EYH), a program which has at its goals to increase the interest of young women in math and science through positive, hands-on experiences.

SIUC is proud to have a number of federally funded programs in the STEM area, including a Heartland Ecological/Environmental Academic Research Training (HEART) GK12 program. HEART GK12 is an NSF-funded fellowship targeting primarily underrepresented minorities in science. As a member of the Illinois LSAMP Alliance, SIUC supports STEM education through the NSF-funded ILSAMP program, which has the goal of increasing participation of undergraduates from underrepresented groups in science, technology, engineering and math (STEM) disciplines. In addition, SIUC also offers the McNair Scholars Program, a federally funded Ronald McNair Postbaccalaureate Achievement Program that prepares first-generation-college/low-income and underrepresented minority students for doctoral study.

Anthony Hall - Mail Code 4344 ▪ Southern Illinois University Carbondale
1265 Lincoln Drive ▪ Carbondale, Illinois 62901 ▪ 618 | 453.4526 ▪ Fax: 618 | 453.4573

SIUC has a brand new "Master of Science in Math & Science Education" (MSMSEd) degree program designed specifically with the math and science content & pedagogy needs of K-8 teachers in mind, funded by the Illinois Mathematics and Science Partnerships (IMSP) program. Also, an Illinois Math Science Partnership grant (ISBE-funded, ~$900,000) is currently in force (supporting the creation and implementation of the new MSMSEd program) and known as the "SMART" program (Science, Mathematics and Action Research for Teachers).

The RAMPD (Rural Access to Mathematics Professional Development) program at SIUC is funded as part of the NCLB initiative. The Rural Access to Mathematics through Professional Development (RAMPD) Project is a collaboration involving the SIUC College of Education and Human Services and Department of Mathematics and public elementary schools in Carbondale, Meridian and Murphysboro and two private faith-based schools. It focuses on the improvement of K-8 student achievement in mathematics.

The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

SIUC is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

As a campus already committed to STEM initiatives, as indicated by the programs listed above, we look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

John A. Koropchak
Vice Chancellor for Research and Graduate Dean

Anthony Hall - Mail Code 4344 ▪ Southern Illinois University Carbondale
1265 Lincoln Drive ▪ Carbondale, Illinois 62901 ▪ 618 | 453.4526 ▪ Fax: 618 | 453.4573

SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE
SCHOOL OF EDUCATION

May 10, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top (RTTT) Application for Initial Funding which you are submitting to the U.S. Department of Education. On behalf of Southern Illinois University Edwardsville (SIUE) and the School of Education (SOE), I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms.

The available funds will allow Illinois to build upon its past initiatives in P-20 education to continue to develop an educational system that will prepare each child in Illinois for postsecondary education and the workforce. Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen who will make profound and positive contributions to the region, state, and global community. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt rigorous standards and assessments for students, teachers and school leaders by providing educators with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools. This will be accomplished through the state's focus on RTTT's four critical reform areas: effective teachers and leaders, data systems to support instruction, strong standards and assessments, and systemic support for struggling schools. SIUE shares the state's commitment to the successful implementation of these critical reforms.

SIUE has demonstrated its commitment to current educational reforms in Illinois through the participation of its faculty and administrators in several critical initiatives that relate to RTTT's reform agenda. For example, the School of Education (SOE) has been actively involved in recent efforts to reform and redesign administrator preparation, has developed successful pathways for certification for non-traditional students in critical needs areas such as Early Childhood Education and Secondary Education that insure that students have access to fully certified teachers, and participates with other public institutions to collect and disseminate data related to graduate satisfaction and success in the classroom through annual surveys of novices and their supervisors. The SOE strongly supports the revisions being proposed of the Illinois Teaching Standards and efforts to strengthen content knowledge for secondary endorsements. In addition, as the SOE's Dean I have served on the state's Leadership to Integrate the Learning Continuum (LINC) Advisory Committee, Illinois New Teacher Collaborative (INTC)

Partnership Board, Associate of Arts in Teaching Steering Committee, and the Charter School Authorizer Task Force, all of which support initiatives being proposed under RTTT. The SOE is firmly committed to excellence in educator preparation, welcomes the opportunity for programmatic review that is transparent and methodologically sound, and anticipates the opportunity to be an active participant in the groundbreaking work proposed through Illinois' RTTT proposal.

SIUE and the School of Education also anticipate supporting the implementation of RTTT's initiatives through the University's newly formed STEM Center, which will coordinate the various STEM-related activities across campus in order to strengthen impact on P-12 outreach and related research. Through its STEM Center, SIUE and the SOE anticipate participating in the state's proposed "STEM Learning Exchange," which will expand access to STEM opportunities and support the development of effective STEM-related programs for P-12 students and teachers. Application areas that are specifically reflective of expertise at SIUE would include Energy, Manufacturing, Information Technology, Research and Development, and the Health Sciences. Through its participation in the STEM Learning Exchange and other related RTTT activities, including the STEM Educator Support Programs and STEM externships, SIUE's STEM Center anticipates working collaboratively with entities across Illinois to strengthen teachers' knowledge and effectiveness in the critical areas of mathematics and science to insure success of Illinois' P-12 students.

In collaboration with the East St. Louis School District, SIUE currently holds a charter for a high school that serves adolescents who are at risk. SIUE and the SOE support the reform initiatives outlined in the state's RTTT proposal to build upon the charter school's successes in graduation rate, post-secondary placement, and attendance to strengthen students' academic achievements. Identified as one of the state's "high priority" schools, this charter school anticipates participation in the proposed Illinois Partnership Zone and systemic reform proposals. This spring, administrators from the charter school, SIUE, the SOE, and the East St. Louis School District began the process of planning for the future, including performing a comprehensive internal evaluation, to insure that students at this school will have access to exemplary teachers, school leaders, and instruction.

As a campus community and regional leader, SIUE and its School of Education are committed to the reform efforts proposed under the state's RTTT proposal and its focus on excellent teachers, assessments, and instruction. We look forward to building upon our record of collaborative work with the state through our continued commitment to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Bette S. Bergeron

Bette S. Bergeron, Ph.D.
Dean
School of Education
Southern Illinois University Edwardsville

Takeda

January 11, 2010

Governor Pat Quinn
Office of the Governor
James R. Thompson Center
100 W. Randolph Street, Suite 16-100
Chicago, Illinois 60601

Re: Letter of Support for State of Illinois Race to the Top Application

Dear Governor Quinn,

I am writing to express support for the comprehensive reforms outlined in the State of Illinois' Race to the Top (RTTT) application. RTTT presents an unparalleled opportunity for Illinois to dramatically improve student performance and outcomes and serve as a leader in preparing students in science, technology, engineering, and mathematics (STEM) disciplines.

The emphasis on high school reform and focus on improving transitions into both college and careers will ensure the development of a well-educated workforce ready for a modern global economy. The State has identified an important and effective high school reform initiative in its RTTT application, including the establishment of a statewide program for the National Career Readiness Certificate (NCRC) and developing and scaling STEM-related Programs of Study.

As chair of the iBIO Institute, whose mission is to provide education, training and research in biotechnology to the business, educational communities and general public, and through Takeda's backing of the Institute's activities, we look to also support the State's NCRC and STEM-related Programs.

I look forward to working with the State of Illinois and other stakeholders on the initiatives outlined in Illinois' Race to the Top application. Please keep me informed of RTTT progress and any opportunities to assist in implementation of the RTTT plan.

Sincerely,

Nancy Joseph-Ridge, M.D.
General Manager
Pharmaceutical Development Division
Takeda Pharmaceuticals International
Chair, iBIO Institute Board of Directors

TAKEDA GLOBAL RESEARCH & DEVELOPMENT CENTER
One Takeda Parkway Deerfield, Illinois 60015 Phone: 224-554-6500

TOOLING & MANUFACTURING ASSOCIATION
1177 S. Dee Road Park Ridge IL 60068
847.825.1120 847.825.0041 FAX
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RECEIVED
MAY 19 2010 #3
State Superintendent of Education

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of The Tooling & Manufacturing Association am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for post-secondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes, as well as turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in post-secondary education and careers, will become a productive citizen in our ever-changing world.

In particular, The Tooling & Manufacturing Association recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students, increasing their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to post-secondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

The Tooling & Manufacturing Association is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

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Craig Zoberis
Fusion Systems, Inc

Carol Ebel
Janler Corporation
(Past Chairperson)

Illinois' Premier Full Service Manufacturing Association

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Brian P. McGuire

UIC UNIVERSITY OF ILLINOIS AT CHICAGO

Office of the Vice Chancellor for Research (MC 672)
310 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612

May 12, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express my support for the Race to the Top Application for Phase 2 Funding (RTTT) that you are submitting to the U.S. Department of Education. I, on behalf of the University of Illinois at Chicago (UIC), am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools. Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, UIC recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

UIC is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Joe G.N. Garcia, MD
Vice Chancellor for Research
Professor of Medicine

cc: David Gulley

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN

National Center for Supercomputing Applications
1008 NCSA Building
1205 West Clark Street
Urbana, IL 61801

May 18, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education on behalf of the National Center for Supercomputing Applications (NCSA) at the University of Illinois in Urbana-Champaign. As director of NCSA, I am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms, as it also supports our strategic goal for education. We were delighted to work with the team in sharing our knowledge of current technologies applicable to implementing the learning management system, and we look forward to bringing our significant background and expertise to the development and implementation of "programs of study," as part of the STEM Learning Exchanges. The available RTTT funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce.

For over 20 years, NCSA has provided powerful computers and expert support that help thousands of scientists and engineers across the country advance our understanding of natural and engineered systems and improve our world. With the computing power available at NCSA, researchers simulate how galaxies collide and merge, how proteins fold and molecules move through the wall of a cell, how tornadoes and hurricanes form, and other phenomena. A fast national communications network brings the power of NCSA's computers to the desktops of scientists and engineers throughout the country.

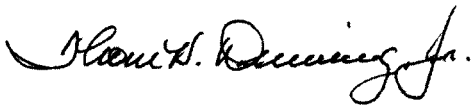
In June 2011, we will deploy Blue Waters, the most powerful supercomputer in the world for open scientific research. It will be the first system of its kind to sustain one petaflop (a million billion arithmetic operations per second) on a broad range of science and engineering applications. The Blue Waters Project also supports a far-reaching educational and workforce development program. *It will impact students from K-12 through postgraduate education and reach out to geographical areas and communities that have been historically underrepresented in supercomputing.*

Through our NSF-funded *Institute for Chemistry Literacy through Computational Science* (ICLCS) program, we are bringing freely available, research-quality computational tools to 127 teachers in high school chemistry classrooms representing 121 individual school districts in Illinois' rural areas. For the past 4 years, we have delivered extraordinary access to computing resources to students in some of the smallest rural districts in Illinois. We have deployed free software to enable teachers to communicate (*i*) via a Virtual Learning Community and (*ii*) via videoconferencing to support ICLCS teachers as they learn new content. This project has shown that the use of computational tools in the classroom is enthusiastically embraced by teachers, results in improved performance of students on standardized tests, and leads to increased student interest in chemistry. With our expertise in deploying leading-edge communication and information technologies to new communities, we can assist other programs that support and develop pathways to the workforce and help facilitate ongoing dialogue and discussion on ways to improve STEM education.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders - providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,



Thom H. Dunning, Jr., Ph.D.
Director, Institute for Advanced Computing Applications & Technologies
Director, National Center for Supercomputing Applications
Distinguished Chair for Research Excellence, Department of Chemistry

VERMILION ADVANTAGE
The Danville Difference

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e-mail: contact@vermilionadvantage.com
http://www.vermilionadvantage.com

May 13, 2010

RECEIVED
MAY 20 2010
State Superintendent of Education

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express support for the Race to the Top Application for Phase 2 Funding ("RTTT") that you are submitting to the U.S. Department of Education. I, on behalf of Vermilion Advantage am excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on ground-breaking, transformative education reforms. The available funds will allow Illinois to continue to develop an educational system that will prepare each and every child in Illinois for postsecondary education and the workforce. In addition, RTTT funds will assist Illinois in addressing the problems that continue to plague persistently low-achieving schools and districts.

The RTTT proposal supports the Illinois education reform agenda by ensuring that we adopt world class standards and assessments for students, teachers and school leaders by providing teachers and school leaders with access to the necessary data and tools to improve student outcomes and to turnaround our most challenged schools.

Illinois' RTTT proposal supports our belief that every student, if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers, will become a productive citizen in our ever-changing world.

In particular, Vermilion Advantage recognizes STEM education as a critical part of K-12 reform that will provide a more rigorous and relevant education experience for our students and will increase their global competitiveness. The State of Illinois' STEM efforts are designed to improve academic achievement, increase high school graduation rates, and improve transition rates to postsecondary education and employment. This approach also promotes choice by providing students with a variety of options in programs of study that are connected to their academic and career interests. By providing more STEM programs of study we will engage more students, especially those that have not historically done well in science and math.

Vermilion Advantage is committed to supporting the State's RTTT plan by participating in the planning, development and implementation of programs of study as well as the proposed STEM Learning Exchanges.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Vicki L. Haugen
President & CEO

Vermilion Advantage, NFP
217-442-6201
28 West North Street, Suite 101
800-373-6201
Danville, Illinois 61832
Fax: 217-442-6228

VOICES
FOR ILLINOIS CHILDREN

BUILDING BETTER LIVES

May 24, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I write to support the Race to the Top Application for Initial Funding you are submitting to the U.S. Department of Education. Voices for Illinois Children is excited about the opportunity this grant provides to move Illinois forward on innovative education reforms. RTTT funding would allow our state to better-develop an educational system that prepares every Illinois child for success in school, the workforce and throughout their lives. In addition, the funds would help our state address many problems that trouble persistently low-achieving schools and districts.

The RTTT proposal supports Illinois' education-reform agenda by ensuring we adopt world-class standards and assessments for students, teachers and school leaders. We can do this by providing teachers and school leaders with access to the data and tools that are necessary to improve student outcomes and to turn around our most challenged schools.

Illinois' RTTT proposal supports our belief that every student – if provided with the knowledge, skills, abilities and attitudes to succeed in postsecondary education and careers – will become a productive citizen in our ever-changing world.

In particular, Voices for Illinois Children intends to support the state's RTTT plan by:

- Service on Illinois' P-20 Council;
- Advocating for the full development and best use of both Kindergarten-readiness measures and longitudinal, P-20 data-sharing processes in Illinois, as well as their proper monitoring;
- Pressing for additional local, state and federal funding to support RTTT priorities; and
- Building public awareness of and support for RTTT, its goals – and what it takes to reach them.

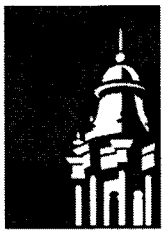
We look forward to working with the Illinois State Board of Education on RTTT-related reforms and efforts to improve children's learning, throughout our state.

Sincerely,

(b)(6)

Kathy Ryg, President

208 S. LaSalle Street • Suite 1490 • Chicago, IL 60604-1120 • Tel 312-456-0600 • Fax 312-456-0088 • www.voices4kids.org



WESTERN
ILLINOIS
UNIVERSITY

May 24, 2010

Dr. Christopher Koch
State Superintendent of Education
Illinois State Board of Education
100 N. 1st Street, S-405
Springfield, Illinois 62777

Dear Dr. Koch:

I am writing to express the strong support of the Illinois Institute for Rural Affairs (IIRA) for the Race to the Top Phase 2 application you are submitting to the U.S. Department of Education. We are excited about the opportunity the federal RTTT grant provides to move the State of Illinois forward on transformative education reforms. As the state's academic clearinghouse for rural development data and initiatives, IIRA recognizes the importance of green industry and the technology sector in Illinois' economic development future. In this context we are particularly excited about the State of Illinois' efforts in K-12 STEM education as a way to prepare students to succeed in this new economic environment.

IIRA is committed to supporting the State's RTTT plan by participating in the planning, development, and implementation of programs of study as well as the proposed STEM learning exchanges. We can make particular contributions in the area of renewable energy. For example, in conjunction with Illinois State University, IIRA is leading the establishment of a Wind for Schools program in Illinois, which will infuse wind energy technology into K-12 curricula around the state. We have already been in discussion with State officials on how to incorporate Wind for Schools into an RTTT Energy Learning Exchange.

We look forward to partnering with the Illinois State Board of Education on the development and implementation of the RTTT proposed reforms and programs.

Sincerely,

Christopher D. Merrett

Christopher D. Merrett, PhD
Director and Professor

Illinois Institute for Rural Affairs
Stipes Hall 518, 1 University Circle, Macomb, IL 61455-1390
Tel 309.298.2237 or 800.526.9943 • Fax 309.298.2142 • iira@wiu.edu • www.iira.org

Appendix B1-1

Common Core State Standards Initiative Consortium Participants

1. Alabama
2. Arizona
3. Arkansas
4. California
5. Colorado
6. Connecticut
7. Delaware
8. District of Columbia
9. Florida
10. Georgia
11. Hawaii
12. Idaho
13. Illinois
14. Indiana
15. Iowa
16. Kansas
17. Kentucky
18. Louisiana
19. Maine
20. Maryland
21. Massachusetts
22. Michigan
23. Minnesota
24. Mississippi
25. Missouri
26. Montana
27. Nebraska
28. Nevada
29. New Hampshire
30. New Jersey
31. New Mexico
32. New York
33. North Carolina
34. North Dakota
35. Ohio
36. Oklahoma
37. Oregon
38. Pennsylvania
39. Puerto Rico
40. Rhode Island
41. South Carolina
42. South Dakota
43. Tennessee
44. Utah
45. Vermont
46. Virgin Islands
47. Virginia
48. Washington
49. West Virginia
50. Wisconsin
51. Wyoming

Appendix B1-2

Memorandum of Agreement

The Council of Chief State School Officers and
The National Governors Association Center for Best Practices

Common Core Standards
Memorandum of Agreement

Purpose. This document commits states to a state-led process that will draw on evidence and lead to development and adoption of a common core of state standards (common core) in English language arts and mathematics for grades K-12. These standards will be aligned with college and work expectations, include rigorous content and skills, and be internationally benchmarked. The intent is that these standards will be aligned to state assessment and classroom practice. The second phase of this initiative will be the development of common assessments aligned to the core standards developed through this process.

Background. Our state education leaders are committed to ensuring all students graduate from high school ready for college, work, and success in the global economy and society. State standards provide a key foundation to drive this reform. Today, however, state standards differ significantly in terms of the incremental content and skills expected of students.

Over the last several years, many individual states have made great strides in developing high-quality standards and assessments. These efforts provide a strong foundation for further action. For example, a majority of states (35) have joined the American Diploma Project (ADP) and have worked individually to align their state standards with college and work expectations. Of the 15 states that have completed this work, studies show significant similarities in core standards across the states. States also have made progress through initiatives to upgrade standards and assessments, for example, the New England Common Assessment Program.

Benefits to States. The time is right for a state-led, nation-wide effort to establish a common core of standards that raises the bar for all students. This initiative presents a significant opportunity to accelerate and drive education reform toward the goal of ensuring that all children graduate from high school ready for college, work, and competing in the global economy and society. With the adoption of this common core, participating states will be able to:

- Articulate to parents, teachers, and the general public expectations for students;
- Align textbooks, digital media, and curricula to the internationally benchmarked standards;
- Ensure professional development to educators is based on identified need and best practices;
- Develop and implement an assessment system to measure student performance against the common core; and
- Evaluate policy changes needed to help students and educators meet the common core standards and "end-of-high-school" expectations.

An important tenet of this work will be to increase the rigor and relevance of state standards across all participating states; therefore, no state will see a decrease in the level of student expectations that exist in their current state standards.

Process and Structure

- **Common Core State-Based Leadership.** The Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) shall assume responsibility for coordinating the process that will lead to state adoption of a common core set of standards. These organizations represent governors and state commissioners of education who are charged with defining K-12 expectations at the state level. As such, these organizations will

facilitate a state-led process to develop a set of common core standards in English language arts and math that are:

- Fewer, clearer, and higher, to best drive effective policy and practice;
- Aligned with college and work expectations, so that all students are prepared for success upon graduating from high school;
- Inclusive of rigorous content and application of knowledge through high-order skills, so that all students are prepared for the 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 several purposes, including validating end-of-course expectations, providing leadership for the development of K-12 standards, and certifying state adoption of the common core. The group will be comprised of national and international experts on standards. Participating states will have the opportunity to nominate individuals to the group. The national validation committee shall provide an independent review of the common core. The national validation committee will review the common core as it is developed and offer comments, suggestions, and validation of the process and products developed by the standards development group. The group will use evidence as the driving factor in validating the common core.

- **Develop End-of-High-School Expectations.** CCSSO and the NGA Center will convene Achieve, ACT and the College Board in an open, inclusive, and efficient process to develop a set of end-of–high-school expectations in English language arts and mathematics based on evidence. We will ask all participating states to review and provide input on these expectations. This work will be completed by July 2009.

- **Develop K-12 Standards in English Language Arts and Math.** CCSSO and the NGA Center will convene Achieve, ACT, and the College Board in an open, inclusive, and efficient process to develop K-12 standards that are grounded in empirical research and draw on best practices in standards development. We will ask participating states to provide input into the drafting of the common core and work as partners in the common core standards development process. This work will be completed by December 2009.

- **Adoption.** The goal of this effort is to develop a true common core of state standards that are internationally benchmarked. Each state adopting the common core either directly or by fully aligning its state standards may do so in accordance with current state timelines for standards adoption not to exceed three (3) years.

  This effort is voluntary for states, and it is fully intended that states adopting the common core may choose to include additional state standards beyond the common core. States that choose to align their standards to the common core standards agree to ensure that the common core represents at least 85 percent of the state's standards in English language arts and mathematics.

  Further, the goal is to establish an ongoing development process that can support continuous improvement of this first version of the common core based on research and evidence-based learning and can support the development of assessments that are aligned to the common core across the states, for accountability and other appropriate purposes.

- **National Policy Forum.** CCSSO and the NGA Center will convene a National Policy Forum (Forum) comprised of signatory national organizations (e.g., the Alliance for Excellent Education, Business Roundtable, National School Boards Association, Council of Great City Schools, Hunt Institute, National Association of State Boards of Education, National Education Association, and others) to share ideas, gather input, and inform the common core initiative. The forum is intended as a place for refining our shared understanding of the scope and elements of a common core; sharing and coordinating the various forms of implementation of a common core; providing a means to develop common messaging between and among participating organizations; and building public will and support.

- **Federal Role.** The parties support a state-led effort and not a federal effort to develop a common core of state standards; there is, however, an appropriate federal role in supporting this state-led effort. In particular, the federal government can provide key financial support for this effort in developing a common core of state standards and in moving toward common assessments, such as through the Race to the Top Fund authorized in the American Recovery and Reinvestment Act of 2009. Further, the federal government can incentivize this effort through a range of tiered incentives, such as providing states with greater flexibility in the use of existing federal funds, supporting a revised state accountability structure, and offering financial support for states to effectively implement the standards. Additionally, the federal government can provide additional long-term financial support for the development of common assessments, teacher and principal professional development, other related common core standards supports, and a research agenda that can help continually improve the common core over time. Finally, the federal government can revise and align existing federal education laws with the lessons learned from states' international benchmarking efforts and from federal research.

Agreement. The undersigned state leaders agree to the process and structure as described above and attest accordingly by our signature(s) below.

Signatures	
Governor:	Pat Quinn
Chief State School Officer:	

Appendix B1-3

Common Core Standards

Introduction to the Draft Common Core Standards
March 9, 2010

The Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) are pleased to present the draft Kindergarten-12 grade level Common Core State Standards documents that our organizations have produced on behalf of 48 states, two territories, and the District of Columbia. These English language arts and mathematics standards represent a set of expectations for student knowledge and skills that will result in high school graduates who are prepared for success in college and careers.

To develop these standards, CCSSO and the NGA Center worked with representatives from participating states, a wide range of educators, content experts, researchers, national organizations, and community groups. These drafts reflect their input, and we are grateful for the time and insight hundreds of individuals have contributed to the development of these important documents.

Now, we seek public comment on these draft documents and encourage input via our online survey available at www.corestandards.org. The public comment period will end on April 2, 2010.

After our work groups have had an opportunity to review all of the feedback from the general public and state-led reviews, they will produce final documents. It is expected that the final set of standards documents will be available in late spring 2010.

You will notice that the college- and career-readiness standards have been incorporated into this draft. The final English language arts and mathematics standards documents will include college- and career-readiness standards along with the K-12 grade level standards.

The criteria that we used to develop the college- and career-readiness standards, as well as these K-12 grade level standards are:

- Aligned with college and work expectations;
- Include rigorous content *and* application of knowledge through high-order skills;
- Build upon strengths and lessons of current state standards;
- Informed by top-performing countries, so that all students are prepared to succeed in our global economy and society; and,
- Evidence and/or research-based.

The following links provide more information about the criteria and considerations for standards development.

The standards development process has maximized the best practices and research from across the nation and the world. While we have used all available research to shape these documents, we recognize that there is more to be learned about the most essential knowledge for student success. As new research is conducted and we evaluate the

implementation of the common core standards, we plan to revise the standards accordingly on a set review cycle.

Our organizations would also like to thank our advisory group, which provides advice and guidance on this initiative. Members of this group include experts from Achieve, Inc., ACT, the College Board, the National Association of State Boards of Education, and the State Higher Education Executive Officers.

Application of Common Core State Standards for English Language Learners

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

ELLs are a heterogeneous group with differences in ethnic background, first language, socioeconomic status, quality of prior schooling, and levels of English language proficiency. Effectively educating these students requires diagnosing each student instructionally, adjusting instruction accordingly, and closely monitoring student progress. For example, ELLs who are literate in a first language that shares cognates with English can apply first-language vocabulary knowledge when reading in English; likewise ELLs with high levels of schooling can bring to bear conceptual knowledge developed in their first language when reading in a second language. However, ELLs with limited or interrupted schooling will need to acquire background knowledge prerequisite to educational tasks at hand. Those ELLs who are newcomers to U.S. schools will need sufficiently scaffolded instruction and assessments to make sense of content delivered in a second language and to display this content knowledge.

English Language Arts

The common core standards for English language arts (ELA) articulate rigorous grade-level expectations in the areas of speaking, listening, reading, and writing to prepare all students to be college and career ready, including English language learners. Second-language learners also will benefit from instruction about how to negotiate situations outside of those settings so they are able to participate on equal footing with native speakers in all aspects of social, economic, and civic endeavors.

ELLs bring with them many resources that enhance their education and can serve as resources for schools and society. Many ELLs have first language and literacy knowledge and skills that boost their acquisition of language and literacy in a second language; additionally, they bring an array of talents and cultural practices and perspectives that enrich our schools and our society. Teachers must build on this enormous reservoir of talent and provide those students who need it with additional time and appropriate instructional support. This includes language proficiency standards that teachers can use in conjunction with the ELA standards to assist ELLs in becoming proficient and literate in English.

To help ELLs meet high academic standards in language arts it is essential that they have access to:

- Teachers and personnel at the school and district levels who are well prepared and qualified to support ELLs while taking advantage of the many strengths and skills they bring to the classroom;

- Literacy-rich school environments where students are immersed in a variety of language experiences;
- Instruction that develops foundational skills in English that enable ELLs to participate fully in grade-level coursework;
- Coursework that prepares ELLs for postsecondary education or the workplace yet is made comprehensible for students learning content in a second language (through specific pedagogical techniques and additional resources);
- Opportunities for classroom discourse and interaction that are well-designed to enable ELLs to develop communicative strengths in language arts;
- Ongoing assessment and feedback to guide learning; and
- Speakers of English who know the language well enough to provide ELLs with models and support.

Mathematics

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

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

Regular and active participation in the classroom—not only reading and listening but also discussing, explaining, writing, representing, and presenting—is critical to the success of ELLs in mathematics. Research has shown that ELLs can produce explanations, presentations, etc. and participate in classroom discussions *as they are learning English*.

ELLs, like English-speaking students, require regular access to teaching practices that are most effective for improving student achievement. Mathematical tasks should be kept at high cognitive demand; teachers and students should attend explicitly to concepts; and students should wrestle with important mathematics.

Overall, research suggests that:

- Language switching can be swift, highly automatic, and facilitate rather than inhibit solving word problems in the second language, as long as the student's language proficiency is sufficient for understanding the text of the word problem.
- Instruction should ensure that students understand the text of word problems before they attempt to solve them.
- Instruction should include a focus on "mathematical discourse" and "academic language" because these are important for ELLs. Although it is critical that

students who are learning English have opportunities to communicate mathematically, this is not primarily a matter of learning vocabulary. Students learn to participate in mathematical reasoning, not by learning vocabulary, but by making conjectures, presenting explanations, and/or constructing arguments.

- While vocabulary instruction is important, it is not sufficient for supporting mathematical communication. Furthermore, vocabulary drill and practice are not the most effective instructional practices for learning vocabulary. Research has demonstrated that vocabulary learning occurs most successfully through instructional environments that are language-rich, actively involve students in using language, require that students both understand spoken or written words and also express that understanding orally and in writing, and require students to use words in multiple ways over extended periods of time. To develop written and oral communication skills, students need to participate in negotiating meaning for mathematical situations and in mathematical practices that require output from students.

Application of Common Core State Standards for Students with Disabilities

The Common Core Standards articulate rigorous, grade-level expectations in the areas of English language arts and mathematics to prepare students to be college and career ready.

All students, including students with disabilities— students eligible under the Individuals with Disabilities Education Act (IDEA) — must be challenged to excel within the general curriculum and prepared for success in their post-school lives, including college and/ or careers. The common core state standards provide a historic opportunity to improve access to academic content standards for students with disabilities. The continued development of understanding about research-based instructional practices and a focus on their effective implementation will also help improve access to the common core state standards.

Students with disabilities are a heterogeneous group with one common characteristic: the presence of disabling conditions that significantly hinder their abilities to benefit from general education (IDEA 34 CFR §300.39, 2004). Therefore, *how* these high standards are taught and assessed is of the utmost importance in reaching this diverse group of students.

For special education students to meet high academic standards and to fully demonstrate their conceptual and procedural knowledge and skills in mathematics and English language arts, their instruction must incorporate supports and often times, accommodations, including:

- Special education supports and related services designed to meet the unique needs of these students and to enable their access to the general education curriculum (IDEA 34 CFR §300.34, 2004).
- An Individualized Education Program, which includes annual goals aligned with and chosen to facilitate their attainment of grade-level academic standards.
- Teachers and specialized instructional support personnel who are prepared and qualified to deliver high-quality, evidence-based, individualized instruction and support services.

Promoting a culture of high expectations for all students is a fundamental goal of the common core state standards. To participate with success in the general curriculum, students with disabilities, as appropriate, may be provided additional supports and services, such as:

- Instructional supports for learning, based on the principles of Universal Design for Learning, which foster student engagement by presenting information in multiple ways and allowing for diverse avenues of action and expression.
- Instructional accommodations —changes in materials or procedures— which do not change the standards but allow students to learn within the framework of the common core state standards.

- Assistive technology devices and services to ensure access to the general education curriculum and the common core state standards.

For some students with significant cognitive disabilities to access certain standards, those standards may need to be extended and/or adjusted. However, standards should be extended and/or adjusted only after students receive access to multiple means of learning and demonstrating knowledge. Any extensions and/ or adjustments must align with and retain the rigor and high expectations of the common core state standards.

COMMON CORE STATE STANDARDS FOR

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

DRAFT

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DRAFT

Introduction

The *Common Core State Standards for English Language Arts and Literacy in History/Social Studies and Science* 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 that help ensure that all students are college and career ready in literacy by no later than the end of high school. The *Standards* set requirements for English language arts (ELA) but also for reading, writing, speaking, listening, and language in the social and natural sciences. Just as students must learn to communicate effectively in a variety of content areas, so too must the *Standards* specify the literacy skills and understandings required for eventual college and career readiness in history, social studies, and science as well as ELA. By their structure, the *Standards* encourage curriculum makers to take a comprehensive approach that coordinates ELA courses with courses in other subject areas in order to help students acquire a wide range of ever more sophisticated knowledge and skills through reading, writing, speaking, and listening.

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, including their work on the American Diploma Project with Achieve. The *Standards* also draw on the most important international models as well as research and input from numerous sources, including scholars, assessment developers, professional organizations, and educators from kindergarten through college. In their design and content, the *Standards* represent a synthesis of the best elements of standards-related work to date and an important advance over that previous work.

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

The *Standards* are an extension of a prior initiative led by CCSSO and NGA to develop College and Career Readiness (CCR) standards in reading, writing, 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 of the present document. Consistent across grades and disciplines, the CCR Standards create an essential unity within the document and a consistent point of reference for educators. Whether guiding third graders through a science unit or high school sophomores through a classic work of literature, teachers can look to the same CCR Standards—included in each section of this document—to help judge whether students are on course for being college and career ready. 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.

While college and career readiness is the end point of the *Standards*—an ambitious goal in its own right—some students will reach that point before the end of high school. For those students who do complete the *Standards*' requirements before graduation, advanced work in such areas as literature, composition, language, and journalism should be available. It is beyond the scope of the *Standards* to describe what such advanced work should consist of, but it should provide the next logical step up from the college and career readiness baseline established here.

As a natural outgrowth of meeting the charge to define college and career readiness, the *Standards* also lay out a vision of what it means to be a literate person in the twenty-first century. Indeed, the skills and understandings students 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 online. 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 master the *Standards* develop the skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language.

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Key Design Considerations

A focus on results rather than means

By focusing on required achievements, the *Standards* leave room for teachers, curriculum developers, and states to determine how those goals should be reached and what additional topics should be addressed. Thus, the *Standards* do not mandate such things as a particular writing process or specify the full range of metacognitive strategies that students may need to use 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.

Language conventions and vocabulary are treated in detail in a separate strand not because those skills should be taught in isolation from other communication activities but because their importance extends beyond writing and reading, where standards documents often place such skills. Many of the conventions must be observed in standard spoken as well as written English, and students, particularly the youngest ones, encounter and acquire new words through conversations as well as through texts. To signal the link between the Language skills and the rest of the standards even more strongly, some skills associated with language use are also found in other strands when appropriate. Reading Standard #4, for example, concerns determining word meanings, and Writing Standard #5 includes editing among the skills students must be able to use to strengthen writing.

Research and media skills integrated 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, report on, and create a high volume and extensive range of print and nonprint texts in media forms old and new. The need to research and to consume and produce media is embedded into every element of today's curriculum; in like fashion, the associated skills and understandings are embedded throughout the *Standards* rather than treated in a separate section.

Shared responsibility for students' literacy development

The *Standards* establish that instruction in reading, writing, speaking, listening, and language is a shared responsibility. The *Standards* present reading instruction in K–5 as fully integrative, including a rich blend of stories, drama, and poetry as well as informational texts from a range of content areas. ELA-specific standards for grade 6 and above include fiction, poetry, and drama but also literary nonfiction (e.g., speeches, essays, and historical documents with significant cultural importance and literary merit). Literacy standards specific to history/social studies and science for grade 6 and above are predicated on teachers in these areas using their unique disciplinary expertise to help students meet the particular challenges of reading, writing, speaking, listening, and language in their respective fields.

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 can meet the demands of college and career readiness. In K–5, the *Standards* balance the teaching of literature with informational text, including texts in history/social studies and science. Fulfilling the standards for 6–12 ELA requires much greater attention to literary nonfiction than has been traditional. The NAEP framework also makes clear that significant reading of informational texts should take place outside of the ELA classroom in order for students to be ready for college and careers. The NAEP framework applies the sum of all the reading students do in a grade, not just their reading in the ELA context. The percentages do not imply, for example, that high school ELA teachers must teach 70 percent informational text; they demand instead that a great deal of reading should occur in other disciplines. 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.

A progression of writing toward college and career readiness

NAEP likewise outlines a distribution across the grades of the core purposes and types of student writing. Similar to the *Standards,* the 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: in grades 9–12 in the *Standards*, students continue writing in all three forms but focus overwhelmingly on writing to argue and to inform or explain.

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.

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.

What is not *covered by the* Standards

The *Standards* should be recognized for what they are *not* as well as what they are. Three of 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 but 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 curriculum 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* set grade-level standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. No set of grade-level standards can fully reflect the great variety in 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.

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 in English language arts and one in history/social studies and science.

Each section is divided into Reading, Writing, Speaking and Listening, and Language *strands*. Each strand is headed by a set of *College and Career Readiness (CCR) Standards* that is identical across all grades and content areas. The uniformity of the CCR Standards provides a consistent point of reference for educators, facilitating schoolwide goal setting and professional development.

CCR Standards: The basis for the K–12 Standards

Standards for each grade within K–8 and for grades 9–10 and 11–12 follow the College and Career Readiness (CCR) Standards in each strand. Each *grade-specific standard* (as these standards will be collectively referred to) corresponds to a particular CCR Standard. Put another way, each CCR Standard has an accompanying grade-specific standard translating the broader CCR statement into grade-appropriate terms.

Who is responsible for which portion of the Standards

A single K–5 section sets 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 receive in these grades comes from one elementary school teacher. Grades 6–12 are covered in two content area–specific sections, the first for the English language arts teacher and the second for the history/social studies and the science teacher. Each of these sections uses the same CCR Standards but also includes discipline-specific standards tuned to the literacy requirements of these disciplines. It is important to note that the literacy standards in history/social studies and science are meant to complement rather than supplant content standards in those disciplines.

Key Features of the Strands

Reading: Text complexity and the growth of comprehension

To foster students' ability to comprehend literary and informational texts of steadily increasing complexity, the *Standards* (starting formally in grade 2) define what proportion of the texts students read each year should come from a particular text complexity grade band (2–3, 4–5, 6–8, 9–10, or 11–12). Whatever they are reading, students must also show a steadily increasing 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 sources, and research

The *Standards* acknowledge the fact that whereas some writing skills, such as the ability to reflect purpose, task, and audience, are important for many types of writing, others are more properly part of writing narratives, informative and explanatory texts, or arguments. Beginning at grade 4, the *Standards* specify the sorts of writing over extended and shorter time frames that students in each grade are to produce in response to sources. Because of the centrality of writing to most forms of inquiry, research standards are primarily included in this strand.

Speaking and Listening: Flexible communication and interpersonal skills

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 sift through and evaluate multiple points of view, listen thoughtfully in order to build on and constructively question the ideas of others while contributing their own ideas, and, where appropriate, reach agreement and common goals through teamwork.

Language: Conventions and vocabulary

The Conventions standards in the Language strand include the essential "rules" of formal written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. The Vocabulary standards focus on both understanding words and their nuances and acquiring new words through conversation, reading, and being taught them directly.

Appendices

Appendix A contains supplementary material on reading text complexity, writing, speaking and listening, language conventions, and vocabulary. Appendix B consists of text exemplars illustrating the complexity, quality, and range of reading appropriate for various grade levels. Appendix C includes annotated writing samples demonstrating at least adequate performance at various grade levels.

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

K–5

DRAFT

College and Career Readiness Standards for Reading

The K–5 standards on the following pages define what students should understand and be able to do in each grade and build toward the ten College and Career Readiness Standards.

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 in detail where, when, why, and how events, ideas, and characters 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 or chapter) 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. Synthesize and apply information presented in diverse ways (e.g., through words, images, graphs, and video) in print and digital sources in order to answer questions, solve problems, or compare modes of presentation.[1]
8. Delineate and evaluate the reasoning and rhetoric within a text, including assessing whether the evidence provided is relevant and sufficient to support the text's claims.
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 and Level of Text Complexity

10. Read complex texts independently, proficiently, and fluently, sustaining concentration, monitoring comprehension, and, when useful, rereading.[2]

[1]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.
[2]Proficiency in this standard is measured by students' ability to read a range of appropriately complex texts in each grade as defined on page 14.

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

Following are the standards for K–5, which relate to their College and Career Readiness counterparts by number. They 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.

Kindergartners:	Grade 1 students:	Grade 2 students:
Key Ideas and Details		
1. With prompting and support, ask and answer questions about details and events in a text.	**1.** Ask and answer questions about key details and events in a text.	**1.** Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details and events in a text.
2. Retell familiar stories.	**2.** Retell stories, demonstrating understanding of the central message or lesson.	**2.** Paraphrase stories, fables, folktales, or myths from diverse cultures and determine their lessons or morals.
3. Identify characters, settings, and key events in a story.	**3.** Describe characters, settings, and key events in a story.	**3.** Describe how characters in a story respond to key events and conflicts.
Craft and Structure		
4. Ask 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.** Identify words and phrases (e.g., regular beats, rhymes, and repeated lines) that supply rhythm and meaning in a story, poem, or song.
5. Recognize common types of texts (e.g., storybooks, poems).	**5.** Distinguish major categories of writing from each other (e.g., stories and poems), drawing on a wide reading of a range of text types.	**5.** Refer to core elements of stories, plays, and myths, including characters, settings, and plots, when writing or speaking about a specific text.
6. Name the author and illustrator of a text and define the role of each.	**6.** Identify who is speaking at various points in a story, myth, fable, or narrative poem.	**6.** Distinguish between characters by speaking in a different voice for each character when reading aloud.
Integration of Knowledge and Ideas		
7. Relate pictures and illustrations to the overall story in which they appear.	**7.** Use pictures, illustrations, and details in a story to describe characters, events, or settings.	**7.** Explain how images and illustrations contribute to and clarify a story.
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)
9. Compare and contrast the adventures of characters in familiar stories.	**9.** Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	**9.** Compare and contrast characters or events from different stories addressing similar themes.
Range and Level of Text Complexity		
10. Read emergent-reader literature texts with purpose and understanding.	**10.** Read independently, proficiently, and fluently literature texts appropriately complex for grade 1.	**10.** Read literature independently, proficiently, and fluently within the grades 2–3 text complexity band; read texts at the high end of the range with scaffolding as needed.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1. Ask and answer questions to demonstrate understanding of a text, explicitly using the text as the basis for the answers.	**1.** Draw on details and examples from a text to support statements about the text.	**1.** Quote from a text to support statements about the text.
2. Use key supporting details in stories, fables, folktales, or myths from diverse cultures to determine the lessons or morals.	**2.** Summarize a text and derive a theme of a story, drama, or poem from details in the text.	**2.** Determine a theme of a text, drawing on how characters in a story respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
3. Describe the main characters in a story (e.g., their traits, motivations, or feelings) and explain how they contribute to the sequence of events.	**3.** Describe in detail a character, event, or setting, drawing on specific details in the text (e.g., from a character's thoughts, words, deeds, or interactions with others).	**3.** Compare and contrast two or more characters, events, or settings in a text, drawing on specific details.
Craft and Structure		
4. Interpret key words and phrases in a text, distinguishing literal from figurative language.	**4.** Understand words and phrases in a text 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.** Identify how metaphors and similes as well as rhymes and other repetitions of sounds (e.g., alliteration) supply meaning and rhythm in a specific verse or stanza of a poem.
5. Demonstrate understanding of common features of legends, myths, and folk- and fairytales (e.g., heroes and villains; quests or challenges) when writing or speaking about classic stories from around the world.	**5.** Explain major differences between poems and prose, and refer to the structural elements of poems (e.g., stanza, verse, rhythm, meter) when writing or speaking about specific poems.	**5.** Explain major differences between drama and prose stories, and refer to the structural elements of drama (e.g., casts of characters, setting descriptions, dialogue, stage directions, acts, scenes) when writing or speaking about specific works of dramatic literature.
6. Distinguish their own point of view from those of characters in a story.	**6.** Compare the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	**6.** Identify how a narrator's perspective or point of view influences how events are described.
Integration of Knowledge and Ideas		
7. Use information from illustrations and other visual elements in a text with the words to develop an understanding of the setting, characters, and plot.	**7.** Integrate information from several illustrations and other visual elements in a text with the words to develop an understanding of how the setting and characters change and the plot develops.	**7.** Explain how images, sounds, and movements contribute to an animated or live-action adaptation of a story, comparing that version to what they "see" or "hear" from reading the text.
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)
9. Compare and contrast the plots, settings, and themes of stories written by the same author about the same or similar characters (e.g., in books from a series).	**9.** Compare and contrast thematically similar tales, myths, and accounts of events from various cultures.	**9.** Compare the treatment of similar ideas and themes (e.g., opposition of good and evil) as well as character types and patterns of events in myths and other traditional literature from different cultures.
Range and Level of Text Complexity		
10. Read literature independently, proficiently, and fluently within the grades 2–3 text complexity band; read "stretch" texts in the grades 4–5 text complexity band with scaffolding as needed.	**10.** Read literature independently, proficiently, and fluently in the grades 4–5 text complexity band; read texts at the high end of the range with scaffolding as needed.	**10.** Read literature independently, proficiently, and fluently within the grades 4–5 text complexity band; read "stretch" texts in the grades 6–8 text complexity band with scaffolding as needed.

Reading Standards for Informational Text K–5

Kindergartners:	Grade 1 students:	Grade 2 students:
Key Ideas and Details		
1. With prompting and support, ask and answer questions about information and events a text.	**1.** Ask and answer questions about key information and events in a text.	**1.** Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key information and events in a text.
2. Identify the main topic and main ideas of a text.	**2.** Identify the main topic, main ideas, and key details of a text.	**2.** Identify the main focus of a multiparagraph text as well as that of specific paragraphs within the text.
3. With prompting and support, describe the connection between two events or ideas in a text.	**3.** Describe the connection between two key events or ideas in a text.	**3.** Describe the connection between two or more historical events or scientific concepts in a text.
Craft and Structure		
4. Ask questions about unknown words in a text.	**4.** Learn and determine the meanings of words and phrases encountered in text relevant to a *grade 1 topic or subject area*.	**4.** Learn and determine the meanings of words and phrases encountered in text relevant to a *grade 2 topic or subject area*.
5. Locate basic information in a text.	**5.** Describe how a text groups information into general categories (e.g., cows, pigs, and horses are *farm animals*).	**5.** Know and use various text features (e.g., captions, headings, tables of contents, glossaries, indexes, electronic menus, icons) to locate key facts or information.
6. Name the author and illustrator of a text and define the role of each.	**6.** Distinguish between information provided by pictures or illustrations and that provided by the words in a text.	**6.** Identify the main purpose of a text, including what question the author aims to answer or what the author aims to explain or describe.
Integration of Knowledge and Ideas		
7. Relate pictures or illustrations to the overall text in which they appear.	**7.** Use pictures, illustrations, and details in a text to describe the key ideas.	**7.** Explain how images and illustrations contribute to and clarify a text.
8. With prompting and support, recognize cause-and-effect relationships in a text.	**8.** Identify cause-and-effect relationships in a text.	**8.** Describe how specific causes link key events or ideas together in a text.
9. With prompting and support, recognize basic similarities in and differences between two texts on the same topic (e.g., in illustrations or descriptions).	**9.** Identify similarities in and differences between two texts on the same topic (e.g., in illustrations or descriptions).	**9.** Describe similarities in and differences between two texts on the same topic.
Range and Level of Text Complexity		
10. Read emergent-reader informational texts with purpose and understanding.	**10.** Read independently, proficiently, and fluently informational texts appropriately complex for grade 1.	**10.** Read informational texts independently, proficiently, and fluently within the grades 2–3 text complexity band; read texts at the high end of the range with scaffolding as needed.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Key Ideas and Details		
1. Ask and answer questions to demonstrate understanding of a text, explicitly using the text as the basis for the answers.	**1.** Draw on details and examples from a text to support statements about the text.	**1.** Quote from a text to support statements about the text.
2. Determine the main idea of a text and explain how it is supported by the key details.	**2.** Determine the main idea and supporting details of a text; summarize the text.	**2.** Determine two or more main ideas and how they are supported by details; summarize the text.
3. Describe the relationship between historical or scientific events or ideas in a text, using knowledge of connective devices that pertain to time, sequence, and cause and effect.	**3.** Describe the sequence of events in an historical or scientific account, including what happened and why, based on specific information in a text.	**3.** Explain the relationships between two or more historical events or scientific concepts by drawing on specific information from one or more texts.
Craft and Structure		
4. Learn and determine the meanings of general academic language and domain-specific words and phrases encountered in a text relevant to a *grade 3 topic or subject area*.	**4.** Learn and determine the meanings of general academic language and domain-specific words or phrases encountered in a text relevant to a *grade 4 topic or subject area*.	**4.** Learn and determine the meanings of general academic language and domain-specific words and phrases encountered in a text relevant to a *grade 5 topic or subject area*.
5. Use text features (e.g., bold print, key words, topic sentences, hyperlinks, electronic menus, icons) to locate information quickly and efficiently.	**5.** Use text features and search tools to locate and process information relevant to a given topic.	**5.** Describe how events, ideas, or information are organized (e.g., chronology, comparison, cause and effect) in a whole text or in part of a text.
6. Compare what is presented in a text with relevant prior knowledge and beliefs, making explicit what is new or surprising.	**6.** Compare an eyewitness account to a secondhand account of the same event or topic.	**6.** Analyze two accounts of the same event or topic and describe important similarities and differences in the details they provide.
Integration of Knowledge and Ideas		
7. Integrate information from illustrations and other visual elements (e.g., maps, photographs) in print and digital texts as an aid to understanding where, when, why, and how key events occur.	**7.** Interpret factual information presented graphically or visually (e.g., in charts, diagrams, time lines, animations, and interactive elements) and explain how the information contributes to understanding a print or digital text.	**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 paragraphs and between sentences in a text (e.g., comparison, sequence, example).	**8.** Explain how an author uses evidence to support his or her claims in a text.	**8.** Explain how an author uses evidence to support his or her claims in a text, identifying what evidence supports which claim(s).
9. Compare and contrast information drawn from two texts on the same subject.	**9.** Describe how two or more texts on the same subject build on one another; provide a coherent picture of the information they convey.	**9.** Integrate information from several texts on the same subject in order to write or speak about the subject knowledgeably.
Range and Level of Text Complexity		
10. Read informational texts independently, proficiently, and fluently within the grades 2–3 text complexity band; read "stretch" texts in the grades 4–5 text complexity band with scaffolding as needed.	**10.** Read informational texts independently, proficiently, and fluently within the grades 4–5 text complexity band; read texts at the high end of the range with scaffolding as needed.	**10.** Read informational texts independently, proficiently, and fluently within the grades 4–5 text complexity band; read "stretch" texts in the grades 6–8 text complexity band with scaffolding as needed.

Reading Standards: Foundational Skills (K–3)

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.

Kindergartners:

Print Concepts

1. Demonstrate understanding of the organization and basic features of print.

a. Identify the front cover, back cover, and title page of a book.
b. Follow words from left to right, top to bottom, and page by page.
c. Understand that words are separated by spaces in print.
d. Recognize and name all upper- and lowercase letters of the alphabet.

Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and phonemes.

a. Recite and produce rhyming words.
b. Count, pronounce, blend, and segment syllables in spoken words.
c. Count individual words in spoken phrases or simple sentences.
d. Blend and segment consonants and rimes of spoken words (*/g/ - /oat/*, */bl/ - /ack/*).
e. Demonstrate phonemic awareness by isolating and pronouncing the initial, medial vowel, and final phonemes (sounds) in three-phoneme (CVC) words (e.g., */save/*, */ham/*).[1] (This does not include CVCs ending with */l/*, */r/*, or */x/*.)
f. Add or substitute individual phonemes in simple, one-syllable words to make new words (e.g., */at/* → */sat/* → */mat/* → */map/*).

Grade 1 students:

1. (Not applicable)

2. Demonstrate understanding of spoken words, syllables, and phonemes.

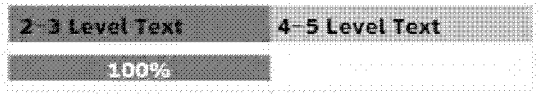
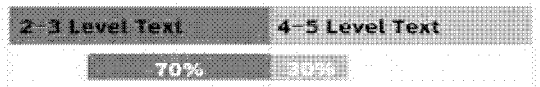
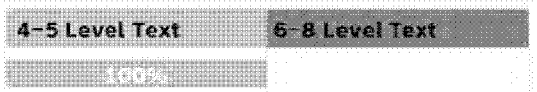
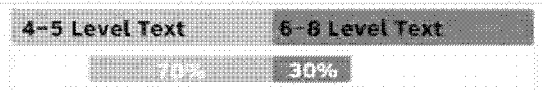
a. Aurally distinguish long from short vowel sounds in spoken single-syllable words (e.g., */tap/* vs. */tape/*, */sock/* vs. */soak/*, */sit/* vs. */sight/*).
b. Orally produce single-syllable words by blending phonemes, including consonant blends (e.g., */cats/*, */black/*, */blast/*).
c. Isolate and pronounce initial, medial vowel, and final phonemes (sounds) in spoken single-syllable words (e.g., *f**a**st*, *f**a**st*, *fas**t***).
d. Segment spoken single-syllable words into their complete sequence of individual phonemes (e.g., lap: /l/-/a/-/p/→ /f/-/l/-/a/-/p/).

[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.

Kindergartners:	Grade 1 students:	Grade 2 students:	Grade 3 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 graphemes for the five major vowels. c. Read at least twenty-five very-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 (e.g., ***b**at* vs. ***s**at*, *ca**t*** vs. *ca**n***, *hi**t*** vs. *ho**t***).	**3.** Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs (e.g., *-ll*, *-ck*, *wr-*, *sh*). b. Decode regularly spelled one-syllable words (e.g., *lock*, *much*, *see*, *rain*, *slide*, *bake*, *bring*). c. Know final *-e* (e.g., *take*, *side*) and common vowel team conventions (e.g., *rain*, *day*, *week*, *seat*, *road*, *show*) 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 (e.g., *rabbit*) by breaking the words into syllables. f. Read words with inflectional endings (e.g., *-s*, *-es*, *-ed*, *-ing*, *-er*, *-est*). g. Recognize and read grade-appropriate irregularly spelled words (e.g., *said*, *were*, *could*, *would*, *their*, *there*, *through*, *none*, *both*).	**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 (e.g., *hop* vs. *hope*, *men* vs. *mean*, *fell* vs. *feel*, *bend* vs. *bead*). b. Know spelling-sound correspondences for additional common vowel teams (e.g., *loud*, *cow*, *look*, *loop*, *boy*, *boil*). c. Decode regularly spelled two-syllable words with long vowels (e.g., *surprise*, *remain*, *needle*, *baby*, *paper*). d. Decode words with common prefixes and suffixes (e.g., *unhappy*, *carefully*, *goodness*, *unbutton*). e. Identify words with inconsistent but common spelling-sound correspondences (e.g., *heat* vs. *head*, *roll* vs. *doll*, *hint* vs. *hind*). f. Recognize and read grade-appropriate irregularly spelled words (e.g., *through*, *eyes*, *busy*, *ocean*, *island*, *people*).	**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 (e.g., *un-*, *re-*, *mis-*, *-ful*, *-less*, *-able*). b. Decode words with common Latin suffixes (e.g., *-tion/-sion*, *-ture*, *-tive/-sive*, *-ify*, *-ity*, *-ment*). c. Decode multisyllable words (e.g., *supper*, *chimpanzee*, *refrigerator*, *terrible*, *frightening*). d. Read grade-appropriate irregularly spelled words (e.g., *although*, *science*, *stomach*, *machine*).
Fluency			
4. Read with sufficient accuracy and fluency to support comprehension. a. 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 on successive readings. 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 on successive readings. 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 on successive readings c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

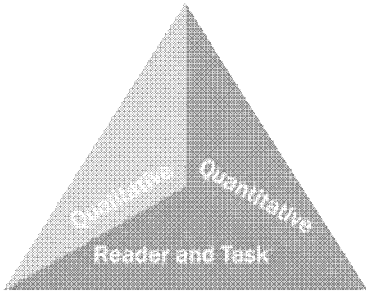
Range and Level of Text Complexity for Student Reading by Grade (Standard 10)

Students demonstrate proficiency in reading texts at the following ranges of text complexity to progress on a path to college and career readiness.

K	(See specific exemplars.)	
1		
2		**In grade 2**, students focus on reading texts independently in the grades 2–3 text complexity band, with scaffolding likely required for texts at the high end of the range.
3		**In grade 3**, students focus on reading texts independently in the grades 2–3 text complexity band (70 percent) and are introduced to texts in the grades 4–5 text complexity band as "stretch" texts (30 percent), which will likely require scaffolding.
4		**In grade 4**, students focus on reading texts independently in the grades 4–5 text complexity band, with scaffolding likely required for texts at the high end of the range.
5		**In grade 5**, students focus on reading independently in the grades 4–5 text complexity band (70 percent) and are introduced to texts in the grades 6–8 text complexity band as "stretch" texts (30 percent), which will likely require scaffolding.

Note: In any given classroom, the actual range of students' reading ability could be greater than the proposed range. Some students will require extra time and intense support and scaffolding to enable them to read grade-level material, whereas other students will be ready for—and should be encouraged to read—more advanced texts.

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 to be assigned and the questions to be 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	**Drama**	**Poetry**	**Literary Nonfiction, History/Social Studies, and Science 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; and digital media sources on a range of topics

College and Career Readiness Standards for Writing

The K–5 standards on the following pages define what students should understand and be able to do in each grade and build toward the ten College and Career Readiness Standards.

Text Types and Purposes[1]

1. Write arguments to support a substantive claim with clear reasons and relevant and sufficient evidence.
2. Write informative/explanatory texts to convey complex information clearly and accurately through purposeful selection and organization of content.
3. Write narratives to convey real or imagined experiences, individuals, or events and how they develop over time.

Production and Distribution of Writing

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

Research to Build Knowledge

7. Perform short, focused research projects as well as more sustained research in response to a focused research question, demonstrating understanding of the material under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate and cite the information while avoiding plagiarism.
9. Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned.

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.[3]

[1]These broad categories of writing include many subgenres. See Appendix A for definitions of key writing types.
[2]See "Conventions" in Language, pages 22–26, for specific editing expectations.
[3]This standard is measured by the proficiency of student writing products.

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 thoughts, feelings, and real and imaginary experiences. 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, content, and style of their writing to accomplish a particular purpose and task. 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 long time frames throughout the year.

Writing Standards K–5

Following are the standards for K–5, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications. Growth in writing ability is characterized by an increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas. At the same time, the content and sources that students address in their writing grow in demand every year.

Kindergartners:	Grade 1 students:	Grade 2 students:
Text Types and Purposes		
1. Use a combination of drawing, dictating, and writing to compose opinions in which they tell a reader the name of a book or the topic they are "writing" about and give an opinion about the topic (e.g., *My favorite book is . . .*).	**1.** Write opinions in which they introduce the topic or the name of the book they are writing about, state an opinion, and provide a reason for their opinion.	**1.** Write opinions in which they introduce the topic or book(s) directly, state an opinion, provide reasons and details to support opinions, use words to link opinions and reason(s) (e.g., *because*, *and*, *also*), and provide a sense of closure.
2. Use a combination of drawing, dictating, and writing to compose informative and explanatory texts in which they name what they are "writing" about and share some information about it.	**2.** Write informative and explanatory texts in which they name a topic, supply some facts relevant to the topic, and provide some sense of closure.	**2.** Write informative and explanatory texts in which they introduce a topic, use facts and definitions to develop points, present similar information together using headers to signal groupings when appropriate, and provide a concluding sentence 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 that they occurred, and provide a reaction to what happened.	**3.** Write narratives in which they include at least two or more appropriately sequenced events, use time cue words to signal event order, and provide some details and a sense of closure.	**3.** Write narratives in which they recount a well-elaborated event or series of events, use temporal words and phrases to signal event order, include details to tell what the narrator did, thought, and felt, and provide 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, add details to strengthen writing as needed through revision.	**5.** With guidance and support from adults, add details to strengthen writing as needed through revision.	**5.** With guidance from adults, strengthen writing as needed by revising and editing.
6. (Begins in grade 2)	**6.** (Begins in grade 2)	**6.** With guidance from adults, use technology to produce writing.
Research to Build Knowledge		
7. (Begins in grade 1)	**7.** Participate in shared research and writing projects (e.g., exploring a number of books on a given topic).	**7.** Participate in shared research and writing projects (e.g., exploring a number of books on a given topic).
8. Gather information from experiences or provided text sources to answer a specific question.	**8.** Gather information from experiences or provided text sources to answer a specific question.	**8.** Gather information from experiences or provided text sources to answer a specific question.
9. (Begins in grade 4)	**9.** (Begins in grade 4)	**9.** (Begins in grade 4)
Range of Writing		
10. (Begins in grade 4)	**10.** (Begins in grade 4)	**10.** (Begins in grade 4)

Grade 3 students:	Grade 4 students:	Grade 5 students:
Text Types and Purposes		
1. Write opinions in which they: a. Introduce the topic or book(s) directly, state an opinion relative to the topic, and create an organizing structure that lists reasons. b. Provide reasons that support the opinion. c. Use appropriate words to link opinions and reason(s) (e.g., *because*, *therefore*, *in order to*, *since*, *for example*). d. Provide a sense of closure.	**1.** Write opinions in which they: a. Introduce an opinion about a concrete issue or topic and create an organizing structure where related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link reasons and details together using words and phrases (e.g., *so*, *then*, *for instance*, *in addition*). d. Adopt an appropriate style for sharing and defending an opinion. e. Provide a concluding statement or section.	**1.** Write opinions in which they: a. Introduce an opinion about a concrete issue or topic and create an organizing structure where ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link reasons and details together using words, phrases, and clauses (e.g., *consequently*, *generally*, *specifically*). d. Adopt an appropriate style for sharing and defending an opinion. e. Provide a concluding statement or section.
2. Write informative/explanatory pieces in which they: a. Introduce a topic and create an organizational structure that presents similar information together. b. Provide some details to develop points. c. Use linking words (e.g., *also*, *another*, *and*, *more*) to connect ideas within categories of information. d. Include a concluding sentence or section.	**2.** Write informative/explanatory pieces in which they: a. State the topic clearly and group related information in paragraphs and sections. b. Develop the topic using facts, concrete details, quotations, or other information and examples. c. Use appropriate links to join ideas within categories of information. d. Employ domain-specific vocabulary when appropriate. e. Provide a conclusion related to the information or explanation offered.	**2.** Write informative/explanatory pieces in which they: a. State the topic clearly, provide a general observation and focus, and group related information logically. b. Develop the topic using relevant facts, concrete details, quotations, or other information and examples. c. Use appropriate links to join ideas within and across categories of information. d. Employ domain-specific vocabulary and some technical terms when appropriate. e. Provide a conclusion related to the information or explanation offered.
3. Write narratives in which they: a. Establish a situation, introduce a narrator and/or characters, and organize an event sequence that unfolds naturally. b. Employ dialogue and descriptions of characters' actions, thoughts, and feelings. c. Use temporal words and phrases to signal event sequence. d. Provide a sense of closure.	**3.** Write narratives in which they: a. Orient the reader by establishing a situation, introduce a narrator and/or characters, and organize an event sequence that unfolds naturally. b. Use narrative techniques such as dialogue and description to develop events and show the characters' external behaviors and internal responses to events. c. Use a variety of temporal words and phrases to manage the sequence of events. d. Use concrete and sensory words and phrases to convey events and experiences precisely. e. Provide a satisfying conclusion that follows from the narrative's events.	**3.** Write narratives in which they: a. Engage and orient the reader by establishing a situation, introduce a narrator and/or characters, and create an organization that sequences events naturally and logically. b. Use narrative techniques such as dialogue, pacing, and description to develop events and show characters' external behaviors and internal responses. c. Use a variety of temporal words, phrases, and clauses to manage the sequence of events. d. Use well-chosen words and phrases to convey events and experiences precisely. e. Provide a satisfying conclusion that follows from the narrative's events.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Production and Distribution of Writing		
4. (Begins in grade 4).	**4.** Produce coherent and clear writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1–3 above.)	**4.** Produce coherent and clear writing in which the organization, development, substance, and style 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, strengthen writing as needed by revising and editing.	**5.** With guidance and support from peers and adults, strengthen writing as needed by planning, revising, and editing.	**5.** With guidance and support from peers and adults, 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.	**6.** With guidance and support from adults, use technology to produce, publish, and interact with others about writing.	**6.** With guidance and support from adults, use technology, including the Internet, to produce, publish, and interact with others about writing.
Research to Build Knowledge		
7. Perform short, focused research tasks that build knowledge about a topic.	**7.** Perform short, focused research tasks that build knowledge through investigation of different aspects of a single topic.	**7.** Perform short, focused research tasks that build knowledge through investigation of different aspects of a topic using several sources.
8. Gather information from experience as well as print and digital resources, take simple notes on sources, and sort evidence into provided categories.	**8.** Gather relevant information from experience as well as print and digital sources, take notes and categorize evidence, restate information in written text, and provide basic bibliographic information.	**8.** Gather relevant information from experience as well as print and digital sources; summarize or paraphrase information in notes and finished work, and provide basic bibliographic information.
9. (Begins in grade 4)	**9.** Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned: a. Apply *grade 4 reading standards* to informational texts (e.g., "Explain how an author uses evidence to support his or her claims in a text"). b. Apply *grade 4 reading standards* to literature (e.g., "Describe in detail a character, event, or setting, drawing on specific details in the text (e.g., from a character's thoughts, words, deeds, and interactions with others").	**9.** Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned: a. Apply *grade 5 reading standards* to informational texts (e.g., "Explain how an author uses evidence to support his or her claims in a text, identifying what evidence supports which claim(s)"). b. Apply *grade 5 reading standards* to literature (e.g., "Compare and contrast two or more characters, events, or settings in a text, drawing on specific details").
Range of Writing		
10. (Begins in grade 4)	**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 Standards for Speaking and Listening

The K–5 standards on the following pages define what students should understand and be able to do in each grade and build toward the six College and Career Readiness Standards.

Comprehension and Collaboration

1. Participate effectively in a range of interactions (one-on-one and in groups), exchanging information to advance a discussion and to build on the input of others.
2. Integrate and evaluate information from multiple oral, visual, or multimodal sources in order to answer questions, solve problems, or build knowledge.
3. Evaluate the speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, evidence, and reasoning in a clear and well-structured way appropriate to purpose and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating a 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--whole class, small group, 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.

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Speaking and Listening Standards K–5

Following are the standards for K–5, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications.

Kindergartners:	Grade 1 students:	Grade 2 students:
Comprehension and Collaboration		
1. Participate in conversations with peers and adults about *kindergarten topics and texts* being studied in class. a. Listen to others and take turns speaking. b. Continue a conversation through several exchanges.	**1.** Initiate and participate in conversations with peers and adults about *grade 1 topics and texts* being studied in class. a. Follow agreed-upon rules for discussions, such as listening to others, speaking one at a time, and gaining the floor in respectful ways. b. Respond to the comments of others through multiple exchanges. c. Ask questions to clear up confusion about a topic.	**1.** Engage in group discussions on *grade 2 topics and texts* being studied in class. a. Follow agreed-upon rules for discussions, such as listening to others, speaking one at a time, and gaining the floor in respectful ways. b. Stay on topic by linking their own additions to the conversation to the previous remarks of others. c. Ask for clarification and further explanation as needed. d. Extend their ideas and understanding in light of the discussions.
2. Confirm understanding of information presented orally or through media by asking and answering questions about key details.	**2.** Confirm understanding of information presented orally or through media by restating key elements and asking and answering questions about key details.	**2.** Retell key details or ideas presented orally or through media.
3. Ask questions to get information, seek help, or clarify something that is not understood.	**3.** Ask questions to get information, clarify something that is not understood, or gather additional information.	**3.** Ask and answer questions about information presented orally or visually in order to deepen their understanding or clarify comprehension.
Presentation of Knowledge and Ideas		
4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	**4.** Describe familiar people, places, things, and events with relevant details, expressing ideas and feelings clearly.	**4.** Recount stories or experiences with appropriate facts and descriptive details.
5. (Begins in grade 4)	**5.** (Begins in grade 4)	**5.** (Begins in grade 4)
6. (Begins in grade 1)	**6.** Produce complete sentences when appropriate to task and situation, using correct verb tenses to convey a sense of past, present, and future. (See "Conventions" in Language, pages 22–26, for specific demands.)	**6.** Produce complete sentences when appropriate to task and situation to provide requested detail or clarification, ensuring subject-verb agreement and correct use of irregular plural nouns. (See "Conventions" in Language, pages 22–26, for specific demands.)

Grade 3 students:	Grade 4 students:	Grade 5 students:
Comprehension and Collaboration		
1. Initiate and engage in group discussions on *grade 3 topics and texts* being studied in class. a. Follow agreed-upon rules for discussions and carry out assigned roles in small-group discussions. b. Pose relevant questions and link their own additions to the conversation to the previous remarks of others. c. Extend their ideas and understanding in light of the discussions.	**1.** Initiate and engage in group discussions on *grade 4 topics and texts* being studied in class. a. Come to discussions prepared, having read required material; in discussions, explicitly draw on that material and other information known about the topic. b. Pose and respond to questions as well as build on the ideas of previous speakers. c. Acknowledge new information provided by others and incorporate it into their own thinking as appropriate.	**1.** Initiate and engage in group discussions on *grade 5 topics and texts* being studied in class. a. Come to discussions prepared, having read the required material; in discussions, explicitly draw on that material and other information known about the topic. b. Respond to questions with elaboration, make comments that contribute to the topic, and build on the ideas of previous speakers. c. Ask questions to clarify or follow up on ideas or information presented orally or through media. d. Draw conclusions based on the ideas of others and incorporate them into their own thinking as appropriate.
2. Identify the main ideas and supporting details of information presented graphically, visually, orally, or multimodally.	**2.** Paraphrase the key information or ideas presented graphically, visually, orally, or multimodally.	**2.** Summarize the key ideas and supporting details presented graphically, visually, orally, or multimodally.
3. Ask and answer questions about presentations, offering appropriate elaboration and detail.	**3.** Identify the claims and supporting evidence used by a speaker or a presenter.	**3.** Summarize the claims made by a speaker or presenter and explain how each claim is supported with evidence.
Presentation of Knowledge and Ideas		
4. Report on a topic or recount stories or experiences with appropriate facts and descriptive details.	**4.** Report on events, topics, or texts in an organized manner, using appropriate, specific facts and descriptive details to support main ideas.	**4.** Report on events, topics, or texts in a focused, organized manner, sequencing ideas logically and using appropriate, specific facts, details, examples, or other information to develop main ideas.
5. (Begins in grade 4)	**5.** Incorporate visual displays and digital media into presentations when appropriate.	**5.** Incorporate visual displays and digital media into presentations when appropriate.
6. Speak coherently, employing a variety of tenses and ensuring subject-verb and pronoun-antecedent agreement. (See "Conventions" in Language, pages 22–26, for specific demands.)	**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 "Conventions" in Language, pages 22–26, for specific demands.)	**6.** Adapt speech to a variety of contexts and communicative tasks, using formal English when appropriate to task and situation. (See "Conventions" in Language, pages 22–26, for specific demands.)

College and Career Readiness Standards for Language

The K–5 standards on the following pages define what students should understand and be able to do in each grade and build toward the six College and Career Readiness Standards.

Conventions in Writing and Speaking

1. Demonstrate a command of the conventions of standard English grammar and usage.
2. Demonstrate a command of the conventions of capitalization, punctuation, and spelling.
3. Make effective choices about language, punctuation, and sentence structure for meaning and style.

Vocabulary Acquisition and Use

4. Determine the meaning of words and phrases encountered through conversations, reading, and media use.
5. Understand the nuances of and relationships among words.
6. Use grade-appropriate general academic vocabulary and domain-specific words and phrases purposefully acquired as well as gained through conversation and reading and responding to texts.

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 writing and speaking as well as acquire new words and understand those that they encounter through listening, reading, and media use. They must be able to determine the meaning of grade-appropriate words, come to appreciate that words have shadings of meaning and relationships to other words, and expand their vocabulary through conversation and (especially in later grades) through reading and by being taught words directly in the course of studying subject matter. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are

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Language Standards K–5

Following are the standards for K–5, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications.

Kindergartners:	Grade 1 students:	Grade 2 students:
Conventions in Writing and Speaking		
1. Observe conventions of grammar and usage. a. Print most upper- and lowercase letters. b. Write a letter or letters for most consonant and short-vowel sounds (phonemes). c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog*, *dogs*; *wish*, *wishes*) when speaking. d. Understand and use the most frequently occurring prepositions in English (e.g., *to/from*, *in/out*, *on/off*, *for*, *of*, *by*, *with*) when speaking. e. Produce and expand complete sentences in shared language and writing activities. f. Understand and use question words (e.g., *who*, *what*, *where*, *when*, *why*, *how*) in discussions.	**1.** Observe conventions of grammar and usage. a. Print all upper- and lowercase letters. b. Use singular and plural nouns with matching verbs in simple sentences (e.g., *He hops*; *We hop*). c. Use subject, object, and possessive pronouns in speaking and writing (e.g., *I*, *me*, *my*; *they*, *them*, *their*). d. Use verbs to convey a sense of past, present, and future in writing and speaking (e.g., *Yesterday I walked home*; *Today I walk home*; *Tomorrow I will walk home*). e. Understand and use frequently occurring prepositions in English (e.g., *during*, *beyond*, *toward*). f. Produce and expand complete declarative, interrogative, imperative, and exclamatory sentences in response to questions and prompts. g. Understand that, minimally, every sentence must be about something (the subject) and tell something (the predicate) about its subject.	**1.** Observe conventions of grammar and usage. a. Form common irregular plural nouns (e.g., *feet*, *children*, *teeth*, *mice*, *fish*). b. Form the past tense of common irregular verbs (e.g., *sat*, *hid*, *told*). c. Produce and expand complete declarative, interrogative, imperative, and exclamatory sentences. d. Produce and expand complete sentences to provide requested detail or clarification.
2. Observe conventions of capitalization, punctuation, and spelling. a. Capitalize the first word in a sentence and the pronoun *I*. b. Name and identify end punctuation, including periods, question marks, and exclamation points. c. Spell simple words phonetically using knowledge of sound-letter relationships.	**2.** Observe conventions of capitalization, punctuation, and spelling. a. Capitalize names, places, and dates. b. Use end punctuation for sentences, including periods, question marks, and exclamation points. 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 common irregular words. e. Use phonetic spellings for untaught words, drawing on phonemic awareness and spelling conventions. f. Form new words through addition, deletion, and substitution of sound and letters (e.g., *an* → *man* → *mat* → *mast* → *must* → *rust* → *crust*).	**2.** Observe conventions of capitalization, punctuation, and spelling. a. Capitalize holidays, product names, geographic names, and important words in titles. b. Use commas in greetings and closings of letters. c. Use apostrophes to form contractions and common possessives. d. Generalize learned spelling patterns when writing words (e.g., *cage* → *badge*; *boy* → *boil*; *paper* → *copper*). e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
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 word meanings (*based on kindergarten reading*). a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. b. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* as a bird and learning the verb *to duck*). c. Use the most common affixes in English (e.g., *-ed*, *-s*, *re-*, *un-*, *pre-*, *-ful*, *-less*) as a clue to the meaning of an unknown word.	**4.** Determine word meanings (*based on grade 1 reading*). a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. Use sentence-level context as a clue to the meaning of an unknown word. c. Use common affixes in English as a clue to the meaning of an unknown word. d. 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). e. Demonstrate understanding of the concept of multiple-meaning words (e.g., *match*, *kind*, *play*) by identifying meanings of some grade-appropriate examples of such words.	**4.** Determine word meanings (*based on grade 2 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as understanding how the word is used in a sentence; analyzing the word's sounds, spelling, and meaningful parts; and consulting glossaries or beginning dictionaries, both print and digital. b. Explain the meaning of grade-appropriate compound words (e.g., *birdhouse*, *lighthouse*, *housefly*; *bookshelf*, *notebook*, *bookmark*). 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. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., *happy / unhappy*, *tell / retell*).
5. Understand word relationships. a. Build real-life connections between words and their use (e.g., note places at school that are *colorful*). b. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk*, *march*, *strut*, *prance*) by acting out the meanings. c. Use common adjectives to distinguish objects (e.g., the *small blue* square; the *shy white* rabbit). d. Demonstrate understanding of common verbs and adjectives by relating them to their opposites (antonyms).	**5.** Understand word relationships. a. Build real-life connections between words and their use (e.g., note places at home that are *cozy*). b. 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, choosing, or acting out the meanings.	**5.** Understand word relationships. a. Build real-life connections between words and their use (e.g., describe foods that are *spicy* or *juicy*). b. Distinguish shades of meaning among related verbs (e.g., *toss*, *throw*, *hurl*) and related adjectives (e.g., *thin*, *slender*, *skinny*, *scrawny*).
6. Use newly learned words acquired through conversations, reading, and responding to texts.	**6.** Use newly learned words acquired through conversations, reading, and responding to texts.	**6.** Use newly learned words acquired through conversations, reading, and responding to texts.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Conventions in Writing and Speaking		
1. Observe conventions of grammar and usage. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in specific sentences. b. Form and use the simple (e.g., *I walked*, *I walk*, *I will walk*) verb tenses. c. Ensure subject-verb and pronoun-antecedent agreement.* d. Produce simple, compound, and complex sentences.	**1.** Observe conventions of grammar and usage. a. Form and use the progressive (e.g., *I was walking*, *I am walking*, *I will be walking*) verb aspects. b. Form and use adjectives and adverbs (including comparative and superlative forms), placing them appropriately within sentences.* c. Produce complete sentences, avoiding rhetorically poor fragments and run-ons.* d. Correctly use frequently confused words (e.g., *to*, *too*, *two*; *there*, *their*).*	**1.** Observe conventions of grammar and usage. a. Form and use the perfect (e.g., *I had walked*, *I have walked*, *I will have walked*) verb aspects. b. Recognize and correct inappropriate shifts in verb tense and aspect.*
2. Observe conventions of capitalization, punctuation, and spelling. a. Use correct capitalization. b. Use quotation marks in dialogue. c. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., *sitting*, *smiled*, *cries*, *happiness*). d. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words. e. Consult reference materials, including dictionaries, as needed to check and correct spellings.	**2.** Observe conventions of capitalization, punctuation, and spelling. a. Use quotation marks to mark direct speech and quotations from a text. b. Spell grade-appropriate words correctly, consulting references as needed.	**2.** Observe conventions of capitalization, punctuation, and spelling. 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 underlining, quotation marks, or italics to indicate titles of works. d. Spell grade-appropriate words correctly, consulting references as needed.
3. Make effective language choices. a. Use words for effect.*	**3.** Make effective language choices. a. Use punctuation for effect.* b. Maintain consistency in style and tone.* c. Choose words and phrases to convey ideas precisely.*	**3.** Make effective language choices. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.*

* Conventions standards noted with an asterisk (*) need to be revisited by students in subsequent grades as their writing and speaking grows in sophistication. See chart on page 27 for a complete listing.

Grade 3 students:	Grade 4 students:	Grade 5 students:
Vocabulary Acquisition and Use		
4. Determine word meanings (*based on grade 3 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as understanding how the word is used in a sentence; analyzing the word's sounds, spelling, and meaningful parts; and consulting glossaries or beginning dictionaries, both print and digital. b. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *company*, *companion*). c. 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*). d. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., *take steps*).	**4.** Determine word meanings (*based on grade 4 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., definitions, examples, or restatements in text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; and consulting reference materials, both print and digital. b. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *telegraph*, *photograph*, *autograph*). c. Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*). d. Paraphrase common idioms, adages, and proverbs.	**4.** Determine word meanings (*based on grade 5 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., definitions, examples, or restatements in text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; and consulting reference materials, both print and digital. b. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *photograph*, *photosynthesis*). c. Interpret figurative language, including similes and metaphors. d. Explain the meaning of common idioms, adages, and proverbs.
5. Understand word relationships. a. Build real-life connections between words and their use (e.g., describe people who are *friendly* or *helpful*). b. Distinguish among related words that describe states of mind or degrees of certainty (e.g., *knew*, *believed*, *suspected*, *heard*, *wondered*).	**5.** Understand word relationships. a. Build real-life connections between words and their various uses and meanings. b. Define relationships between words (e.g., how *ask* is like and unlike *demand*; what items are likely to be *enormous*). c. Distinguish a word from other words with similar but not identical meanings (synonyms).	**5.** Understand word relationships. a. Build real-life connections between words and their various uses and meanings. b. Define relationships between words (e.g., how *smirk* is like and unlike *smile*; what items are likely to be *vast*). c. Distinguish a word from other words with similar but not identical meanings (synonyms).
6. Use words that are in common, conversational vocabulary as well as grade-appropriate academic vocabulary and domain-specific words (in English language arts, history/social studies, and science) taught directly and acquired through reading and responding to texts.	**6.** Use grade-appropriate general academic vocabulary and domain-specific words and phrases (in English language arts, history/social studies, and science) taught directly and acquired through reading and responding to texts.	**6.** Use grade-appropriate general academic vocabulary and domain-specific words and phrases (in English language arts, history/social studies, and science) taught directly and acquired through reading and responding to texts.

English Language Arts Conventions Progressive Skills, By Standard

The following, marked with an asterisk (*) in the Conventions standards, are skills and understandings that require continued attention in higher grades (after their introduction in the grade listed below) as they are applied to increasingly sophisticated writing and speaking.

Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grades 9–10
1c. Ensure subject-verb and pronoun-antecedent agreement. **3a.** Choose words for effect.						
	1b. Form and use adjectives and adverbs (including comparative and superlative forms), placing them appropriately within sentences. **1c.** Produce complete sentences, avoiding rhetorically poor fragments and run-ons. **1d.** Correctly use frequently confused words (e.g., *effect/affect*, *to/too/two*). **3a.** Use punctuation for effect. **3b.** Maintain consistency in style and tone. **3c.** Choose words and phrases to convey ideas precisely.					
		1b. Recognize and correct inappropriate shifts in verb tense and aspect. **2a.** Use punctuation to separate items in a series. **3a.** Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.				
			1b. Recognize and correct inappropriate shifts in pronoun number and person. **1c.** Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). **2a.** Use commas, parentheses, or dashes to set off nonrestrictive/parenthetical elements. **3a.** Vary sentence patterns for meaning, reader/listener interest, and style.			
				1c. Place phrases and clauses within a sentence, avoiding misplaced and dangling modifiers. **3b.** Choose words and phrases that express ideas concisely, eliminating wordiness and redundancy.		
					1c. Recognize and correct inappropriate shifts in verb voice and mood.	
						1a. Use parallel structure in writing.

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* Read-aloud
** Read-along

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

	Literature: Stories, Drama, Poetry	Informational Texts: Literary Nonfiction, History/Social Studies, Science/Technical Texts
K	▪ *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 & Robin Page (2003)* ▪ *Amazing Whales!* by Sarah L. Thomson (2005)*
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.) 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 that topic 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

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College and Career Readiness Standards for Reading

The grades 6–12 standards on the following pages define what students should understand and be able to do in each grade and build toward the ten College and Career Readiness Standards.

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 in detail where, when, why, and how events, ideas, and characters 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 or chapter) 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. Synthesize and apply information presented in diverse ways (e.g., through words, images, graphs, and video) in print and digital sources in order to answer questions, solve problems, or compare modes of presentation.[1]
8. Delineate and evaluate the reasoning and rhetoric within a text, including assessing whether the evidence provided is relevant and sufficient to support the text's claims.
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 and Level of Text Complexity

10. Read complex texts independently, proficiently, and fluently, sustaining concentration, monitoring comprehension, and, when useful, rereading.[2]

[1]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.
[2]Proficiency in this standard is measured by students' ability to read a range of appropriately complex text in each grade as defined on page 36.

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 the founding 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

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. They 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.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Key Ideas and Details		
1. Cite specific textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite several sources of textual evidence when useful to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite a wide range of evidence throughout the text when useful to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Analyze how a theme or central idea develops over the course of a text, drawing on key details.	**2.** Analyze how two or more themes or central ideas in a text relate to one another, drawing on key details.	**2.** Analyze how recurring images or events contribute to the development of a theme or central idea in a text.
3. Describe how a story's plot unfolds (in a series of episodes or as a problem to be solved) as well as how characters adapt or change as they move toward a resolution.	**3.** Analyze how particular lines of dialogue or specific incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.	**3.** Analyze how elements of a story or drama interact (e.g., how plot and setting are integral to one another; how the setting affects characters).
Craft and Structure		
4. Interpret the figurative and connotative meanings of words and phrases as they are used in a text.	**4.** Interpret the figurative and connotative meanings of words and phrases as they are used in a text and describe in detail a specific word choice and its impact on meaning and tone.	**4.** Explain the comparisons an author makes through metaphors, allusions, or analogies in a text and analyze how those comparisons contribute to meaning.
5. Explain the effect of such devices as flashbacks and foreshadowing on the development of the plot and meaning of a text.	**5.** Describe how any given sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the plot or themes.	**5.** Compare a poem with a conventional structure, such as a sonnet, to a poem without a proscribed structure, such as a free verse poem.
6. Describe how an author establishes the point of view of the speaker or a character in a poem, drama, or story.	**6.** Analyze how an author presents the points of view of different characters in a story or drama, including their different reactions to the same person or event(s).	**6.** Explain how a difference in the perspective or knowledge of characters and the audience (e.g., created through the device of dramatic irony) produces suspense or humor.
Integration of Knowledge and Ideas		
7. Analyze how illustrations, diagrams, multimedia elements, and words contribute to the meaning and tone of a print or digital text (e.g., graphic novel, multimedia presentation of fiction).	**7.** Compare and contrast a text to its filmed, staged, or multimedia version, including examining some techniques unique to each medium (e.g., lighting, sound, color, camera focus and angles).	**7.** Analyze to what degree a filmed or live production of a drama or story stays faithful to or departs from the script or text.
8. (Not applicable to literature)	**8.** (Not applicable to literature)	**8.** (Not applicable to literature)
9. Analyze stories in the same genre (e.g., mysteries, adventure stories), comparing and contrasting their approaches to similar themes and topics.	**9.** Analyze a specific case in which a modern work of fiction draws on patterns of events or character types found in traditional literature (e.g., the hero, the quest).	**9.** Compare a fictional portrayal of a time, place, or character to historical sources from the same period as a means of understanding how authors use or alter history.
Range and Level of Text Complexity		
10. Read literature independently, proficiently, and fluently in the grades 6–8 text complexity band; read texts at the high end of the range with scaffolding as needed.	**10.** Read literature independently, proficiently, and fluently in the grades 6–8 text complexity band; read "stretch" texts in the grades 9–10 text complexity band with scaffolding as needed.	**10.** Read literature independently, proficiently, and fluently in the grades 6–8 text complexity band; engage in sustained practice with "stretch" texts in the grades 9–10 text complexity band with scaffolding as needed.

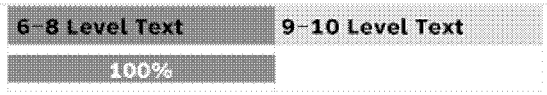
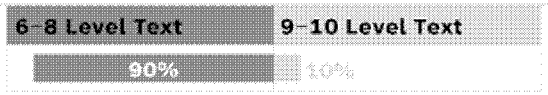
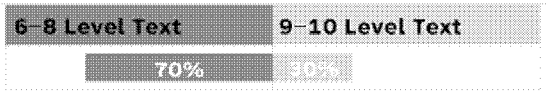
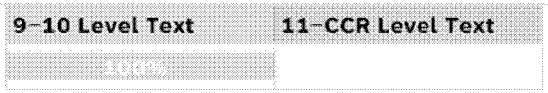
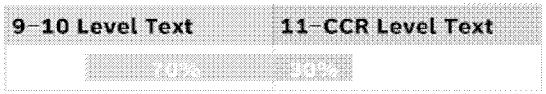
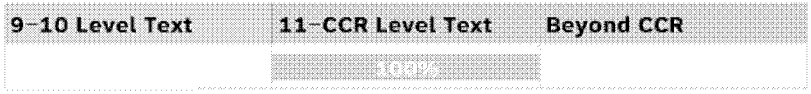
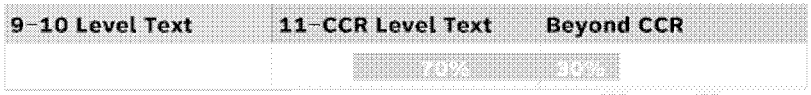
Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details	
1. Cite the evidence in the text that most strongly supports a specific analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves things uncertain.
2. Analyze in detail the development and refinement of a theme or central idea in a text, including how it emerges and how it is shaped and refined by specific details.	**2.** Analyze how multiple themes or central ideas in a text interact, build on, and, in some cases, conflict with one another.
3. Analyze how complex characters, including those with conflicting motivations or divided loyalties, develop over the course of a text, interact with other characters, and advance the plot or develop the theme.	**3.** Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).
Craft and Structure	
4. Evaluate how an author's use of language, including formality of diction, shapes meaning and tone in a text (e.g., how the language evokes a sense of time and place, how it sets a formal or informal tone).	**4.** Analyze in detail the condensed language of poems (or particularly rich language use in a narrative or drama), determining how specific word choices and multiple meanings shape the impact and tone.
5. Analyze how an author structures a text, orders events within it (e.g., parallel plots), and manipulates time (e.g., pacing) to create mystery, tension, or surprise.	**5.** Analyze how an author's choices concerning how to structure a text (e.g., electing at what point to begin or end a story) shape the meaning of the text.
6. Analyze a case in which the author's work takes a position or stance on a social issue or other topic and describe how the author carries out that purpose.	**6.** Analyze an author's use of satire, sarcasm, irony, understatement, or other means that requires a reader to understand various layers of meaning in a text.
Integration of Knowledge and Ideas	
7. Compare and contrast the representation of a subject or a key scene in two different artistic mediums (e.g., Auden's "Musée de Beaux Arts" and Breughel's *Landscape with the Fall of Icarus*).	**7.** Compare and contrast multiple interpretations of a drama or story (e.g., recorded or live productions), distinguishing how each version interprets the source text. (This includes 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. Analyze a wide range of nineteenth- and early-twentieth-century foundational works of American literature, comparing and contrasting approaches to similar ideas or themes in two or more texts from the same period.	**9.** Analyze how an author draws on and transforms fictional source material in a specific work (e.g., how Shakespeare draws on a story from Ovid or how a later author draws on a play by Shakespeare).
Range and Level of Text Complexity	
10. **In grade 9**, read literature independently, proficiently, and fluently in the grades 9–10 text complexity band; read texts at the high end of the range with scaffolding as needed. **In grade 10**, read literature independently, proficiently, and fluently in the grades 9–10 text complexity band; read "stretch" texts in the grades 11–CCR text complexity band with scaffolding as needed.	**10.** **In grade 11**, read literature independently, proficiently, and fluently in the grades 11–CCR text complexity band; read texts at the high end of the range with scaffolding as needed. **In grade 12**, read literature independently, proficiently, and fluently in the grades 11–CCR text complexity band; read "stretch" texts in the Beyond CCR text complexity band with scaffolding as needed.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Key Ideas and Details		
1. Cite specific textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite several sources of textual evidence when useful to support analysis of what the text says explicitly as well as inferences drawn from the text.	**1.** Cite a wide range of evidence throughout the text when useful to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Analyze how a central idea develops over the course of a text, drawing on key details.	**2.** Analyze how two or more central ideas in a text relate to one another, drawing on key details.	**2.** Provide an objective summary of a text, accurately conveying an author's view and specific points.
3. Determine the causes or reasons that link different events, ideas, or information in a text, drawing on key details.	**3.** Describe in detail how an author introduces, illustrates, and elaborates a key idea in a text (e.g., through examples or anecdotes).	**3.** Analyze how an author introduces, illustrates, and elaborates two or more significant ideas in a text, including how the relationship between the ideas is expressed.
Craft and Structure		
4. Interpret words and phrases as they are used in a text, including technical, figurative, and connotative meanings, and analyze how an author's choice of specific words in a text contributes to understanding the ideas or concepts.	**4.** Interpret words and phrases as they are used in a text, including technical, figurative, and connotative meanings, and describe in detail how an author's choice of specific words affects meaning and tone.	**4.** Explain the comparisons an author makes through metaphors, allusions, and analogies in a text and analyze how those comparisons contribute to meaning.
5. Describe the structure an author uses to organize a specific text, including how the major sections contribute to the whole.	**5.** Describe how any given sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes 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. Compare and contrast one author's point of view on events with that of another (e.g., a memoir written by and a biography on the same person).	**6.** Describe 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.** Compare and contrast the points of view and purposes of two authors writing about the same topic.
Integration of Knowledge and Ideas		
7. Compare and contrast the accounts of a subject in different mediums (e.g., a person's life story told in print, video, or multimedia), analyzing which details are emphasized and how the account unfolds in each version.	**7.** Compare and contrast the impression conveyed by a printed text to that conveyed when listening to or viewing a video or multimedia presentation of it (e.g., analyzing how the delivery of a speech affects its impact).	**7.** Evaluate the advantages and disadvantages of using different mediums (e.g., text, video, multimedia) to present a particular topic or idea.
8. Distinguish among fact, opinion, and reasoned judgment presented in a text.	**8.** Identify the stated and unstated premises of an argument and explain how they contribute to the conclusions reached.	**8.** Evaluate an argument's claims and reasoning as well as the degree to which evidence supports each claim.
9. Assess the similarities and differences between two or more texts on the same subject and apply the knowledge gained to inform reading of additional texts.	**9.** Analyze where two or more texts provide conflicting information on the same subject and determine whether the texts disagree on matters of fact or on matters of interpretation.	**9.** Compare and contrast 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.
Range and Level of Text Complexity		
10. Read informational text independently, proficiently, and fluently in the grades 6–8 text complexity band; read texts at the high end of the range with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 6–8 text complexity band; read "stretch" texts in the grades 9–10 text complexity band with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 6–8 text complexity band; engage in sustained practice with "stretch" texts in the grades 9–10 text complexity band with scaffolding as needed.

Grades 9–10 students:	Grades 11–12 students:
Key Ideas and Details	
1. Cite evidence in the text that most strongly supports a specific 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 things uncertain.
2. Analyze in detail the development and refinement of a central idea in a text, including how it emerges and is shaped and refined by specific details.	**2.** Analyze how multiple ideas in a text interact, build on, and, in some cases, conflict with one another.
3. Analyze the interactions between and among ideas and events, including how ideas and events influence one another.	**3.** Analyze in detail an author's ideas by describing how the ideas are developed and refined by specific sentences, paragraphs, and larger portions of a text.
Craft and Structure	
4. Evaluate how an author's use of language, including formality and type of diction, shapes meaning and tone in a text (e.g., the formality of a court opinion or a newspaper).	**4.** Interpret 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 and No. 51).
5. 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.	**5.** Analyze how an author's choices concerning how to structure a text (e.g., how reasons, evidence, and information are organized and emphasized) shape the meaning of the text.
6. Analyze documents of historical and literary significance, including foundational U.S. documents (e.g., the Declaration of Independence, the Preamble to the Constitution, the Bill of Rights) for their premises, purposes, and structure.	**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. Synthesize information presented in different formats (e.g., text, video, mutimedia) to generate a coherent understanding of an issue.	**7.** Synthesize and apply multiple sources of information presented in different formats in order to address a question or solve a problem, including resolving conflicting information.
8. Assess the truth of an argument's explicit and implicit premises by determining whether the evidence presented in the text justifies the conclusions.	**8.** Evaluate the reasoning and rhetoric that support an argument or explanation, including assessing the relevance and sufficiency of evidence and identifying false statements or fallacious reasoning.
9. Analyze how authors argue with or otherwise respond to one another's ideas or accounts of key events, evaluating the strength of each author's interpretation.	**9.** Synthesize explanations and arguments from diverse sources to provide a coherent account of events or ideas, including resolving conflicting information.
Range and Level of Text Complexity	
10. **In grade 9**, read informational text independently, proficiently, and fluently in the grades 9–10 text complexity band; read texts at the high end of the range with scaffolding as needed. **In grade 10**, read informational text independently, proficiently, and fluently in the grades 9–10 text complexity band; read "stretch" texts in the grades 11–CCR text complexity band with scaffolding as needed.	**10.** **In grade 11**, read informational text independently, proficiently, and fluently in the grades 11–CCR text complexity band; read texts at the high end of the range with scaffolding as needed. **In grade 12**, read informational text independently, proficiently, and fluently in the grades 11–CCR text complexity band; read "stretch" texts in the Beyond CCR text complexity band with scaffolding as needed.

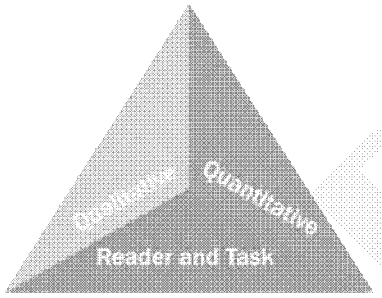
Range and Level of Text Complexity for Student Reading by Grade (Standard 10)

Students demonstrate proficiency in reading texts at the following ranges of text complexity to progress on a path to college and career readiness.

6		**In grade 6**, students focus on reading texts independently in the grades 6–8 text complexity band, with scaffolding likely required for texts at the high end of the range.
7		**In grade 7**, students focus on reading texts independently in the grades 6–8 text complexity band (90 percent) and are introduced to texts in the grades 9–10 text complexity band as "stretch" texts (10 percent), which will likely require scaffolding.
8		**In grade 8**, students focus on reading texts independently in the grades 6–8 text complexity band (70 percent) as well as sustained practice with texts in the grades 9–10 text complexity band as "stretch" texts (30 percent), which will likely require scaffolding.
9		**In grade 9**, students focus on reading texts independently in the grades 9–10 text complexity band, with scaffolding likely required for texts at the high end of the range.
10		**In grade 10**, students focus on reading texts independently in the grades 9–10 text complexity band (70 percent) and are introduced to texts in the grades 11–CCR text complexity band as "stretch" texts (30 percent), which will likely require scaffolding.
11		**In grade 11**, students focus on reading texts independently in the grades 11–CCR text complexity band, with scaffolding likely required for texts at the high end of the range.
12		**In grade 12**, students focus on reading texts independently in the grades 11–CCR text complexity band (70 percent) and are introduced to texts in the Beyond CCR text complexity band as "stretch" texts (30 percent), which will likely require scaffolding.

Note: In any given classroom, the actual range of students' reading ability could be greater than the proposed range. Some students will require extra time and intense support and scaffolding to enable them to read grade-level material, whereas other students will be ready for—and should be encouraged to read—more advanced texts.

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 to be assigned and the questions to be posed

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

College and Career Readiness Standards for Writing

The grades 6–12 standards on the following pages define what students should understand and be able to do in each grade and build toward the ten College and Career Readiness Standards.

Text Types and Purposes[1]

1. Write arguments to support a substantive claim with clear reasons and relevant and sufficient evidence.
2. Write informative/explanatory texts to convey complex information clearly and accurately through purposeful selection and organization of content.
3. Write narratives to convey real or imagined experiences, individuals, or events and how they develop over time.

Production and Distribution of Writing

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

Research to Build Knowledge

7. Perform short, focused research projects as well as more sustained research in response to a focused research question, demonstrating understanding of the material under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate and cite the information while avoiding plagiarism.
9. Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned.

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.[3]

[1]These broad categories of writing include many subgenres. See Appendix A for definitions of key writing types.
[2]See "Conventions" in Language, pages 47–50, for specific editing expectations.
[3]This standard is measured by the proficiency of student writing products.

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 as well as 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 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications. Growth in writing ability is characterized by an increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas. At the same time, the content and sources that students address in their writing grow in demand every year.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Text Types and Purposes		
1. Write arguments in which they: a. Introduce a claim about a topic or issue and organize the reasons and evidence to support the claim. b. Support the claim with clear reasons and relevant evidence. c. Use words, phrases, and clauses to convey the relationships among claims and reasons. d. Sustain an objective style and tone. e. Provide a concluding statement or section that follows from the argument.	**1.** Write arguments in which they: a. Introduce a claim about a topic or issue, acknowledge alternate or opposing claims, and organize the reasons and evidence logically to support the claim. b. Support the claim with logical reasoning and detailed, relevant evidence that demonstrate a comprehensive understanding of the topic. c. Use words, phrases, and clauses to convey the relationships among the claims, reasons, and evidence. d. Sustain an objective style and tone. e. Provide a concluding statement or section that follows logically from the argument.	**1.** Write arguments in which they: a. Introduce a claim about a topic or issue, distinguish it from alternate or opposing claims, and organize the reasons and evidence logically to support the claim. b. Support the claim with logical reasoning and detailed and relevant evidence from credible sources to demonstrate a comprehensive understanding of the topic. c. Use words, phrases, and clauses to make clear the relationships among claims, reasons, counterclaims, and evidence. d. Sustain an objective style and tone. e. Provide a concluding statement or section that follows logically from the argument.
2. Write informative/explanatory texts in which they: a. Introduce a topic and organize information appropriate to the purpose, using strategies such as definition, classification, comparison/contrast, and cause/effect. b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate links and varied sentence structures to join and clarify ideas. d. Use straightforward language to create an objective style appropriate for a reader seeking information. e. Provide a conclusion that follows logically from the information or explanation presented.	**2.** Write informative/explanatory texts in which they: a. Introduce and establish a topic that provides a sense of what is to follow and organize information appropriate to the purpose, using strategies such as definition, classification, comparison/contrast, and cause/effect. b. Develop the topic with relevant and accurate facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate links and varied sentence structures to create cohesion and clarify ideas. d. Use precise language and sustain an objective style appropriate for a reader seeking information. e. Provide a conclusion that follows logically from the information or explanation presented.	**2.** Write informative/explanatory texts in which they: a. Introduce and establish a topic and organize information under broader concepts or categories. b. Develop the topic with well-chosen, relevant, and accurate facts, concrete details, quotations, or other information and examples. c. Use varied links and sentence structures to create cohesion and clarify information and ideas. d. Use precise language and domain-specific and technical wording (when appropriate) and sustain a formal, objective style appropriate for a reader seeking information. e. Provide a conclusion that follows logically from the information or explanation presented.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Text Types and Purposes (continued)		
3. Write narratives in which they: a. Engage and orient the reader by establishing a context and point of view, and organize a sequence of events or experiences. b. Develop narrative elements (e.g., setting, event sequence, characters) using relevant sensory details. c. Use a variety of transition words, phrases, and clauses to convey sequence, shift from one time frame or setting to another, and/or show the relationships among events and experiences. d. Choose words and phrases to develop the events, experiences, and ideas precisely. e. Provide a satisfying conclusion that follows from the events, experiences, or ideas.	**3.** Write narratives in which they: a. Engage and orient the reader by establishing a context and point of view, and purposefully organize a sequence of events or experiences. b. Develop narrative elements (e.g., setting, conflict, complex characters) with relevant and specific sensory details. c. Use a variety of techniques to convey sequence, shift from one time frame or setting to another, and/or show the relationships among events or experiences. d. Choose words and phrases to develop the events, experiences, and ideas precisely and to create mood. e. Provide a satisfying conclusion that follows from the events, experiences, or ideas.	**3.** Write narratives in which they: a. Engage and orient the reader by establishing a context and point of view, and purposefully organize a progression of events or experiences. b. Develop narrative elements (e.g., setting, plot, event sequence, complex characters) with well-chosen, relevant, and specific sensory details. c. Use a variety of techniques to convey sequence in multiple storylines, shift from one time frame or setting to another, and/or show the relationships among events or experiences. d. Choose words and phrases to effectively develop the events, experiences, and ideas precisely and to create mood. e. Provide a satisfying conclusion that follows from the events, experiences, or ideas.
Production and Distribution of Writing		
4. Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1–3 above.)	**4.** Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1–3 above.)	**4.** Produce writing in which the organization, development, substance, 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, strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	**5.** With some guidance and support from peers and adults, strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach after rethinking how well questions of purpose have been addressed.	**5.** With some guidance and support from peers and adults, strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach after rethinking how well questions of purpose and context have been addressed.
6. Use technology, including the Internet, to produce, publish, and interact with others about writing, including linking to and citing online sources.	**6.** Use technology, including the Internet, to produce, publish, and interact with others about writing, including presenting and citing information in a digital format.	**6.** Use technology, including the Internet, to present and cite information effectively in a digital format, including when publishing and responding to writing.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Research to Build Knowledge		
7. Perform short, focused research projects in response to a question and refocus the inquiry in response to further research and investigation.	**7.** Perform short, focused research projects in response to a question and generate additional related and focused questions for further research and investigation.	**7.** Perform short, focused research projects in response to a question and generate additional related 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 documenting 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, avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple print and digital sources using advanced search features; assess the credibility and accuracy of each source; and quote or paraphrase the evidence, avoiding plagiarism and following a standard format for citation.
9. Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned. a. Apply *grade 6 reading standards* to literature (e.g., "Analyze stories in the same genre (e.g., mysteries, adventure stories), comparing and contrasting their approaches to similar themes and topics."). b. Apply *grade 6 reading standards* to literary nonfiction (e.g., "Distinguish among fact, opinion, and reasoned judgment presented in a text").	**9.** Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned. a. Apply *grade 7 reading standards* to literature (e.g., "Analyze a specific case in which a modern work of fiction draws on patterns of events or character types found in traditional literature (e.g., the hero, the quest). b. Apply *grade 7 reading standards* to literary nonfiction (e.g., "Identify the stated and unstated premises of an argument and explain how they contribute to the conclusions reached").	**9.** Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned: a. Apply *grade 8 reading standards* to literature (e.g., "Compare a fictional portrayal of a time, place, or character to historical sources from the same period as a means of understanding how authors use or alter history"). b. Apply *grade 8 reading standards* to literary nonfiction (e.g., "Evaluate an argument's claims and reasoning as well as the degree to which evidence supports each claim").
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.	**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.

Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes	
1. Write arguments which they: a. Introduce a precise claim, distinguish it from alternate or opposing claims, and provide an organization that establishes clear relationships among the claim, reasons, and evidence. b. Develop a claim and counterclaim fairly, supplying evidence for each, while pointing out the strengths of their own claim and the weaknesses of the counterclaim. c. Use precise words, phrases, and clauses to make clear the relationships between claims and reasons, between reasons and evidence, and between claims and counterclaims. d. Sustain an objective style and tone while attending to the norms and conventions of the specific discipline as well as to the audience's knowledge of the issue. e. Provide a concluding statement or section that follows logically from the argument and offers a reflection or recommendation.	**1.** Write arguments in which they: a. Introduce a substantive claim, establish its significance, distinguish it from alternate or opposing claims, and create an organization so that claims, reasons, and evidence are purposefully and logically sequenced. b. Develop a claim and counterclaim thoroughly and fairly, supplying the most relevant evidence, while pointing out the strengths of their own claim and the weaknesses of the counterclaim. c. Use precise words, phrases, and complex syntax to make explicit the relationships between claims and reasons, between reasons and evidence, and between claims and counterclaims. d. Sustain an objective style and tone while attending to the norms and conventions of the specific discipline as well as to the audience's knowledge, values, and possible biases. e. Provide a concluding statement or section that follows logically from the argument and offers a reflection or recommendation.
2. Write informative/explanatory texts in which they: a. Introduce a topic and organize information under broader concepts and categories to make clear the connections and distinctions between key ideas appropriate to the purpose; include formatting (e.g., headings) and graphics (e.g., figures, tables) when useful to clarify ideas. b. Develop a complex topic through well-chosen, relevant, and sufficient facts, concrete details, quotations, extended definitions, or other information and examples. c. Use varied transitions and sentence structures to create cohesion, clarify information and ideas, and link major sections in the text. d. Use precise language and domain-specific and technical wording (when appropriate) to manage the complexity of the topic in a style that responds to the specific discipline and context as well as to the expertise of likely readers. e. Provide a conclusion that follows logically from the information or explanation provided and articulates the implications or significance of the topic.	**2.** Write informative/explanatory texts in which they: a. Introduce a complex topic and organize the information at multiple levels of the text so that each new piece of information builds on that which precedes it to create a unified whole; include formatting (e.g., headings) and graphics (e.g., figures, tables) when useful to clarify ideas. b. Thoroughly develop aspects of a complex topic through the purposeful selection of the most significant and relevant facts, concrete details, quotations, extended definitions, or other information and examples. c. Use varied transitional devices and sentence structures to create cohesion, clarify complex ideas, and link the major sections of the text. d. Use precise language, domain-specific and technical wording (when appropriate), and techniques such as metaphor, simile, and analogy to manage the complexity of the topic in a style that responds to the specific discipline and context as well as to the expertise of likely readers. e. Provide a well-developed conclusion that follows logically from the information or explanation provided and articulates the implications or significance of the topic.

Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes (continued)	
3. Write narratives in which they: a. Engage the reader by establishing a problem, situation, or observation and purposefully organize a progression of events or experiences. b. Develop narrative elements (e.g., setting, event sequence, complex characters) with well-chosen, revealing details. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. d. Use precise language to develop a picture of how the events, experiences, and ideas emerge and unfold. e. Provide a satisfying conclusion that follows from what is experienced, observed, or resolved over the course of the narrative.	**3.** Write narratives in which they: a. Engage the reader by establishing the significance of a problem, situation, or observation and purposefully organize events or experiences. b. Develop narrative elements (e.g., setting, stance, event sequence, complex characters) with purposefully selected details that call readers' attention to what is most distinctive or worth noticing. c. Use a variety of techniques to build toward a particular impact (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise language to develop the events, experiences, and ideas clearly and to reinforce the style. e. Provide a satisfying conclusion that follows from what is experienced, observed, or resolved over the course of the narrative.
Production and Distribution of Writing	
4. Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for this standard are defined in Standards 1–3 above.)	**4.** Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for this standard are defined in Standards 1–3 above.)
5. Strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific task and context.	**5.** 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 collaborate on a shared writing product, incorporating diverse and sometimes conflicting feedback.	**6.** Demonstrate command of technology, including the Internet, to produce, publish, and update work in response to ongoing feedback, including fresh arguments or new information.
Research to Build Knowledge	
7. Perform short, focused research projects and more sustained research; synthesize multiple sources on a subject to answer a question or solve a problem.	**7.** Perform short, focused research projects and more sustained research; synthesize multiple authoritative sources on a subject to answer a question or solve a problem.
8. Assemble evidence gathered from authoritative print and digital sources; assess the credibility and accuracy of the information and its strengths and limitations in terms of answering the research question; and integrate selected information into the text, avoiding overreliance on any one source and following a standard format for citation.	**8.** Analyze evidence gathered from multiple authoritative print and digital sources; assess the credibility and accuracy of the information and its usefulness and relevance for the specific task, purpose, and audience; and integrate selected information into the text, following a standard format for citation.

Grades 9–10 students:	Grades 11–12 students:
Research to Build Knowledge (continued)	
9. Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned. a. Apply *grades 9–10 reading standards* to literature (e.g., "Analyze a wide range of nineteenth- and early-twentieth-century foundational works of American literature, comparing and contrasting approaches to similar ideas or themes in two or more texts from the same period."). b. Apply *grades 9–10 reading standards* to literary nonfiction (e.g., "Assess the truth of an argument's explicit and implicit premises by determining whether the evidence presented in the text justifies the conclusions").	**9.** Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned. a. Apply *grades 11–12 reading standards* to literature (e.g., "Analyze how an author draws on and transforms fictional source material, such as how Shakespeare draws on a story from Ovid, or a later author draws on Shakespeare"). b. Apply *grades 11–12 reading standards* to literary nonfiction (e.g., "Evaluate the reasoning and rhetoric that support an argument or explanation, including assessing the relevance and sufficiency of evidence and identifying false statements or fallacious reasoning").
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.

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College and Career Readiness Standards for Speaking and Listening

The grades 6–12 standards on the following pages define what students should understand and be able to do in each grade and build toward the six College and Career Readiness Standards.

Comprehension and Collaboration

1. Participate effectively in a range of interactions (one-on-one and in groups), exchanging information to advance a discussion and to build on the input of others.
2. Integrate and evaluate information from multiple oral, visual, or multimodal sources in order to answer questions, solve problems, or build knowledge.
3. Evaluate the speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, evidence, and reasoning in a clear and well-structured way appropriate to purpose and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating a 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—whole class, small group, 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.

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Speaking and Listening Standards 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Comprehension and Collaboration		
1. Initiate and engage actively in group discussions on *grade 6 topics, texts, and issues* being studied in class. a. Prepare for discussions by completing reading or conducting research and explicitly draw on that material in discussions. b. Cooperate with peers to set clear goals and deadlines. c. Build on the ideas of others by asking relevant questions and contributing appropriate and essential information. d. Review the key ideas expressed and extend their own thinking in light of new information learned.	**1.** Initiate and engage actively in group discussions on *grade 7 topics, texts, and issues* being studied in class. a. Prepare for discussions by completing reading or conducting research and explicitly draw on that material in discussions. b. Cooperate with peers to set clear goals and deadlines. c. Advance a discussion by asking questions, responding precisely, and sharing factual knowledge and observations. d. Ensure a hearing for the range of positions on an issue. e. Take the views of others into account and, when warranted, modify their own views in light of the evidence presented.	**1.** Initiate and engage actively in group discussions on *grade 8 topics, texts, and issues* being studied in class. a. Prepare for discussions by completing reading or conducting research and explicitly draw on that material in discussions. b. Cooperate with peers to set clear goals and deadlines. c. Advance a discussion by asking questions, responding precisely, and sharing factual knowledge and observations supported by credible evidence. d. Ensure a hearing for the range of positions on an issue. e. Qualify or justify, when warranted, their own thinking after listening to others' questions or accounts of the evidence.
2. Interpret information presented in visual or multimodal formats and explain how the information clarifies and contributes to a topic or issue under study.	**2.** Determine the main ideas and supporting elements presented in oral, visual, or multimodal formats and explain how the information clarifies and contributes to an understanding of a topic or issue under study.	**2.** Determine the purpose of and perspectives represented in oral, visual, or multimodal formats and evaluate whether the information is laden with social, commercial, or political motives.
3. Delineate the claims made by a speaker or presenter and detail what evidence supports which claims.	**3.** Evaluate a speaker's or presenter's reasoning and claims as well as the degree to which each claim is logically supported by the evidence provided.	**3.** Assess the truth of a speaker's or presenter's premises and the validity of his or her conclusions.
Presentation of Knowledge and Ideas		
4. Present information, emphasizing salient points with pertinent descriptions and details and using appropriate eye contact, adequate volume, and clear pronunciation.	**4.** Present claims and findings with relevant and specific descriptions, facts, and examples, and use appropriate eye contact, adequate volume, and clear pronunciation.	**4.** Present claims and findings with relevant evidence that is accessible and verifiable to listeners, and use appropriate eye contact, adequate volume, and clear pronunciation.
5. Incorporate digital media and visual displays of data when helpful and in a manner that strengthens the presentation.	**5.** Incorporate digital media and visual displays of data when helpful and in a manner that strengthens the presentation.	**5.** Incorporate digital media and visual displays of data when helpful and in a manner that strengthens the presentation.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating a command of formal English when indicated or appropriate. (See "Conventions" in Language, on pages 47–50, for specific demands.)	**6.** Adapt speech to a variety of contexts and communicative tasks, demonstrating a command of formal English when indicated or appropriate. (See "Conventions" in Language, pages 47–50, for specific demands.)	**6.** Adapt speech to a variety of contexts and communicative tasks, demonstrating a command of formal English when indicated or appropriate. (See "Conventions" in Language, pages 47–50, for specific demands.)

Grades 9–10 students:	Grades 11–12 students:
Comprehension and Collaboration	
1. Initiate and participate effectively in group discussions on *grades 9–10 topics, texts, and issues* being studied in class. a. Prepare for discussions by reading and researching material under study and explicitly draw on that preparation in discussions. b. Cooperate with peers to set clear goals and deadlines and to establish roles. c. Build on essential information from others' input by asking questions and sharing comments that enrich discussions. d. Acknowledge the ideas and contributions of others in the group, reach decisions about the information and ideas under discussion, and complete the task. e. Evaluate whether the team has met its goals.	**1.** Initiate and participate effectively in group discussions on *grades 11–12 topics, texts, and issues* being studied in class. a. Prepare for discussions by distilling the evidence or information about the material under study and explicitly draw on that preparation in discussions. b. Cooperate with peers to set clear goals and deadlines, establish roles, and determine ground rules for decision making (e.g., informal consensus, taking votes on key issues, presentation of alternate views). c. Propel conversations forward by asking questions that test the evidence and by sharing findings that clarify, verify, or challenge ideas and conclusions. d. Summarize accurately the comments and claims made on all sides of an issue and determine what additional information, research, and tasks are required for the team to complete the task. e. Evaluate whether the team has met its goals.
2. Synthesize information presented visually or multimodally with other information presented orally, noting any discrepancies between the data that emerge as a result.	**2.** Integrate multiple streams of data presented through various mediums, evaluating the reliability and credibility of each source of information in order to answer questions, solve problems, or build knowledge.
3. Determine a speaker's or presenter's position or point of view by assessing the evidence, word choice, points of emphasis, and tone used.	**3.** Evaluate the information conveyed and rhetoric used by a speaker or presenter, identifying logical errors in reasoning and exaggerated or distorted evidence.
Presentation of Knowledge and Ideas	
4. Plan and deliver relevant and sufficient evidence in support of findings and claims such that listeners can follow the reasoning, adjusting presentation to particular audiences and purposes.	**4.** Plan and deliver focused and coherent presentations that convey clear and distinct perspectives such that the line of reasoning and sources of support are clear and alternative perspectives are addressed, adjusting presentation to particular audiences and purposes.
5. Make strategic use of digital media elements and visual displays of data to enhance understanding.	**5.** Make strategic use of digital media elements and visual displays of data to enhance understanding.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating a command of formal English when indicated or appropriate. (See "Conventions" in Language, pages 47–50, for specific demands.)	**6.** Adapt speech to a variety of contexts and communicative tasks, demonstrating a command of formal English when indicated or appropriate. (See "Conventions" in Language, pages 47–50, for specific demands.)

College and Career Readiness Standards for Language

The grades 6–12 standards on the following pages define what students should understand and be able to do in each grade and build toward the six College and Career Readiness Standards.

Conventions in Writing and Speaking

1. Demonstrate a command of the conventions of standard English grammar and usage.
2. Demonstrate a command of the conventions of capitalization, punctuation, and spelling.
3. Make effective choices about language, punctuation, and sentence structure for meaning and style.

Vocabulary Acquisition and Use

4. Determine the meaning of words and phrases encountered through conversations, reading, and media use.
5. Understand the nuances of and relationships among words.
6. Use grade-appropriate general academic vocabulary and domain-specific words and phrases purposefully acquired as well as gained through conversation and reading and responding to texts.

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 writing and speaking and have extensive vocabularies built through reading and study. They must have a well-developed understanding of standard written and spoken English, demonstrating command of the conventions of grammar, usage, and mechanics. They also must come to appreciate that language is as much a matter of craft as of rules and be able to use punctuation, words, phrases, clauses, and sentences to achieve particular rhetorical effects and to convey ideas precisely and concisely. They need to become highly skilled in determining the meanings of words 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 and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.

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Language Standards 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. They offer a focus for instruction in each year to help ensure that students gain adequate exposure to a range of skills and applications.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Conventions in Writing and Speaking		
1. Observe conventions of grammar and usage. a. Ensure that pronouns are in the proper case (subjective, objective, possessive). b. Recognize and correct inappropriate shifts in pronoun number and person.* c. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*	**1.** Observe conventions of grammar and usage. a. Explain the function of phrases and clauses in general and their functions in specific sentences. b. Chose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. c. Place phrases and clauses within a sentence, avoiding misplaced and dangling modifiers.*	**1.** Observe conventions of grammar and usage. a. Form and use verbs in the active and passive voice. b. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive moods. c. Recognize and correct inappropriate shifts in verb voice and mood.*
2. Observe conventions of capitalization, punctuation, and spelling. a. Use commas, parentheses, or dashes to set off nonrestrictive/parenthetical elements.* b. Spell correctly.	**2.** Observe conventions of capitalization, punctuation, and spelling. a. Use a comma before a coordinating conjunction in a compound sentence. b. Spell correctly.	**2.** Observe conventions of capitalization, punctuation, and spelling. 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. Use a comma, ellipses, or dash to indicate a pause or break. c. Spell correctly.
3. Make effective language choices. a. Vary sentence patterns for meaning, reader/listener interest, and style.*	**3.** Make effective language choices. a. Choose words and phrases that express ideas concisely, eliminating wordiness and redundancy.*	**3.** Make effective language choices. a. Use verbs in the active and passive voice and in the conditional and subjunctive moods to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

* Conventions standards noted with an asterisk need to be revisited by students in subsequent grades. See page 51 for a complete listing.

Grade 6 students:	Grade 7 students:	Grade 8 students:
Vocabulary Acquisition and Use		
4. Determine word meanings (*based on grade 6 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., sentence and paragraph context, the organizational pattern of the text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; and consulting reference materials, both print and digital. b. Use a known root as a clue to the meaning of an unknown word (e.g., *audience*, *auditory*, *audible*). c. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or looking up the word in a dictionary). d. Interpret various figures of speech (e.g., personification) relevant to particular texts.	**4.** Determine word meanings (*based on grade 7 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., sentence and paragraph context, the organizational pattern of the text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; and consulting reference materials, both print and digital. b. Use a known root as a clue to the meaning of an unknown word (e.g., *belligerent*, *bellicose*, *rebel*). c. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or looking up the word in a dictionary). d. Interpret various figures of speech (e.g., allegory) relevant to particular texts.	**4.** Determine word meanings (*based on grade 8 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., sentence and paragraph context, the organizational pattern of the text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; and consulting reference materials, both print and digital. b. Use a known root as a clue to the meaning of an unknown word (e.g., *precede*, *recede*, *secede*). c. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or looking up the word in a dictionary). d. Interpret various figures of speech (e.g. verbal irony, puns) relevant to particular texts.
5. Understand word relationships. a. Trace the network of uses and meanings that different words have and the interrelationships among those meanings and uses. b. Distinguish a word from other words with similar denotations but different connotations.	**5.** Understand word relationships. a. Trace the network of uses and meanings different words have and the interrelationships among those meanings and uses. b. Distinguish a word from other words with similar denotations but different connotations.	**5.** Understand word relationships. a. Trace the network of uses and meanings different words have and the interrelationships among those meanings and uses. b. Distinguish a word from other words with similar denotations but different connotations.
6. Use grade-appropriate general academic vocabulary and English language arts–specific words and phrases taught directly and gained through reading and responding to texts.	**6.** Use grade-appropriate general academic vocabulary and English language arts–specific words and phrases taught directly and gained through reading and responding to texts.	**6.** Use grade-appropriate general academic vocabulary and English language arts–specific words and phrases taught directly and gained through reading and responding to texts.

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Grades 9–10 students:	Grades 11–12 students:
Conventions in Writing and Speaking	
1. Observe conventions of grammar and usage. a. Use parallel structure in writing.* 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. a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. b. Resolve complex usage issues, particularly when the issue involves contested or changing usage; consult references (e.g., *Merriam-Webster's Dictionary of English Usage*) as needed for guidance.
2. Observe conventions of capitalization, punctuation, and spelling. 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. a. Observe the conventions concerning using hyphens to join words. b. Spell correctly.
3. Make effective language choices. a. Write and edit work so that it conforms to the guidelines in a style manual.	**3.** Make effective language choices. a. Write and edit work so that it conforms to the guidelines in a style manual.
Vocabulary Acquisition and Use	
4. Determine word meanings (*based on grades 9–10 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., sentence, paragraph, and whole-text context; the organizational pattern of the text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; understanding the word's etymology; and consulting reference materials, both print and digital. b. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or looking up the word in a dictionary). c. Interpret various figures of speech (e.g., hyperbole, paradox) and analyze their role in a text.	**4.** Determine word meanings (*based on grades 11–12 reading*). a. Determine or clarify the meaning of unknown or multiple-meaning words through the use of one or more strategies, such as using semantic clues (e.g., sentence, paragraph, and whole-text context; the organizational pattern of the text); using syntactic clues (e.g., the word's position or function in the sentence); analyzing the word's sounds, spelling, and meaningful parts; understanding the word's etymology; and consulting reference materials, both print and digital. b. Verify the preliminary determination of a word's meaning (e.g., by checking the inferred meaning in context or looking up the word in a dictionary). c. Interpret various figures of speech (e.g., satire, sarcasm) and analyze their role in a text.
5. Understand word relationships. a. Trace the network of uses and meanings different words have and the interrelationships among those meanings and uses. b. Distinguish a word from other words with similar denotations but different connotations.	**5.** Understand word relationships. a. Trace the network of uses and meanings different words have and the interrelationships among those meanings and uses. b. Distinguish a word from other words with similar denotations but different connotations.
6. Use grade-appropriate general academic vocabulary and English language arts–specific words and phrases taught directly and gained through reading and responding to texts.	**6.** Use grade-appropriate general academic vocabulary and English language arts–specific words and phrases taught directly and gained through reading and responding to texts.

* Conventions standards noted with an asterisk need to be revisited by students in subsequent grades as their writing and speak grow in sophistication. See page 51 for a complete listing.

English Language Arts Conventions Progressive Skills, By Standard

The following, marked with an asterisk (*) in the Conventions standards, are skills and understandings that require continued attention in higher grades (after their introduction in the grade listed below) as they are applied to increasingly sophisticated writing and speaking.

Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grades 9–10
1c. Ensure subject-verb and pronoun-antecedent agreement. **3a.** Choose words for effect.						
	1b. Form and use adjectives and adverbs (including comparative and superlative forms), placing them appropriately within sentences. **1c.** Produce complete sentences, avoiding rhetorically poor fragments and run-ons. **1d.** Correctly use frequently confused words (e.g., *effect/affect*, *to/too/two*). **3a.** Use punctuation for effect. **3b.** Maintain consistency in style and tone. **3c.** Choose words and phrases to convey ideas precisely.					
		1b. Recognize and correct inappropriate shifts in verb tense and aspect. **2a.** Use punctuation to separate items in a series. **3a.** Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.				
			1b. Recognize and correct inappropriate shifts in pronoun number and person. **1c.** Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). **2a.** Use commas, parentheses, or dashes to set off nonrestrictive/parenthetical elements. **3a.** Vary sentence patterns for meaning, reader/listener interest, and style.			
				1c. Place phrases and clauses within a sentence, avoiding misplaced and dangling modifiers. **3b.** Choose words and phrases that express ideas concisely, eliminating wordiness and redundancy.		
					1c. Recognize and correct inappropriate shifts in verb voice and mood.	
						1a. Use parallel structure in writing.

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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 and argument 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 media sources) written for a broad audience

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

	Literature: Stories, Drama, 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.) 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 topics in depth.

Standards for Literacy in History/Social Studies & Science

6–12

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College and Career Readiness Standards for Reading

The grades 6–12 standards on the following pages define what students need to know and be able to do and build toward the ten College and Career Readiness Standards.

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 in detail where, when, why, and how events, ideas, and characters 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 or chapter) 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. Synthesize and apply information presented in diverse ways (e.g., through words, images, graphs, and video) in print and digital sources in order to answer questions, solve problems, or compare modes of presentation.[1]
8. Delineate and evaluate the reasoning and rhetoric within a text, including assessing whether the evidence provided is relevant and sufficient to support the text's claims.
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 and Level of Text Complexity

10. Read complex texts independently, proficiently, and fluently, sustaining concentration, monitoring comprehension, and, when useful, rereading.[2]

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

[2]Proficiency in this standard is measured by students' ability to read a range of appropriately complex text in each grade as defined in Appendix A.

Note on range and content of student reading

Reading is critical to building knowledge in history/social studies as well as in science and other technical fields. 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 text 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 History/Social Studies 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. The standards below begin at grade 6; standards for K–5 reading in history/social studies are integrated into the K–5 standards for reading informational text.

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 main ideas or information of a primary or secondary source; summarize the source, basing the summary on information in the text rather than on prior knowledge or opinions.	**2.** Determine the main ideas or information of a primary or secondary source; summarize how key events or ideas develop over the course of the text.	**2.** Determine the main ideas or information of a primary or secondary source; provide a summary that makes clear the relationships between 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 and the causes that link the events; distinguish whether earlier events caused later ones or simply preceded them.	**3.** Analyze how ideas and beliefs emerge, develop, and influence events, based on evidence in the text .
Craft and Structure		
4. Determine the meaning of words and phrases in a text, including vocabulary specific to domains related to history/social studies.	**4.** Determine the meaning of words and phrases in a text, including the vocabulary describing political, economic, or social aspects of history.	**4.** Interpret the meaning of words and phrases in a text, including 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 and No. 51).
5. Identify how a history/social studies text presents information (e.g., sequentially, comparatively, causally).	**5.** Explain how an author chooses to structure information or an explanation in a text 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 historical 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, evidence, and reasoning.
Integration of Knowledge and Ideas		
7. Integrate graphical information (e.g., pictures, videos, maps, time lines) with other information in a print or digital text.	**7.** Integrate quantitative or technical information presented in maps, time lines, and videos with other information in a print or digital text.	**7.** Synthesize ideas and data presented graphically and determine their relationship to the rest of a print or digital text, noting discrepancies between the graphics and other information in the text.
8. Distinguish among fact, opinion, and reasoned judgment in a historical account.	**8.** Assess the extent to which the evidence n 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 and Level of Text Complexity		
10. Read informational text independently, proficiently, and fluently in the grades 6–8 text complexity band; read "stretch" texts with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 9–10 text complexity band; read "stretch" texts with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 11–12 text complexity band; read "stretch" texts with scaffolding as needed.

Reading Standards for Science 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. The standards below begin at grade 6; standards for K–5 reading in science are integrated into the K–5 standards for reading informational text.

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 scientific and technical texts.	**1.** Cite specific textual evidence to support analysis of scientific and technical text, including analysis of the precise details of explanations or descriptions.	**1.** Cite specific textual evidence to support analysis of scientific and technical texts, including analysis of important distinctions the author makes between ideas or pieces of information.
2. Summarize the broad ideas and specific conclusions made in a text, basing the summary on textual information rather than on prior knowledge or opinions.	**2.** Analyze the development of a text's explanation of a process or phenomenon, summarizing the central ideas and supporting details.	**2.** Summarize complex information or ideas presented in a text, paraphrasing it 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.	**3.** Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the causes of the specific results based on information from the text.
Craft and Structure		
4. Determine the meaning of key terms, symbols, and domain-specific vocabulary used in a text.	**4.** Determine the meaning of key terms, symbols, and domain-specific vocabulary used in a text, noting relationships among terms pertaining to important ideas or processes (e.g., *force*, *friction*, *reaction force*, *energy*).	**4.** Determine the meaning of key terms, symbols, and domain-specific vocabulary used in a text, attending to the precise meaning of terms as they are used in particular scientific or technical contexts.
5. Analyze how each major part of a text contributes to an understanding of the topic discussed in the text.	**5.** Analyze the relationships among concepts in a text, including developing propositional concept maps to organize and illustrate the ideas.	**5.** Analyze the hierarchical or categorical relationships of concepts or information presented in a text.
6. Analyze the purpose of an experiment or explanation in a text, including defining the problem or question to be resolved.	**6.** Analyze the purpose of an experiment, including defining the possibilities ruled out by the experimental results.	**6.** Analyze the scope and purpose of an experiment or explanation and determine which related issues remain unresolved or uncertain.
Integration of Knowledge and Ideas		
7. Integrate 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.** Integrate quantitative or technical information presented graphically (e.g., in a flowchart, diagram, model, graph, or table) with other information in a text.	**7.** Synthesize information in different formats by representing complex information in a text in graphical form (e.g., a table or chart) or translating a graphic or equation into words.
8. Distinguish facts or reasoned judgments based on research findings from opinions.	**8.** Assess the extent to which the evidence in a text supports a scientific claim or a recommendation for solving a technical problem.	**8.** Evaluate the hypotheses, data, and conclusions in a scientific text, corroborating or undercutting them with 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 experimental findings presented in a text to information from other sources, noting when the findings support or contradict previous explanations or accounts.	**9.** Integrate information from diverse sources (e.g., video, multimedia sources, experiments, simulations) into a coherent understanding of a concept, process, or phenomenon, noting discrepancies among sources.
Range and Level of Text Complexity		
10. Read informational text independently, proficiently, and fluently in the grades 6–8 text complexity band; read "stretch" texts with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 9–10 text complexity band; read "stretch" texts with scaffolding as needed.	**10.** Read informational text independently, proficiently, and fluently in the grades 11–CCR text complexity band; read "stretch" texts with scaffolding as needed.

College and Career Readiness Standards for Writing

The grades 6–12 standards on the following pages define what students need to know and be able to do and build toward these ten College and Career Readiness Standards.

Text Types and Purposes[1]

1. Write arguments to support a substantive claim with clear reasons and relevant and sufficient evidence.
2. Write informative/explanatory texts to convey complex information clearly and accurately through purposeful selection and organization of content.
3. Write narratives to convey real or imagined experiences, individuals, or events and how they develop over time.

Production and Distribution of Writing

4. Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience.
5. Strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce, publish, and interact with others about writing.

Research to Build Knowledge

7. Perform short, focused research projects as well as more sustained research in response to a focused research question, demonstrating understanding of the material under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate and cite the information while avoiding plagiarism.
9. Write in response to literary or informational sources, drawing evidence from the text to support analysis and reflection as well as to describe what they have learned.

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.[2]

[1]These broad categories of writing include many subgenres. See Appendix A for definitions of key writing types.
[2]This standard is measured by the proficiency of student writing products.

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 History/Social Studies and Science 6–12

Following are the standards for grades 6–12, which relate to their College and Career Readiness counterparts by number. The standards below begin at grade 6; standards for K–5 writing in history/social studies and science are integrated into the K–5 standards for writing.

Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes		
1. Write arguments focused on *discipline-specific content* in which they: a. Introduce a claim about a topic or issue, distinguish it from alternate or opposing claims, and organize the reasons, data, and evidence logically to support the claim. b. Support the claim with logical reasoning and detailed, accurate data and evidence (science) or information from credible primary, secondary, and tertiary sources (history). c. Use words and phrases as well as domain-specific vocabulary to make clear the relationships among claims, reasons, data, and evidence. d. Sustain an objective style and tone. e. Provide a concluding statement or section that follows logically from the argument.	**1.** Write arguments focused on *discipline-specific content* in which they: a. Introduce a precise claim, distinguish it from alternate or opposing claims, and provide an organization that establishes clear relationships among the claim, reasons, data, and evidence. b. Develop a claim fairly with logical reasoning, supplying detailed, accurate data and evidence acquired in a scientifically acceptable form (science) or gathered from credible primary, secondary, and tertiary sources (history). c. Use precise words and phrases as well as domain-specific vocabulary to make clear the relationships between claims and reasons and between reasons and the data and evidence. d. Sustain an objective style and tone while attending to the norms and conventions of the specific discipline. e. Provide a concluding statement or section that follows logically from the argument.	**1.** Write arguments focused on *discipline-specific content* in which they: a. Introduce a substantive claim, establish its significance, distinguish it from alternate or opposing claims, and create an organization so that claims, reasons, data, and evidence are purposefully and logically sequenced. b. Develop a claim thoroughly and fairly with logical reasoning, supplying the most relevant data and evidence acquired in a scientifically acceptable form (science) or gathered from credible primary, secondary, and tertiary sources (history). c. Use precise words and phrases as well as domain-specific vocabulary to make clear the relationships between claims and reasons and between reasons and the data and evidence. d. Sustain an objective style and tone while attending to the norms and conventions of the specific discipline. e. Provide a concluding statement or section that follows logically from the argument.

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Grades 6–8 students:	Grades 9–10 students:	Grades 11–12 students:
Text Types and Purposes (continued)		
2. Write informative/explanatory texts, including the narration of historical events or scientific procedures/experiments, in which they: a. Introduce and establish a topic and organize information under concepts or into categories. b. Develop a topic that has historical or scientific significance using well-chosen, relevant facts, data, details, quotations, examples, or other information. c. Use varied links and sentence structures to create cohesion and clarify information and ideas. d. Use precise language and domain-specific vocabulary and sustain a formal, objective style appropriate for a reader seeking information. e. Provide a conclusion that follows logically from the information or explanation presented.	**2.** Write informative/explanatory texts, including the narration of historical events or scientific procedures/experiments, in which they: a. Introduce a topic and organize information under concepts and into categories, making clear the connections and distinctions between key ideas; use formatting and graphics (e.g., headings, figures, tables, graphs, illustrations) as useful to clarify ideas. b. Develop a topic that has historical or scientific significance using well-chosen, relevant, and sufficient facts, data, details, quotations, examples, extended definitions, or other information. c. Use varied transitions and sentence structures to create cohesion, clarify information and ideas, and link major sections in the text. d. Use precise language and domain-specific vocabulary to convey a style appropriate to the specific discipline and context as well as to the expertise of likely readers. e. Provide a conclusion that follows logically from the information or explanation provided and that articulates the implications or significance of the topic.	**2.** Write informative/explanatory texts, including the narration of historical events or scientific procedures/experiments, in which they: a. Introduce a complex topic and organize the information so that each new piece of information builds on that which precedes it to create a unified whole; use formatting and graphics (e.g., headings, figures, tables, graphs, illustrations) as useful to clarify ideas. b. Develop a complex topic that has historical and scientific significance using the most significant and relevant facts, data, details, quotations, examples, extended definitions, or other information. c. Use varied transitional devices and sentence structures to create cohesion, clarify complex information and ideas, and link the major sections of the text. d. Use precise language, domain-specific and technical wording, 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 specific discipline and context as well as to the expertise of likely readers. e. Provide a well-developed conclusion that follows logically from the information or explanation provided and that articulates the implications or 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 write narrative accounts about 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 write narrative accounts about 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 write narrative accounts about 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 writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience.	**4.** Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience.	**4.** Produce writing in which the organization, development, substance, and style are appropriate to task, purpose, and audience.
5. With some guidance and support from peers and adults, strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach after rethinking how well questions of purpose and context have been addressed.	**5.** Strengthen writing as needed by planning, revising, editing, or trying a new approach, focusing on addressing what is most significant for a specific task and context.	**5.** Strengthen writing as needed by planning, revising, editing, 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 present and cite information effectively in a digital format, including when publishing and responding to writing.	**6.** Use technology, including the Internet, to produce, publish, and collaborate on a shared writing product, incorporating diverse and sometimes conflicting feedback.	**6.** Demonstrate command of technology, including the Internet, to produce, publish, and update work in response to ongoing feedback, including fresh arguments or new information.
Research to Build Knowledge		
7. Perform short, focused research projects in response to a question or problem and generate additional related questions that allow for multiple avenues of exploration.	**7.** Perform short, focused research projects and more sustained research; synthesize multiple sources on a subject to answer a question or solve a problem.	**7.** Perform short, focused research projects and more sustained research; synthesize multiple authoritative sources on a subject to answer a question or solve a problem.
8. Gather relevant information from multiple print and digital sources using effectively tailored searches; assess the credibility and accuracy of each source; and quote or paraphrase the evidence, avoiding plagiarism and following a standard format for citation.	**8.** Gather relevant information from multiple print and digital sources; assess the credibility, accuracy, and strengths and limitations of each source; and integrate selected information into the text, avoiding overreliance on any one source, avoiding plagiarism, and following a standard format for citation.	**8.** Gather relevant information from multiple print and digital sources; assess its credibility and accuracy and its usefulness in terms of purpose, task, and audience; and integrate selected information into the text, avoiding overreliance on any one source, avoiding plagiarism, and following a standard format for citation.
9. Write in response to informational sources, drawing on textual evidence to support analysis and reflection as well as to describe what they have learned.	**9.** Write in response to informational sources, drawing on textual evidence to support analysis and reflection as well as to describe what they have learned.	**9.** Write in response to informational sources, drawing on textual evidence to support analysis and reflection as well as to describe what they have learned.
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 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 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 tasks, purposes, and audiences.

COMMON CORE STATE STANDARDS

FOR Mathematics

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Introduction
Toward greater focus and coherence

> *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 US. 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

> *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. The mathematical process goals should be integrated in these content areas. Children should understand the concepts and learn the skills exemplified in the teaching-learning paths described in this report.*
>
> National Research Council, 2009

> *In general, the US textbooks do a much worse job than the Singapore textbooks in clarifying the mathematical concepts that students must learn. Because the mathematics concepts in these 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

Notable in the research base for these standards are conclusions from TIMSS and other studies of high-performing countries that the traditional US mathematics curriculum must become substantially more coherent and more focused in order to improve student achievement in mathematics. 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.' The draft Common Core State Standards for Mathematics are a substantial answer to this challenge.

It is important to recognize that "fewer standards" are no substitute for *focused* standards. Achieving "fewer standards" would be easy to do by simply resorting to broad, general statements. Instead, the draft Common Core State Standards for Mathematics 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)

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

The standards in this draft document define what students should understand and be able to do. 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 the student who can summon a mnemonic device such as "FOIL" to expand a product such as $(a + b)(x + y)$ and a student who can explain where that mnemonic comes from. Teachers often observe this difference firsthand, even if large-scale assessments in the year 2010 often do not. 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 draft Common Core State Standards for Mathematics begin on the next page with eight Standards for Mathematical Practice. These are not a list of individual math topics, but rather a list of ways in which developing student-practitioners of mathematics increasingly ought to engage with those topics as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years.

Grateful acknowledgment is here made to Dr. Cathy Kessel for editing the draft standards.

Mathematics | Standards for Mathematical Practice

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

The practices described below are encouraged in apprentices by expert mathematical thinkers. Students who engage in these practices, individually and with their classmates, discover ideas and gain insights that spur them to pursue mathematics beyond the classroom walls. They learn that effort counts in mathematical achievement. Encouraging these practices in students of all ages should be as much a goal of the mathematics curriculum as the learning of specific content.

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.

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.

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.

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, 2-by-2 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.

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 interpret 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.

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, are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They 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.

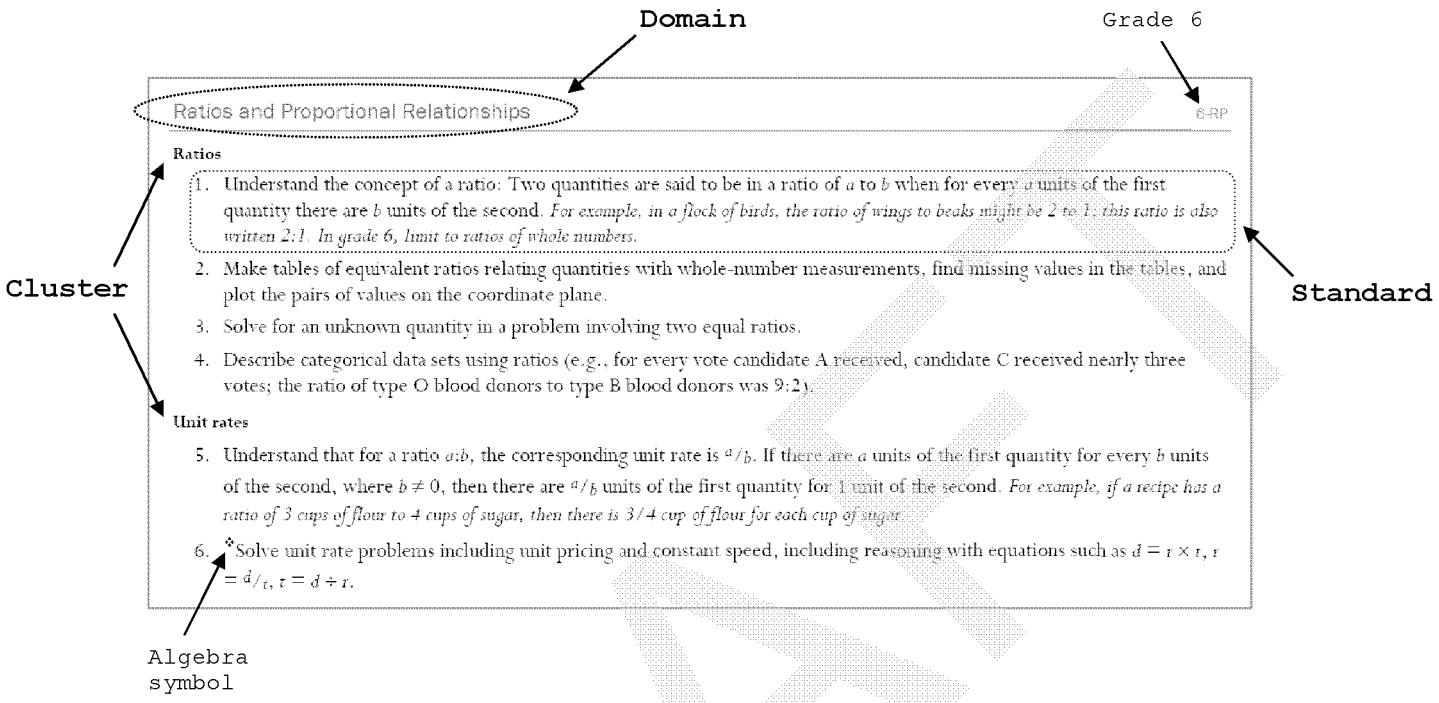
7 Look for and make use of structure.

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.

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.

How to read the grade level standards



Standards define what students should understand and be able to do. **Clusters** are 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. For each grade level in Grades K–8, the standards are organized into four or five domains. Standards from different domains may sometimes be closely related.

Algebra Symbol: Key standards for the development of algebraic thinking in Grades K–5 are indicated by ❖.

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

Note on Grade Placement of Topics. What students can learn at any particular grade level depends upon what they have learned before. Ideally then, each standard in this document might have been phrased in the form, "Students who already know A should next come to learn B." But in the year 2010 this approach is unrealistic—not least because existing education research cannot specify all such learning pathways. Of necessity therefore, grade placements for specific topics have been made on the basis of state and international comparisons and the collective experience and collective professional judgment of educators, researchers and mathematicians. One promise of common state standards is that over time they will allow research on learning progressions to inform and improve the design of standards to a much greater extent than is possible today. Learning opportunities will continue to vary across schools and school systems, and educators should make every effort to meet the needs of individual students based on their current understanding.

Note on Ordering of Topics within a Grade. These standards do not dictate curriculum. In particular, just because topic A appears before topic B in the standards for a given grade, it does not necessarily mean that topic A must be taught before topic B. A teacher might prefer to teach topic B before topic A, or might choose to highlight connections by teaching topic A and topic B at the same time. Or, a teacher might prefer to teach a topic of his or her own choosing that leads, as a byproduct, to students reaching the standards for topics A and B.

Overview of the Mathematics Standards
Grades K–5

This table shows the domains and clusters in each grade K–5

	K	*1*	*2*	*3*	*4*	*5*
Number—Counting and Cardinality	• Number names • Counting to tell the number of objects • Comparing and ordering numbers					
Number—Operations and the Problems They Solve	• Composing and decomposing numbers; addition and subtraction	• Addition and subtraction • Describing situations and solving problems with addition and subtraction	• Addition and subtraction • Describing situations and solving problems with addition and subtraction	• Multiplication and division • Describing situations and solving problems with multiplication and division	• Multiplication and Division • Problem solving with the four operations	
Number—Base Ten	• Two-digit numbers • Composing and decomposing ten	• Numbers up to 100 • Adding and subtracting in base ten	• Numbers up to 1000 • Adding and subtracting in base ten	• Numbers up to 10,000 • Adding and subtracting in base ten • Multiplying and dividing in base ten	• Numbers up to 100,000 • Multiplying and dividing in base ten	• Whole numbers in base ten • Decimal concepts • Operations on decimals
Number—Fractions				• Fractions as representations of numbers • Fractional quantities	• Operations on fractions • Decimal concepts	• Fraction equivalence • Operations on fractions
Measurement and Data	• Direct measurement • Representing and interpreting data	• Length measurement • Time measurement • Representing and interpreting data	• Length measurement • Time and money • Representing and interpreting data	• The number line and units of measure • Perimeter and area • Representing and interpreting data	• The number line and units of measure • Perimeter and area • Angle measurement • Representing and interpreting data	• Units of measure • Volume • Representing and interpreting data
Geometry	• Shapes, their attributes, and spatial reasoning	• Shapes, their attributes, and spatial reasoning	• Shapes, their attributes, and spatial reasoning	• Properties of 2-dimensional shapes • Structuring rectangular shapes	• Lines and angles • Line symmetry	• Coordinates • Plane figures

Overview of the Mathematics Standards
Grades 6–8

This table shows the domains and clusters in each grade 6–8.

	Grade 6	Grade 7	Grade 8
Ratios and Proportional Relationships	• Ratios • Unit rates	• Analyzing proportional relationships • Percent	
The Number System	• Operations • The system of rational numbers	• The system of rational numbers • The system of real numbers	• The system of real numbers
Expressions and Equations	• Expressions • Quantitative relationships and the algebraic approach to problems	• Expressions • Quantitative relationships and the algebraic approach to solving problems	• Slopes of lines in the coordinate plane • Linear equations and systems
Functions			• Function concepts • Functional relationships between quantities
Geometry	• Properties of area, surface area, and volume	• Congruence and similarity • Angles	• Congruence and similarity • The Pythagorean Theorem • Plane and solid geometry
Statistics and Probability	• Variability and measures of center • Summarizing and describing distributions	• Situations involving randomness • Random sampling to draw inferences about a population • Comparative inferences about two populations	• Patterns of association in bivariate data

In Kindergarten, instructional time should focus on two critical areas: (1) representing, comparing and ordering whole numbers and joining and separating sets; (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; creating a set with a given number of objects; comparing and ordering sets or numerals; and modeling simple joining and separating situations with objects. They 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 shapes, such as squares, triangles, circles, rectangles, (regular) hexagons, and (isosceles) trapezoids, presented in a variety of ways (e.g., with different sizes or orientations), as well as three-dimensional shapes such as spheres, cubes, and cylinders. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

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Number names

1. Say the number name sequence to 100.
2. Know the decade words to ninety and recite them in order ("ten, twenty, thirty, …").
3. Say the number name sequence forward or backward beginning from a given number within the known sequence (instead of always beginning at 1).
4. Write numbers from 1 to 20 in base-ten notation.

Counting to tell the number of objects

5. Count to answer "how many?" questions about as many as 20 things. *Objects may be arranged in a line, a rectangular array, a circle, or a scattered configuration.*
6. Understand that when counting objects,
   a. The number names are said in the standard order.
   b. Each object is paired with one and only one number name.
   c. The last number name said tells the number of objects counted.
7. Understand that when counting forward, each successive number name refers to a quantity that is 1 larger.

Comparing and ordering numbers

8. 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. *Include groups with up to ten objects.*
9. Compare and put in order numbers between 1 and 10 presented in written symbols: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Number—Operations and the Problems They Solve K-NOP

Composing and decomposing numbers; addition and subtraction

1. Understand addition as putting together—e.g., finding the number of objects in a group formed by putting two groups together. Understand subtraction as taking apart—e.g., finding the number of objects left when a one group is taken from another.
2. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. *Note that drawings need not show details, but should show the mathematics in the problem. (This note also applies wherever drawings are mentioned in subsequent standards.)*
3. ❖Decompose numbers less than or equal to 10 into pairs in various ways, e.g., using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$). Compose numbers whose sum is less than or equal to 10, e.g., using objects or drawings, and record each composition by a drawing or equation (e.g., $3 + 1 = 4$).❖
4. Compose and decompose numbers less than or equal to 10 in two different ways, and record compositions and decompositions by drawings or equations. *For example, 7 might be composed or decomposed in two different ways by a drawing showing how a group of 2 and a group of 5 together make the same number as do a group of 3 and a group of 4.*
5. ❖Understand that addition and subtraction are related. *For example, when a group of 9 is decomposed into a group of 6 and a group of 3, this means not only $9 = 6 + 3$ but also $9 - 3 = 6$ and $9 - 6 = 3$.*
6. ❖Solve addition and subtraction word problems, and calculate additions and subtractions within 10, e.g., using objects or drawings to represent the problem.
7. Fluently add and subtract, for sums and minuends of 5 or less.

Number—Base Ten K-NBT

Two-digit numbers

1. Understand that 10 can be thought of as a bundle of ones—a unit called a "ten."
2. Understand that a teen number is composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
3. Compose and decompose teen numbers into a ten and some ones, e.g., by using objects or drawings, and record the compositions and decompositions in base-ten notation. *For example, $10 + 8 = 18$ and $14 = 10 + 4$.*
4. Put in order numbers presented in base-ten notation from 1 to 20 (inclusive), and be able to explain the reasoning.
5. Understand that a decade word refers to one, two, three, four, five, six, seven, eight, or nine tens.
6. Understand that the two digits of a two-digit number represent amounts of tens and ones. *In 29, for example, the 2 represents two tens and the 9 represents nine ones.*

Composing and decomposing ten

7. Decompose 10 into pairs of numbers, e.g., by using objects or drawings, and record each decomposition with a drawing or equation.
8. Compose numbers to make 10, e.g., by using objects or drawings, and record each composition with a drawing or equation.
9. ❖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.

Measurement and Data K-MD

Direct measurement

1. Understand that objects have measurable attributes, such as length or weight. A single object might have several measurable attributes of interest.
2. Directly compare two objects with a measurable attribute in common, to see which object has "more of" the attribute. *For example, directly compare the heights of two books and identify which book is taller.*

Representing and interpreting data

3. Classify objects or people into given categories; count the numbers in each category and sort the categories by count. *Limit category counts to be less than or equal to 10.*

Geometry K-G

Shapes, their attributes, and spatial reasoning

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. Understand that names of shapes apply regardless of the orientation or overall size of the shape. *For example, a square in any orientation is still a square. Students may initially need to physically rotate a shape until it is "level" before they can correctly name it.*
3. Understand that shapes can be two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
4. Understand that shapes can be seen as having parts, such as sides and vertices ("corners"), and that shapes can be put together to compose other shapes.
5. Analyze and compare a variety of two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, component parts (e.g., number of sides and vertices) and other attributes (e.g., having sides of equal length).
6. Combine two- or three-dimensional shapes to solve problems such as deciding which puzzle piece will fit into a place in a puzzle.

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In Grade 1, instructional time should focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for additions and subtractions within 20; (2) developing understanding of whole number relationships, including grouping in tens and ones, (3) developing understanding of linear measurement and measuring lengths, and (4) 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 "put together/take apart," "add to," "take from," 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 (i.e., adding two is the same as counting on two). They use properties of addition (commutativity and associativity) 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 inverse relationship between addition and subtraction.

(2) Students compare and order 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). They understand the sequential order of the counting numbers and their relative magnitudes through activities such as representing numbers on paths of numbered things.

(3) Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as partitioning (the mental activity of decomposing the length of an object into equal-sized units) and transitivity (e.g., in terms of length, if object A is longer than object B and object B is longer than object C, then object A is longer than object C). They understand linear measure as an iteration of units, and use rulers and other measurement tools with that understanding.

(4) Students compose and decompose plane and solid figures (e.g., put two congruent isosceles triangles together to make a rhombus), building understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine solid and plane figures, 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.

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Addition and subtraction

1. ❖Understand the properties of addition.
   a. Addition is commutative. *For example, if 3 cups are added to a stack of 8 cups, then the total number of cups is the same as when 8 cups are added to a stack of 3 cups; that is, 8 + 3 = 3 + 8.*
   b. Addition is associative. *For example, 4 + 3 + 2 can be found by first adding 4 + 3 = 7 then adding 7 + 2 = 9, or by first adding 3 + 2 = 5 then adding 4 + 5 = 9.*
   c. 0 is the additive identity.
2. ❖Explain and justify properties of addition and subtraction, e.g., by using representations such as objects, drawings, and story contexts. Explain what happens when:
   a. The order of addends in a sum is changed in a sum with two addends.
   b. 0 is added to a number.
   c. A number is subtracted from itself.
   d. One addend in a sum is increased by 1 and the other addend is decreased by 1. *Limit to two addends.*
3. ❖Understand that addition and subtraction have an inverse relationship. *For example, if 8 + 2 = 10 is known, then 10 – 2 = 8 and 10 – 8 = 2 are also known.*
4. ❖Understand that when all but one of three numbers in an addition or subtraction equation are known, the unknown number can be found. *Limit to cases where the unknown number is a whole number.*
5. Understand that addition can be recorded by an expression (e.g., 6 + 3), or by an equation that shows the sum (e.g., 6 + 3 = 9). Likewise, subtraction can be recorded by an expression (e.g., 9 – 5), or by an equation that shows the difference (e.g., 9 – 5 = 4).

Describing situations and solving problems with addition and subtraction

6. Understand that addition and subtraction apply to situations of adding-to, taking-from, putting together, taking apart, and comparing. *See Glossary, Table 1.*
7. ❖Solve word problems involving addition and subtraction within 20, e.g., by using objects, drawings and equations to represent the problem. *Students should work with all of the addition and subtraction situations shown in the Glossary, Table 1, solving problems with unknowns in all positions, and representing these situations with equations that use a symbol for the unknown (e.g., a question mark or a small square). Grade 1 students need not master the more difficult problem types.*
8. Solve word problems involving addition of three whole numbers whose sum is less than or equal to 20.

Number—Base Ten 1-NBT

Numbers up to 100

1. Read and write numbers to 100.
2. Starting at any number, count to 100 or beyond.
3. Understand that when comparing two-digit numbers, if one number has more tens, it is greater; if the amount of tens is the same in each number, then the number with more ones is greater.
4. Compare and order two-digit numbers based on meanings of the tens and ones digits, using > and < symbols to record the results of comparisons.

Adding and subtracting in base ten

5. Calculate mentally, additions and subtractions within 20.
   a. Use strategies that include counting on; making ten (for example, 7 + 6 = 7 + 3 + 3 = 10 + 3 = 13); and decomposing a number (for example, 17 – 9 = 17 – 7 – 2 = 10 – 2 = 8).
6. Demonstrate fluency in addition and subtraction within 10.
7. Understand that in adding or subtracting two-digit numbers, one adds or subtracts like units (tens and tens, ones and ones) and sometimes it is necessary to compose or decompose a higher value unit.
8. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count.
9. Add one-digit numbers to two-digit numbers, and add multiples of 10 to one-digit and two-digit numbers.
10. Explain addition of two-digit numbers using concrete models or drawings to show composition of a ten or a hundred.
11. ❖Add two-digit numbers to two-digit numbers using strategies based on place value, properties of operations, and/or the inverse relationship between addition and subtraction; explain the reasoning used.

Length measurement

1. Order three objects by length; compare the length of two objects indirectly by using a third object.
2. Understand that the length of an object can be expressed numerically by using another object as a length unit (such as a paper-clip, yardstick, or inch length on a ruler). The object to be measured is partitioned into as many equal parts as possible with the same length as the length unit. The length measurement of the object is the number of length units that span it with no gaps or overlaps. *For example, "I can put four paperclips end to end along the pencil, so the pencil is four paperclips long."*
3. Measure the length of an object by using another object as a length unit.

Time measurement

4. Tell time from analog clocks in hours and half- or quarter-hours.

Representing and interpreting data

5. Organize, represent, and interpret data with several categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Geometry 1-G

Shapes, their attributes, and spatial reasoning

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.
2. Understand that shapes can be joined together (composed) to form a larger shape or taken apart (decomposed) into a collection of smaller shapes. Composing multiple copies of some shapes creates tilings. *In this grade, "circles," "rectangles," and other shapes include their interiors as well as their boundaries.*
3. Compose two-dimensional shapes to create a unit, using cutouts of rectangles, squares, triangles, half-circles, and quarter-circles. Form new shapes by repeating the unit.
4. Compose three-dimensional shapes to create a unit, using concrete models of cubes, right rectangular prisms, right circular cones, and right circular cylinders. Form new shapes by repeating the unit. *Students do not need to learn formal names such as "right rectangular prism."*
5. Decompose circles and rectangles into two and four equal parts. Describe the parts using the words *halves*, *fourths*, and *quarters*, and using the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the parts. Understand that decomposing into more equal shares creates smaller shares.
6. Decompose two-dimensional shapes into rectangles, squares, triangles, half-circles, and quarter-circles, including decompositions into equal shares.

Mathematics | Grade 2

In Grade 2, instructional time should focus on three critical areas: (1) developing understanding of base-ten notation; (2) developing fluency with additions and subtractions within 20 and fluency with multi-digit addition and subtraction; and (3) describing and analyzing shapes.

(1) Students develop an understanding of the base-ten system (at least to 1000). Their understanding of the base-ten system includes ideas of counting in units (twos, fives, and tens) and multiples of hundreds, tens, and ones, as well as number relationships, including comparing and ordering. They understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent 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 additions and subtractions within 20. They solve arithmetic problems by applying their understanding of models for addition and subtraction (such as combining or separating sets or using number lines that begin with zero), relationships and properties of numbers, and properties of addition. They develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of two-digit whole numbers. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences. They develop fluency with efficient procedures, including standard algorithms, for adding and subtracting whole numbers; understand and explain why the procedures work based on their understanding of base-ten notation and properties of operations; and use them to solve problems.

(3) 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 attributes of two- and three-dimensional space such as area and volume, and properties such as congruence and symmetry that they will learn about in later grades.

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Addition and subtraction

1. ❖Explain and justify properties of addition and subtraction, e.g., by using representations such as objects, drawings, and story contexts. Include properties such as:
   a. Changing the order of addends does not change their sum.
   b. Subtracting one addend from a sum of two numbers results in the other addend.
   c. If more is subtracted from a number, the difference is decreased, and if less is subtracted the difference is increased.
   d. In an addition equation, each addend can be decomposed and the parts can be recombined in any order without changing the sum. *For example, 5 + 3 = 8. Because 5 decomposes as 4 + 1, the first addend can be replaced by 4 + 1, yielding (4 + 1) + 3 = 8. Recombining in two different orders: 4 + 4 = 8, also 7 + 1 = 8.*

Describing situations and solving problems with addition and subtraction

2. ❖Solve word problems involving addition and subtraction within 100, e.g., by using drawings or equations to represent the problem. *Students should work with all of the addition and subtraction situations shown in the Glossary, Table 1, solving problems with unknown sums, addends, differences, minuends, and subtrahends, and representing these situations with equations that use a symbol for the unknown (e.g., a question mark or a small square). Focus on the more difficult problem types.*
3. Solve two-step word problems involving addition and subtraction within 100, e.g., by using drawings or equations to represent the problem.

Number—Base Ten 2-NBT

Numbers up to 1000

1. Understand that 100 can be thought of as a bundle of tens—a unit called a "hundred."
2. Read and write numbers to 1000 using base-ten notation, number names, and expanded form.
3. Count within 1000; skip count by 2s, 5s, 10s, and 100s.
4. Understand that when comparing three-digit numbers, if one number has more hundreds, it is greater; if the amount of hundreds is the same in each number, then the number with more tens is greater. If the amount of tens and hundreds is the same in each number, then the number with more ones is greater.
5. Compare and order three-digit numbers based on meanings of the hundreds, tens, and ones digits.

Adding and subtracting in base ten

6. Fluently add and subtract within 20. By end of Grade 2, know from memory sums of one-digit numbers.
7. Mentally compute sums and differences of multiples of 10. *For example, mentally calculate 130 – 80.*
8. Understand that in adding or subtracting three-digit numbers, one adds or subtracts like units (hundreds and hundreds, tens and tens, ones and ones) and sometimes it is necessary to compose or decompose a higher value unit.
9. Given a number from 100 to 900, mentally find 10 more or 10 less than the number, and mentally find 100 more or 100 less than the number, without counting.
10. Understand that algorithms are predefined steps that give the correct result in every case, while strategies are 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. *For example, one might mentally compute 503 – 398 as follows: 398 + 2 = 400, 400 + 100 = 500, 500 + 3 = 503, so the answer is 2 + 100 + 3, or 105.*
11. ❖ Compute sums and differences of one-, two-, and three-digit numbers using strategies based on place value, properties of operations, and/or the inverse relationship between addition and subtraction; explain the reasoning used.
12. ❖Explain why addition and subtraction strategies and algorithms work, using place value and the properties of operations. *Include explanations supported by drawings or objects. A range of reasonably efficient algorithms may be covered, not only the standard algorithm.*
13. Compute sums of two three-digit numbers, and compute sums of three or four two-digit numbers, using the standard algorithm; compute differences of two three-digit numbers using the standard algorithm.

Measurement and Data 2-MD

Length measurement

1. Understand that 1 inch, 1 foot, 1 centimeter, and 1 meter are conventionally defined lengths used as standard units.
2. Measure lengths using measurement tools such as rulers, yardsticks and measuring tapes; understand that these tools are used to find out how many standard length units span an object with no gaps or overlaps, when the 0 mark of the tool is aligned with an end of the object.

3. Understand that when measuring a length, if a smaller unit is used, more copies of that unit are needed to measure the length than would be necessary if a larger unit were used.
4. Understand that units can be decomposed into smaller units, e.g., 1 foot can be decomposed into 12 inches and 1 meter can be decomposed into 100 centimeters. A small number of long units might compose a greater length than a large number of small units.
5. Understand that lengths can be compared by placing objects side by side, with one end lined up. The difference in lengths is how far the longer extends beyond the end of the shorter.
6. Understand that a sum of two whole numbers can represent a combination of two lengths; a difference of two whole numbers can represent a difference in length; find total lengths and differences in lengths using addition and subtraction.

Time and money

7. Find time intervals between hours in one day.
8. Solve word problems involving dollar bills, quarters, dimes, nickels and pennies. *Do not include dollars and cents in the same problem.*

Representing and interpreting data

9. Generate measurement data by measuring whole-unit lengths of several objects, or by making repeated measurements of the same object. Show the measurements by making a dot 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 several categories. Connect representations on bar graph scales, rulers, and number lines that begin with zero. Solve simple Put Together/Take Apart and Compare problems using information presented in a bar graph. *See Glossary, Table 1.*

Geometry 2-G

Shapes, their attributes, and spatial reasoning

1. Understand that different categories of shapes (e.g., rhombuses, trapezoids, rectangles, and others) can be united into a larger category (e.g., quadrilaterals) on the basis of shared attributes (e.g., having four straight sides).
2. Identify and name polygons of up to six sides by the number of their sides or angles.
3. Recognize rectangles, rhombuses, squares and trapezoids as examples of quadrilaterals; draw examples of quadrilaterals that do not belong to any of these subcategories.
4. Draw and identify shapes that have specific attributes, such as number of equal sides or number of equal angles. *Sizes of lengths and angles are compared directly or visually, not compared by measuring.*
5. Recognize objects as resembling spheres, right circular cylinders, and right rectangular prisms. *Students do not need to learn formal names such as "right rectangular prism."*
6. Decompose circular and rectangular objects into two, three, or four equal parts. Describe the parts using the words *halves*, *thirds*, *half of*, *a third of*, etc.; describe the wholes as two halves, three thirds, four fourths. Recognize that a half, a third, or a fourth of a circular or rectangular object—a graham cracker, for example—is the same size regardless of its shape.

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, starting with unit fractions; (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes. Multiplication, division, and fractions are the most important developments in Grade 3.

(1) Students develop an understanding of the meanings of multiplication and division of whole numbers through the use of representations such as equal-sized groups, arrays, area models, and equal jumps on number lines for multiplication; and successive subtraction, partitioning, and sharing for division. Through this process, numbers themselves take on new meaning and are no longer only counters for single objects. They represent groups, a number of groups (for example, 3 teams of 6 people), or a comparative factor (3 times as long).

Students use properties of operations to calculate products of whole numbers. They use 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 inverse relationship between multiplication and division.

(2) Students develop an understanding of a definition of a fraction, beginning with unit fractions. They use fractions to represent parts of a whole or distances on a number line that begins with zero. Students understand that the size of a fractional part is relative to the size of the whole (for example, ¼ of a mile is longer than ¾ of a foot, even though $\frac{1}{4} < \frac{3}{4}$), and they are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing and ordering fractions using by models or strategies based on noticing common numerators or denominators.

(3) Students recognize area as an attribute of two-dimensional regions. They understand that area can be quantified by finding the total number of same-size units of area required to cover the shape without gaps or overlaps. They understand that a 1-unit by 1-unit square is 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 measure to the area model used to represent multiplication, and they use this connection to justify using multiplication to determine the area of a rectangle. Students contrast area with perimeter.

(4) Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify the shapes by their sides and angles, and connect these with definitions of shapes. Students investigate, describe, and reason about decomposing and combining polygons to make other polygons. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of attributes and properties of two-dimensional objects.

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Multiplication and division

1. Understand that multiplication of whole numbers is repeated addition. *For example, 5 × 7 means 7 added to itself 5 times. Products can be represented by rectangular arrays, with one factor the number of rows and the other the number of columns.*
2. ❖Understand the properties of multiplication.
   a. Multiplication is commutative. *For example, the total number in 3 groups with 6 things each is the same as the total number in 6 groups with 3 things each, that is, 3 × 6 = 6 × 3.*
   b. Multiplication is associative. *For example, 4 × 3 × 2 can be calculated by first calculating 4 × 3 = 12 then calculating 12 × 2 = 24, or by first calculating 3 × 2 = 6 then calculating 4 × 6 = 24.*
   c. 1 is the multiplicative identity.
   d. Multiplication distributes over addition (the distributive property). *For example, 5 × (3 + 4) = (5 × 3) + (5 × 4).*
3. ❖Explain and justify properties of multiplication and division, e.g., by using representations such as objects, drawings, and story contexts. Include properties such as:
   a. Changing the order of two factors does not change their product.
   b. The product of a number and 1 is the number.
   c. Dividing a nonzero number by itself yields 1.
   d. Multiplying a quantity by a nonzero number, then dividing by the same number, yields the original quantity.
   e. When one factor in a product is multiplied by a number and another factor divided by the same number, the product is unchanged. *Limit to multiplying and dividing by numbers that result in whole-number quotients.*
   f. Products where one factor is a one-digit number can be computed by decomposing one factor as the sum of two numbers, multiplying each number by the other factor, and adding the two products.
4. ❖Understand that multiplication and division have an inverse relationship. *For example, if 5 × 7 = 35 is known, then 35 ÷ 5 = 7 and 35 ÷ 7 = 5 are also known. The division 35 ÷ 5 means the number which yields 35 when multiplied by 5; because 5 × 7 = 35, then 35 ÷ 5 = 7.*
5. ❖Understand that when all but one of three numbers in a multiplication or division equation are known, the unknown number can be found. *Limit to cases where the unknown number is a whole number.*

Describing situations and solving problems with multiplication and division

6. Understand that multiplication and division apply to situations with equal groups, arrays or area, and comparing. *See Glossary, Table 2.*
7. ❖Solve word problems involving multiplication and division within 100, using an equation with a symbol for the unknown to represent the problem. *This standard is limited to problems with whole-number quantities and whole-number quotients. Focus on situations described in the Glossary, Table 2.*
8. ❖Solve one- or two-step word problems involving the four operations. *This standard is limited to problems with whole-number quantities and whole-number quotients.*
9. Understand that multiplication and division can be used to compare quantities (see Glossary, Table 2); solve multiplicative comparison problems with whole numbers (problems involving the notion of "times as much").

Number—Base Ten 3-NBT

Numbers up to 10,000

1. Understand that 1000 can be thought of as a bundle of hundreds—a unit called a "thousand."
2. Read and write numbers to 10,000 using base-ten notation, number names, and expanded form.
3. Count within 10,000; skip count by 10s, 100s and 1000s.
4. Understand that when comparing four-digit numbers, if one number has more thousands, it is greater; if the amount of thousands is the same in each number, then the number with more hundreds is greater; and so on. Compare and order four-digit numbers based on meanings of the digits.

Adding and subtracting in base ten

5. Mentally calculate sums and differences of multiples of 10, 100, and 1000. *For example, mentally calculate 1300 – 800*
6. Given a number from 1000 to 9000, mentally find 100 more or 100 less than the number, and mentally find 1000 more or 1000 less than the number, without counting.

Multiplying and dividing in base ten

7. ❖Understand that the distributive property is at the heart of strategies and algorithms for multiplication and division computations with numbers in base-ten notation; use the distributive property and other properties of operations to explain patterns in the multiplication table and to derive new multiplication and division equations from known ones. *For example, the distributive property makes it possible to multiply 4 × 7 by decomposing 7 as 5 + 2 and using 4 × 7 = 4 × (5 + 2) = (4 × 5) + (4 × 2) = 20 + 8 = 28.*
8. Fluently multiply one-digit numbers by 10.
9. Use a variety of strategies for multiplication and division within 100. By end of Grade 3, know from memory products of one-digit numbers where one of the factors is 2, 3, 4, or 5.

Number—Fractions 3-NF

Fractions as representations of numbers

1. Understand that a unit fraction corresponds to a point on a number line. *For example, 1/3 represents the point obtained by decomposing the interval from 0 to 1 into three equal parts and taking the right-hand endpoint of the first part. In Grade 3, all number lines begin with zero.*
2. Understand that fractions are built from unit fractions. *For example, 5/4 represents the point on a number line obtained by marking off five lengths of ¼ to the right of 0.*
3. Understand that two fractions are equivalent (represent the same number) when both fractions correspond to the same point on a number line. Recognize and generate equivalent fractions with denominators 2, 3, 4, and 6 (e.g., $^1/_2 = {}^2/_4$, $^4/_6 = {}^2/_3$), and explain the reasoning.
4. Understand that whole numbers can be expressed as fractions. *Three important cases are illustrated by the examples 1 = 4/4, 6 = 6/1, and 7 = (4 × 7)/4. Expressing whole numbers as fractions can be useful for solving problems or making calculations.*

Fractional quantities

5. Understand that fractions apply to situations where a whole is decomposed into equal parts; use fractions to describe parts of wholes. *For example, to show 1/3 of a length, decompose the length into 3 equal parts and show one of the parts.*
6. Compare and order fractional quantities with equal numerators or equal denominators, using the fractions themselves, tape diagrams, number line representations, and area models. Use > and < symbols to record the results of comparisons.

Measurement and Data 3-MD

The number line and units of measure

1. Understand that a number line has an origin (0) and a unit (1), with whole numbers one unit distance apart. Use number lines to represent problems involving distances, elapsed time, amounts of money and other quantities. *In such problems, the interval from 0 to 1 may represent a unit of distance, time, money, etc.*
2. Understand that a unit of measure can be decomposed into equal-sized parts, whose sizes can be represented as fractions of the unit. Convert measurements in one unit to measurements in a smaller or a larger unit, and solve problems involving such mixed units (e.g., feet and inches, weeks and days).

Perimeter and area

3. Understand and use 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 has an area of *n* square units. Areas of some other figures can be measured by using fractions of unit squares or using figures whose areas have been found by decomposing other figures.
   c. When measuring an area, if a smaller unit of measurement is used, more units must be iterated to measure the area in those units.
   d. Determine and compare areas by counting square units. *Use cm^2, m^2, in^2, ft^2, and improvised units.*
4. Understand that multiplication of whole numbers can be represented by area models; a rectangular region that is *a* length units by *b* length units (where *a* and *b* are whole numbers) and tiled with unit squares illustrates why the rectangle encloses an area of *a* × *b* square units.
5. Solve problems involving perimeters of polygons.
   a. Add given side lengths, and multiply for the case of equal side lengths.
   b. ❖Find an unknown length of a side in a polygon given the perimeter and all other side lengths; represent these problems with equations involving a letter for the unknown quantity.
   c. Exhibit rectangles with the same perimeter and different area, and with the same area and different perimeter.

Representing and interpreting data

6. 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. *Include single-unit scales and multiple-unit scales; for example, each square in the bar graph might represent 1 pet, 5 pets, or 10 pets.*
7. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a dot plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

Geometry 3-G

Properties of 2-dimensional shapes

1. Understand that a given category of plane figures (e.g., triangles) has subcategories (e.g., isosceles triangles) defined by special properties.
2. Describe, analyze, compare and classify two-dimensional shapes by their properties and connect these properties to the classification of shapes into categories and subcategories (e.g., squares are "special rectangles" as well as "special rhombuses"). *Focus on triangles and quadrilaterals.*

Structuring rectangular shapes

3. Understand that rectangular regions can be tiled with squares in rows and columns, or decomposed into such arrays.
4. Structure a rectangular region spatially by decomposing it into rows and columns of squares. Determine the number of squares in the region using that spatial structure (e.g., by multiplication or skip counting).
5. Understand that shapes can be decomposed into parts with equal areas; the area of each part is a unit fraction of the whole. *For example, when a shape is partitioned into 4 parts with equal area, the area of each part is ¼ of the area of the shape.*

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In Grade 4, instructional time should focus on four critical areas: (1) continuing to develop understanding and fluency with whole number multiplication, and developing understanding of multi-digit whole number division; (2) developing an understanding of addition and subtraction of fractions with like denominators, multiplication of fractions by whole numbers, and division of whole numbers with fractional answers; (3) developing an understanding of area; and (4) understanding that geometric figures can be analyzed and classified using properties such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

(1) Students use understandings of multiplication to develop fluency with multiplication and division within 100. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models, equal intervals on a number line), 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 products or mentally calculate products. They develop fluency with efficient procedures, including the standard algorithm, 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 quotients and mentally calculate quotients, depending upon the context and the numbers involved.

(2) Students develop understanding of operations with fractions. They apply their understandings of fractions as built from unit fractions, and use fraction models to represent the addition and subtraction of fractions with like denominators. Students use the meaning of fractions and the meaning of multiplication to understand and explain why the procedure for multiplying a fraction by a whole number makes sense. They understand and explain the connection between division and fractions.

(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.

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Multiplication and division

1. Find the factor pairs for a given whole number less than or equal to 100; recognize prime numbers as numbers greater than 1 with exactly one factor pair. *Example: The factor pairs of 42 are {42, 1}, {21, 2}, {14, 3}, {7, 6}.*

Problem solving with the four operations

2. ❖Solve multistep word problems involving the four operations with whole numbers.
3. ❖Solve problems posed with both whole numbers and fractions. Understand that while quantities in a problem might be described with whole numbers, fractions, or decimals, the operations used to solve the problem depend on the relationships between the quantities regardless of which number representations are involved.
4. Assess the reasonableness of answers using mental computation and estimation strategies including rounding to the nearest 10 or 100.

Number—Base Ten 4-NBT

Numbers up to 100,000

1. Understand that a digit in one place represents ten times what it represents in the place to its right. *For example, 7 in the thousands place represents 10 times as many as than 7 in the hundreds place.*
2. Read, write and compare numbers to 100,000 using base-ten notation, number names, and expanded form.

Multiplying and dividing in base ten

3. Understand how the distributive property and the expanded form of a multi-digit number can be used to calculate products of multi-digit numbers.
   a. ❖The product of a one-digit number times a multi-digit number is the sum of the products of the one-digit number with the summands in the expanded form of the multi-digit number. Illustrate this numerically and visually using equations, rectangular arrays, area models, and tape diagrams.
   b. Algorithms for multi-digit multiplication can be derived and explained by writing multi-digit numbers in expanded form and applying the distributive property.
4. Fluently multiply and divide within 100. By end of Grade 4, know from memory products of one-digit numbers where one of the factors is 6, 7, 8, or 9.
5. Mentally calculate products of one-digit numbers and one-digit multiples of 10, 100, and 1000 (e.g., 7×6000). Mentally calculate whole number quotients with divisors of 10 and 100.
6. Compute products and whole number quotients of two-, three- or four-digit numbers and one-digit numbers, and compute products of two two-digit numbers, using strategies based on place value, the properties of operations, and/or the inverse relationship between multiplication and division; explain the reasoning used.
7. Explain why multiplication and division strategies and algorithms work, using place value and the properties of operations. *Include explanations supported by drawings, equations, or both. A range of reasonably efficient algorithms may be covered, not only the standard algorithms.*
8. Compute products of two-digit numbers using the standard algorithm, and check the result using estimation.
9. Given two whole numbers, find an equation displaying the largest multiple of one which is less than or equal to the other. *For example, given 325 and 7, the equation $325 = 46 \times 7 + 3$ shows the largest multiple of 7 less than or equal to 325.*

Number—Fractions 4-NF

Operations on fractions

1. Understand addition of fractions:
   a. Adding or subtracting fractions with the same denominator means adding or subtracting copies of unit fractions. *For example, $2/3 + 4/3$ is 2 copies of $1/3$ plus 4 copies of $1/3$, or 6 copies of $1/3$ in all, that is $6/3$.*
   b. Sums of related fractions can be computed by replacing one with an equivalent fraction that has the same denominator as the other. *For example, the sum of the related fractions $2/3$ and $1/6$ can be computed by rewriting $2/3$ as $4/6$ and computing $4/6 + 1/6 = 5/6$.*
2. Compute sums and differences of fractions with like denominators, add and subtract related fractions within 1 (e.g., $1/2 + 1/4$, $3/10 + 4/100$, $7/8 - 1/4$), and solve word problems involving these operations.
3. ❖ Understand that the meaning of multiplying a fraction by a whole number comes from interpreting multiplication by a whole number as repeated addition. *For example, $3 \times 2/5 = 6/5$ because $3 \times 2/5 = 2/5 + 2/5 + 2/5 = 6/5$.*

4. Solve word problems that involve multiplication of fractions by whole numbers; represent multiplication of fractions by whole numbers using tape diagrams and area models that explain numerical results.
5. ❖Understand that fractions give meaning to the quotient of any whole number by any non-zero whole number. *For example, 3 ÷ 4 = 3/4, because 3/4 multiplied by 4 equals 3. (The division 3 ÷ 4 means the number which yields 3 when multiplied by 4.)*
6. Solve word problems that involve non-whole number quotients of whole numbers; represent quotients of whole numbers using tape diagrams and area models that explain numerical results.

Decimal concepts

7. Understand that a two-digit decimal is a sum of fractions with denominators 10 and 100. *For example, 0.34 is 3/10 + 4/100.*
8. Use decimals to hundredths to describe parts of wholes; compare and order decimals to hundredths based on meanings of the digits; and write fractions of the form *a*/10 or *a*/100 in decimal notation. *Use > and < symbols to record the results of comparisons.*

Measurement and Data 4-MD

The number line and units of measure

1. Understand that the unit length on a number line (interval from 0 to 1) can be divided into parts of equal fractional length. Draw number line representations of problem situations involving length, height, and distance including fractional or decimal units. *For example, show distances along a race course to tenths of a mile on a number line, by dividing the unit length into 10 equal parts to get parts of length 1/10; the endpoint of the segment of 1/10 length from 0 represents 1/10 of a mile from the starting point of the race. In Grade 4, all numbers lines begin with zero.*

Perimeter and area

2. Understand that if a region is decomposed into several disjoint pieces, then the area of the region can be found by adding the areas of the pieces (when these areas are expressed in the same units).
3. ❖Apply the formulas for area of squares and rectangles. Measure and compute whole-square-unit areas of objects and regions enclosed by geometric figures which can be decomposed into rectangles. *Limit to situations requiring products of one-or two-digit numbers.*
4. ❖Find one dimension of a rectangle, given the other dimension and the area or perimeter; find the length of one side of a square, given the area or perimeter. Represent these problems using equations involving a letter for the unknown quantity.

Angle measurement

5. Understand what an angle is and how it is measured:
   a. An angle is formed by two rays with a common endpoint.
   b. An angle is measured by reference to a circle with its center at the common endpoint of the rays. The measure of an angle is based on the fraction of the circle between the points where the two rays intersect the circle.
   c. A one-degree angle turns through 1/360 of a circle, where the circle is centered at the common endpoint of its rays; the measure of a given angle is the number of one-degree angles turned with no gaps or overlaps.
6. Measure angles in whole-number degrees using a protractor; sketch angles of specified measure; ❖find the measure of a missing part of an angle, given the measure of the angle and the measure of a part of it, representing these problems with equations involving a letter for the unknown quantity.

Representing and interpreting data

7. Make a dot 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 dot plots. *For example, from a dot plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Geometry 4-G

Lines and angles

1. Draw points, lines, line segments, rays, angles, and perpendicular and parallel lines; identify these in plane figures.
2. Identify right angles, and angles smaller than or greater than a right angle in geometric figures; recognize right triangles.
3. Classify shapes based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of specified size.

Line symmetry

4. Understand that a line of symmetry for a geometric figure is a line across the figure such that the figure can be folded along the line into matching parts

5. Identify line-symmetric figures; given a horizontal or vertical line and a drawing that is not a closed figure, complete the drawing to create a figure that is symmetric with respect to the given line.

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Mathematics | Grade 5

In Grade 5, instructional time should focus on four critical areas: (1) developing fluency with addition and subtraction of fractions, developing understanding of the multiplication of fractions and of division of fractions in limited cases (fractions divided by whole numbers and whole numbers divided by unit fractions); (2) developing understanding of and fluency with division of multi-digit whole numbers; (3) developing understanding of and fluency with addition, subtraction, multiplication, and division of decimals; 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 inverse 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 fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop fluency with division of whole numbers; understand why procedures work based on the meaning of base-ten notation and properties of operations; and use these procedures to solve problems. Based on the context of a problem situation, they select the most useful form of the quotient for the answer and interpret it appropriately.

(3) Students apply their understandings of models for decimals, decimal notation, and properties of operations to compute sums and differences of finite decimals. 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 finite decimals efficiently and accurately.

(4) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be quantified 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 problems.

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Whole numbers in base ten

1. Compute quotients of two-, three-, and four-digit whole numbers and two-digit whole numbers using strategies based on place value, the properties of operations, and/or the inverse relationship between multiplication and division; explain the reasoning used.
2. Explain why division strategies and algorithms work, using place value and the properties of operations. *Include explanations supported by drawings, equations, or both. A range of reasonably efficient algorithms may be covered, not only the standard algorithm.*
3. Use the standard algorithm to compute quotients of two-, three- and four-digit whole numbers and two-digit whole numbers, expressing the results as an equation (e.g., $145 = 11 \times 13 + 2$ or $120 \div 7 = 17\ 1/7$).
4. Fluently add, subtract and multiply whole numbers using the standard algorithm for each operation.

Decimal concepts

5. Read, write, and compare numbers expressed as decimals. Understand that a digit in one place represents ten times what it represents in the place to its right. *For example, 7 in the hundredths place represents 10 times as many as 7 in the thousandths place.*
6. Round decimals (to hundredths) to the nearest whole number.
7. Write fractions in decimal notation for fractions with denominators 2, 4, 5, 8, 10, and 100.

Operations on decimals

8. Understand that in adding or subtracting finite decimals, one adds or subtracts like units (tenths and tenths, hundredths and hundredths, etc.) and sometimes it is necessary to compose or decompose a higher value unit.
9. Fluently find 0.1 more than a number and less than a number; 0.01 more than a number and less than a number; and 0.001 more than a number and less than a number, for numbers expressed as finite decimals.
10. Compute sums and differences of finite decimals by expressing the decimals as fractions and adding the fractions. *For example, $0.05 + 0.91 = 5/100 + 91/100 = 96/100$ or 0.96.*
11. Compute sums, differences, products, and quotients of finite decimals using strategies based on place value, the properties of operations, and/or the inverse relationships between addition and subtraction and between multiplication and division; explain the reasoning used. *For example, transform $1.5 \div 0.3$ into $15 \div 3 = 5$.*
12. Explain why strategies and algorithms for computations with finite decimals work. *Include explanations supported by drawings, equations, or both. A range of reasonably efficient algorithms may be covered, not only the standard algorithm.*
13. Use the standard algorithm for each of the four operations on decimals (to hundredths).
14. Solve word problems involving operations on decimals.

Number—Fractions 5-NF

Fraction equivalence

1. ❖Understand fraction equivalence:
   a. Multiplying the numerator and denominator of a fraction by the same nonzero whole number produces an equivalent fraction. *For example, $2/3 = (2 \times 4)/(3 \times 4) = 8/12$. ($1/3$ is 4 copies of $1/12$, so $2/3$ is 8 copies of $1/12$.)*
   b. Equivalent fractions correspond to the same point on a number line. *In Grade 5, all numbers lines begin with zero.*
   c. When the numerators of equivalent fractions are divided by their denominators, the resulting quotients are the same.
2. Identify pairs of equivalent fractions; given two fractions with unlike denominators, find two fractions with the same denominator and equivalent to each.
3. Compare and order fractions with like or unlike denominators, e.g., by finding equivalent fractions with the same denominator, and describe the sizes of fractional quantities from a context with reference to the context. *Compare using the fractions themselves, tape diagrams or number line representations, and area models.*

Operations on fractions

4. Understand that sums and differences of fractions with unlike denominators can be computed by replacing each with an equivalent fraction so that the resulting fractions have the same denominator. *For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$.*
5. Compute sums and differences of fractions with like or unlike denominators, and solve word problems involving addition and subtraction of fractions. Estimate fraction sums and differences to assess the reasonableness of results.
6. ❖ Understand that multiplying a fraction by a/b means taking a parts of a decomposition of the fraction into b equal parts. *For example, to multiply $2/3 \times 4/5 = 8/15$, one may decompose a whole of size $4/5$ into 3 equal parts; each part has size $4/15$. Two*

of these parts then make 8/15, so 2/3 × 4/5 = 8/15. (In general, a/b × p/q = ap/bq.) This standard includes multiplication of a whole number by a fraction, by writing the whole number as fraction with denominator 1.

7. Understand that the area of a rectangle with side lengths a/b and c/d is the product $a/b \times p/q$. This extends the area formula for rectangles to fractional side lengths, and also allows products of fractions to be represented visually as areas of rectangles.
8. ❖Explain and justify the properties of operations with fractions, e.g., by using equations, number line representations, area models, and story contexts.
9. Understand division of unit fractions by whole numbers and division of whole numbers by unit fractions:
   a. Dividing a unit fraction 1/b by a whole number a results in a smaller unit fraction 1/a × b. *For example, 1/3 ÷ 2 = 1/6 because when 1/3 is divided into 2 equal parts, the size of each part is 1/6; a third of a pound of cheese shared between two people will give each person a sixth of a pound. (Using the inverse relationship between multiplication and division: 1/3 ÷ 2 = 1/6 because 1/6 × 2 = 1/3.)*
   b. Dividing a whole number a by a unit fraction 1/b results in a greater whole number a × b. *For example, 2 ÷ 1/3 = 6 because 6 is the number of 1/3s in 2; two pounds of cheese will make six portions of a third of a pound each. (Using the inverse relationship between multiplication and division: 2 ÷ 1/3 = 6 because 6 × 1/3 = 2.)*
10. Calculate products of fractions, and quotients of unit fractions and nonzero whole numbers (with either as divisor), and solve word problems involving these operations. Represent these operations using equations, area models and length models.
11. Understand that a mixed number such as 3 2/5 represents the sum of a whole number and a fraction less than one. Because a whole number can be represented as a fraction (3 = 3/1), and the sum of two fractions is also a fraction, a mixed number also represents a fraction (3 2/5 = 3 + 2/5 = 15/5 + 2/5 = 17/5). Write fractions as equivalent mixed numbers and vice versa.

Measurement and Data 5-MD

Units of measure

1. Understand that quantities expressed in like units can be added or subtracted giving a sum or difference with the same unit; different quantities may be multiplied to obtain a new kind of quantity (e.g., as when two lengths are multiplied to compute an area, or when an area and a length are multiplied to compute a volume).
2. Understand that when measuring a quantity, if a smaller unit is used, more units must be iterated to measure the quantity in those units.
3. Convert among different-sized standard measurement units within a given measurement system (e.g., feet to yards, centimeters to meters) and use conversion in solving multi-step word problems.

Volume

4. Understand concepts of volume measurement:
   a. A cube with side length 1 unit (a unit cube) is said to have "one cubic unit" of volume, and can be used to measure volume.
   b. The volume of a right rectangular prism with whole-unit side lengths can be found by packing it with unit cubes and using multiplication to count their number. *For example, decomposing a right rectangular prism 3 length units wide by 5 units deep by 2 units tall shows that its volume is 3 × 5 × 2 cubic units. The base of the prism has area 3 × 5 square units, so the volume can also be expressed as the height times the area of the base.*
   c. When measuring a volume, if a smaller unit is used, more units must be iterated to measure the volume in those units.
   d. If a solid figure is decomposed into several disjoint pieces, then the volume enclosed by the figure can be found by adding the volumes of the pieces (when these volumes are expressed in the same units).
5. Decompose right rectangular prisms into layers of arrays of cubes; determine and compare volumes of right rectangular prisms, and objects well described as right rectangular prisms, by counting cubic units (using cm^3, m^3, in^3, ft^3, and improvised units).

Representing and interpreting data

6. Make a dot 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 dot 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.*

Geometry 5-G

Coordinates

1. Understand that a pair of perpendicular number lines, called axes, defines a coordinate system.
    a. Their intersection is called the origin, usually arranged to coincide with the 0 on each line.
    b. A given point in the plane can be located by using an ordered pair of numbers, called its coordinates. The first number indicates how far to travel from the origin in the direction of one axis, the second number indicates how far to travel in the direction of the second axis.
    c. To avoid ambiguity, conventions dictate that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).
2. Graph points in the first quadrant of the coordinate plane, and identify the coordinates of graphed points. Where ordered pairs arise in a problem situation, interpret the coordinate values in the context of the situation.

Plane figures

3. Understand that properties belonging to a category of plane 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 plane figures in a hierarchy based on properties.

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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; (2) developing understanding of and fluency with division of fractions and developing fluency with multiplication 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 with 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 whole number multiplication and division to ratios and rates. Thus students expand their repertoires of problems in which multiplication and division can be used 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 inverse relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. Students are able to add, subtract, multiply, and divide fractions fluently, and use these operations to solve problems, including multi-step problems and problems involving measurement.

(3) Students reason about relationships among shapes to determine area and surface area. 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.

(4) Students write mathematical expressions and equations that correspond to given situations, they evaluate expressions, and they use expressions and formulas to solve problems. Students understand that a variable is a letter standing for a number, where the number is unknown, or where, for the purpose at hand, it can be any number in the domain of interest. Students understand that expressions in different forms can be equivalent, and they use the laws of arithmetic to rewrite expressions to represent a total quantity in a different way (such as to represent it more compactly or to feature different information). 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 in a table.

Having represented and analyzed data in Grades K–5, students in Grade 6 begin a serious engagement with statistics. The study of variability in data distinguishes statistics from mathematics. Students beginning their study of variability must first recognize statistical questions as those that anticipate variability in the answers. From this conceptual beginning, they learn to describe and summarize distributions of data—an activity that goes beyond merely computing summary statistics to include assessing the shape of a distribution and considering other issues as described in the standards.

Ratios

1. Understand the concept of a ratio: Two quantities are said to be in a ratio of a to b when for every a units of the first quantity there are b units of the second. *For example, in a flock of birds, the ratio of wings to beaks might be 2 to 1; this ratio is also written 2:1. In Grade 6, limit to ratios of whole numbers.*
2. 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.
3. Solve for an unknown quantity in a problem involving two equal ratios.
4. Describe categorical data sets using ratios (e.g., for every vote candidate A received, candidate C received nearly three votes; the ratio of type O blood donors to type B blood donors was 9:2).

Unit rates

5. Understand that for a ratio a:b, the corresponding unit rate is a/b. If there are a units of the first quantity for every b units of the second, where $b \neq 0$, then there are a/b units of the first quantity for 1 unit of the second. *For example, if a recipe has a ratio of 3 cups of flour to 4 cups of sugar, then there is 3/4 cup of flour for each cup of sugar.*
6. ❖Solve unit rate problems including unit pricing and constant speed, including reasoning with equations such as $d = r \times t$, $r = d/t$, $t = d \div r$.

The Number System 6-NS

Operations

1. Understand that the properties of operations apply to, and can be used with, addition and multiplication of fractions.
2. Understand that division of fractions is defined by viewing a quotient as the solution for an unknown-factor multiplication problem. *For example, (2/3) ÷ (5/7) = 14/15 because (5/7) × (14/15) = (2/3).*
3. Solve word problems requiring arithmetic with fractions, using the properties of operations and converting between forms as appropriate; estimate to check reasonableness of answers.
4. Fluently divide whole numbers using the standard algorithm.

The system of rational numbers

5. Understand that a number is a point on the number line.
6. Understand that some quantities have opposite directions, such as elevation above and below sea level or money received and spent. These quantities can be described using positive and negative numbers.
7. Understand that number lines familiar from previous grades can be extended to represent negative numbers to the left of zero. *Number lines can also be vertically oriented, as when a coordinate system is formed. Then the conventional terms "to the right of 0" and "to the left of 0" conventionally become "above 0" and "below 0."*
   a. Two different numbers, such as 7 and –7, that are equidistant from zero on a number line are said to be opposites of one another. The opposite of the opposite of a number is the number itself, e.g., –(–3) = 3. The opposite of 0 is 0.
   b. The absolute value of a number q, written $|q|$, is its distance from zero, and is always positive or zero.
   c. Fractions and their opposites form a system of numbers called the rational numbers, represented by points on a number line. Whole numbers and their opposites form the integers, which are contained in the rational numbers.
   d. Previous ways of comparing positive numbers can be extended to the rational numbers. The statement $p > q$ means that p is located to the right of q on a number line, while $p < q$ means that p is located to the left of q on a number line. Comparisons can also be made by reasoning appropriately about signed quantities (e.g, –3 > –7 makes sense because –3°C is a higher temperature than –7°C). The way two numbers compare does not always agree with the way their absolute values compare; for example, –3 > –7, but $|-3| < |-7|$.
8. Find and position rational numbers, including integers, on a number line.
9. Use rational numbers to describe quantities such as elevation, temperature, account balance and so on. Compare these quantities, recording the results of comparisons using > and < symbols.
10. Graph points and identify coordinates of points on the coordinate plane in all four quadrants. Where ordered pairs arise in a problem situation, interpret the coordinate values in the context of the situation.

Expressions

1. Understand that an expression records operations with numbers or with letters standing for numbers. *For example, the expression 2 · (8 + 7) records adding 8 and 7 then multiplying by 2; the expression 5 − y records subtracting y from 5. Focus on the operations of addition, subtraction, multiplication and division, with some attention to square or cube roots.*
2. Understand the use of variables in expressions and algebraic conventions:
   a. A letter is used to stand for a number in an expression in cases where the number is unknown, or where, for the purpose at hand, it can be any number in a domain of interest. Such a letter is called a variable.
   b. If a variable appears in an expression more than once (e.g., as in $t + 3t$), that variable is understood to refer to the same number in each instance.
   c. The multiplication symbol can be omitted when writing products of two or more variables or of a number and a variable. *For example, the expressions xy and 2a indicate $x \times y$ and $2 \times a$, respectively.*
3. Describe the structure and elements of simple expressions using correct terminology (sum, term, product, factor, quotient, coefficient); describe an expression by viewing one or more of its parts as a single entity. *For example, describe the expression 2 · (8 + 7) as a product of two factors, by viewing (8 + 7) as a single entity. The second factor is itself a sum of two terms.*
4. Understand and generate equivalent expressions:
   a. Understand that two expressions are equivalent if they name the same number regardless of which numbers the variables in them stand for. *For example, the expressions x + 3 and 4x are not equivalent, even though they happen to name the same number in the case when x stands for 1.*
   b. Understand that applying the laws of arithmetic to an expression results in an equivalent expression. *For example, applying the distributive law to the expression 3 · (2 + x) leads to the equivalent expression 6 + 3x. Applying the distributive law to y + y + y leads to the equivalent expression $y \times (1 + 1 + 1)$, i.e., $y \times 3$ and then the commutative law of multiplication leads to the equivalent expression 3y.*
   c. Generate equivalent expressions to reinterpret the meaning of an expression. *For example, 2t + 3t records the addition of twice a quantity to three times itself; applying the distributive law leads to the equivalent expression 5t, so that the original expression can be reinterpreted as recording five times the quantity.*

Quantitative relationships and the algebraic approach to problems

5. Understand that an equation is a statement that two expressions are equal, and a solution to an equation is a replacement value of the variable (or replacement values for all the variables if there is more than one) that makes the equation true.
6. Using the idea of maintaining equality between both sides of the equation, solve equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.
7. Choose variables to represent quantities in a word problem, and construct simple expressions or equations to solve the problem by reasoning about the quantities.
8. Understand that a variable can be used to represent a quantity that can change, often in relationship to another changing quantity, and an equation can express one quantity, thought of as the dependent variable, in terms of other quantities, thought of as the independent variables; represent a relationship between two quantities using equations, graphs, and tables; translate between any two of these representations. *For example, describe the terms in a sequence $t = 3, 6, 9, 12, \ldots$ of multiples of 3 by writing the equation $t = 3n$ for $n = 1, 2, 3, 4, \ldots$.*

Geometry 6-G

Properties of area, surface area, and volume

1. Understand that plane figures can be decomposed, reassembled, and completed into new figures; use this technique to derive area formulas.
2. Find the areas enclosed by right triangles, other triangles, special quadrilaterals, and polygons (by composing into rectangles or decomposing into triangles and other shapes).
3. Understand that three-dimensional figures can be formed by joining rectangles and triangles along their edges to enclose a solid region with no gaps or overlaps. The surface area is the sum of the areas of the enclosing rectangles and triangles.
4. Find the surface area of cubes, prisms and pyramids (include the use of nets to represent these figures).
5. Solve problems involving area, volume and surface area of objects.
6. Give examples of right rectangular prisms with the same surface area and different volumes, and with the same volume and different surface areas.

7. ❖Use exponents and symbols for square roots and cube roots to express the area of a square and volume of a cube in terms of their side lengths, and to express their side lengths in terms of their area or volume.

Statistics and Probability 6-SP

Variability and measures of center

1. Understand that a statistical question is 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 generated by answers to a statistical question typically shows variability—not all of the values are the same—and yet often the values show an overall pattern, often with a tendency to cluster.
   a. A measure of center for a numerical data set summarizes all of its values using a single number. The median is a measure of center in the sense that approximately half the data values are less than the median, while approximately half are greater. The mean is a measure of 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 in the sense that it is the balance point of a data distribution shown on a dot plot.
   b. A measure of variation for a numerical data set describes how its values vary using a single number. The interquartile range and the mean absolute deviation are both measures of variation.

Summarizing and describing distributions

3. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
4. Summarize numerical data sets, such as by:
   a. Reporting the number of observations.
   b. Describing the nature of the variable, including how it was measured and its units of measurement. *Data sets can include fractional values at this grade but not negative values.*
   c. Describing center and variation, as well as describing any overall pattern and any striking deviations from the overall pattern.
5. Relate the choice of the median or mean as a measure of center to the shape of the data distribution being described and the context in which it is being used. Do the same for the choice of interquartile range or mean average deviation as a measure of variation. *For example, why are housing prices often summarized by reporting the median selling price, while students' assigned grades are often based on mean homework scores?*

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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) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence; 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 similar objects (including geometric figures) by using scale factors that relate 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 laws of arithmetic, 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 use ideas about distance and angles, how they behave under dilations, translations, rotations and reflections, and ideas about congruence and similarity to describe and analyze figures and situations in two- and three-dimensional space and to solve problems, including multi-step problems. Students prove that various configurations of lines give rise to similar triangles because of the angles created when a transversal cuts parallel lines. Students apply this reasoning about similar triangles to solve problems, such as finding heights and distances. Students see the plausibility of the formulas for the circumference and area of a circle. For example, in the case of area, they may do so by reasoning about how lengths and areas scale in similar figures or by decomposing a circle or circular region and rearranging the pieces.

(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.

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Analyzing proportional relationships

1. Form ratios of nonnegative rational numbers and compute corresponding unit rates. *For example, a person might walk ½ mile in each ¼ hour; the unit rate for this ratio is (1/2)/(1/4) miles per hour, equivalently 2 miles per hour. Include ratios of lengths, areas and other quantities, including when quantities being compared are measured in different units.*
2. Recognize situations in which two quantities covary and have a constant ratio. (The quantities are then said to be in a proportional relationship and the unit rate is called the constant of proportionality.) Decide whether two quantities that covary are in a proportional relationship, e.g., by testing for equivalent ratios or graphing on a coordinate plane.
3. Compute unit rates and solve proportional relationship problems in everyday contexts, such as shopping, cooking, carpentry, party planning, etc. Represent proportional relationships by equations that express how the quantities are related via the constant of proportionality or unit rate. *For example, total cost, t, is proportional to the number, n, purchased at a constant price, p; this relationship can be expressed as $t = pn$.*
4. Plot proportional relationships on a coordinate plane where each axis represents one of the two quantities involved, observe that the graph is a straight line through the origin, and find unit rates from a graph. Explain what a point (x, y) means in terms of the situation, with special attention to the points (0, 0) and $(1, r)$ where r is the unit rate.
5. Compare tables, graphs, formulas, diagrams, and verbal descriptions that represent or partially represent proportional relationships; explain correspondences among the representations including how the unit rate is shown in each.

Percent

6. Understand that percentages are rates per 100. For example, 30% of a quantity means $30/100$ times the quantity. A percentage can be a complex fraction, as in $3.75\% = 3.75/100$.
7. Find a percentage of a quantity; solve problems involving finding the whole given a part and the percentage.
8. Solve multistep percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error, expressing monthly rent as a percentage of take-home pay.*

The Number System 7-NS

The system of rational numbers

1. Understand that the rules for manipulating fractions extend to complex fractions.
2. Understand and perform addition and subtraction with rational numbers:
   a. Understand that on a number line, the sum $p + q$ is the number located a distance $|q|$ from p, to the right of p if q is positive and to the left of p if q is negative. A number and its opposite are additive inverses (i.e., their sum is zero).
   b. Compute sums of signed numbers using the laws of arithmetic. *For example, $7 + (-3) = 4$ because $7 + (-3) = (4 + 3) + (-3) = 4 + [3 + (-3)] = 4 + [0] = 4$.*
   c. Understand that subtraction of rational numbers is defined by viewing a difference as the solution of an unknown-addend addition problem. Subtraction of a rational number gives the same answer as adding its additive inverse.
   d. Explain and justify rules for adding and subtracting rational numbers, using a number line and practical contexts. *For example, relate $r + (-s) = r - s$ to a bank transaction; explain why $p - (q + r) = p - q - r$.*
   e. Understand that the additive inverse of a sum is the sum of the additive inverses, that is $-(p + q) = -p + -q$. *For example, $-(6 + -2) = (-6) + 2$ because $[6 + (-2)] + [(-6) + 2] = [6 + (-6)] + [(-2) + 2] = [0] + [0] = 0$.*
3. Understand and perform multiplication and division with rational numbers:
   a. Understand that the extension of multiplication from fractions to rational numbers is determined by the requirement that multiplication and addition satisfy the laws of arithmetic, particularly the distributive law, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers.
   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 $-(p/q) = (-p)/q = p/(-q)$.
   c. Calculate products and quotients of rational numbers, and use multiplication and division to solve word problems. *Include signed quantities.*

The system of real numbers

4. Understand that there are numbers that are not rational numbers, called irrational numbers, e.g., π and $\sqrt{2}$. Together the rational and irrational numbers form the real number system. In school mathematics, the real numbers are assumed to satisfy the laws of arithmetic.

Expressions and Equations 7-EE

Expressions

1. Interpret numerical expressions at a level necessary to calculate their value using a calculator or spreadsheet. For expressions with variables, use and interpret conventions of algebraic notation, such as $y/2$ is $y \div 2$ or $1/2 \times y$; $(3 \pm y)/5$ is $(3 \pm y) \div 5$ or $1/5 \times (3 \pm y)$; a^2 is $a \times a$, a^3 is $a \times a \times a$, a^2b is $a \times a \times b$.
2. Generate equivalent expressions from a given expression using the laws of arithmetic and conventions of algebraic notation. Include:
   a. Adding and subtracting linear expressions, as in $(2x + 3) + x + (2 - x) = 2x + 5$.
   b. Factoring, as in $4x + 4y = 4(x + y)$ or $5x + 7x + 10y + 14y = 12x + 24y = 12(x + 2y)$.
   c. Simplifying, as in $-2(3x - 5) + 4x = 10 - 2x$ or $x/3 + (x - 2)/4 = 7x/12 - 1/2$.

Quantitative relationships and the algebraic approach to problems

3. Choose variables to represent quantities in a word problem, and construct simple equations to solve the problem 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 nonnegative rational numbers and the solution is a nonnegative rational number. Fluently solve equations of these forms, e.g., by undoing the operations involved in producing the expression on the left.
   b. Solve the same word problem arithmetically and algebraically. *For example, "J. has 4 packages of balloons and 5 single balloons. In all, he has 21 balloons. How many balloons are in a package?" Solve this problem arithmetically (using a sequence of operations on the given numbers), and also solve it by using a variable to stand for the number of balloons in a package, constructing an equation such as $4b + 5 = 21$ to describe the situation then solving the equation.*
   c. 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, $P + 0.05P = 1.05P$ means that "increase by 5%" is the same as "multiply by 1.05."*

Geometry 7-G

Congruence and similarity

1. Verify experimentally the fact that a rigid motion (a sequence of rotations, reflections, and translations) preserves distance and angle, e.g., by using physical models, transparencies, or dynamic geometry software:
   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 the meaning of congruence: a plane figure is congruent to another if the second can be obtained from the first by a rigid motion.
3. Verify experimentally that a dilation with scale factor k preserves lines and angle measure, but takes a line segment of length L to a line segment of length kL.
4. Understand the meaning of similarity: a plane figure is similar to another if the second can be obtained from the first by a similarity transformation (a rigid motion followed by a dilation).
5. Solve problems involving similar figures and scale drawings. *Include computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.*
6. Use informal arguments involving approximation by lines, squares, and cubes to see that a similarity transformation with a scale factor of k leaves angle measures unchanged, changes lengths by a factor of k, changes areas by a factor of k^2, and changes volumes by a factor of k^3.
7. Know the formulas relating the area, radius and circumference of a circle and solve problems requiring the use of these formulas; give an informal derivation of the relationship between the circumference and area of a circle.

Angles

8. Justify facts about the angle sum of triangles, exterior angles, and alternate interior angles created when parallel lines are cut by a transversal, e.g., by using physical models, transparencies, or dynamic geometry software to make rigid motions and give informal arguments. *For example, arrange three copies of the same triangle so that the three angles appear to form a line, and give an argument in terms of transversals why this is so.*
9. 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.

Situations involving randomness

1. Simulate situations involving randomness using random numbers generated by a calculator or a spreadsheet or taken from a table. *For example, if you guess at all ten true/false questions on a quiz, how likely are you to get at least seven answers correct?*
2. Use proportional reasoning to predict relative frequencies of outcomes for situations involving randomness, but for which a theoretical answer can be determined. For *example, when rolling a number cube 600 times, one would predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times. How far off might your prediction be? Use technology to generate multiple samples to approximate a distribution of sample proportions. Repeat the process for smaller sample sizes.*

Random sampling to draw inferences about a population

3. 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.
4. Understand the importance of measures of variation in sample quantities (like means or proportions) in reasoning about how well a sample quantity estimates or predicts the corresponding population quantity.
5. 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.*

Comparative inferences about two populations

6. 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.*
7. Use measures of center and measures of variability for numerical data from uniform random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade book are generally longer than the words in a chapter of a sixth-grade book.*

DRAFT

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) 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 mA. 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 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.

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The Number System 8-NS

The system of real numbers

1. Understand informally that every number on a number line has a decimal expansion, which can be found for rational numbers using long division. Rational numbers are those with repeating decimal expansions (this includes finite decimals which have an expansion that ends in a sequence of zeros).
2. Informally explain why $\sqrt{2}$ is irrational.
3. Use rational approximations (including those obtained from truncating decimal expansions) to compare the size of irrational numbers, locate them approximately on a number line, and estimate the value of expressions (e.g., π^2). *For example, show that the square root of 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

Linear equations in one variable

1. Understand that a linear equation in one variable might have one solution, infinitely many solutions, or no solutions. Which of these possibilities is the case can be determined 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).
2. Solve linear equations with rational number coefficients, including equations that require expanding expressions using the distributive law and collecting like terms.

Linear equations in two variables

3. Understand that the slope of a non-vertical line in the coordinate plane has the same value for any two distinct points used to compute it. This can be seen using similar triangles.
4. Understand that two lines with well-defined slopes are parallel if and only if their slopes are equal.
5. Understand that the graph of a linear equation in two variables is a line, the set of pairs of numbers satisfying the equation. If the equation is in the form $y = mx + b$, the graph can be obtained by shifting the graph of $y = mx$ by b units (upwards if b is positive, downwards if b is negative). The slope of the line is m.
6. Understand that a proportional relationship between two variable quantities y and x can be represented by the equation $y = mx$. The constant m is the unit rate, and tells how much of y per unit of x.
7. Graph proportional relationships and relationships defined by a linear equation; find the slope and interpret the slope in context.
8. 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.*

Systems of linear equations

9. 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.
10. 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 the quantity $3x + 2y$ cannot simultaneously be 5 and 6.*
11. Solve and explain word problems leading to two linear equations in two variables.
12. Solve problems involving lines and their equations. *For example, decide whether a point with given coordinates lies on the line with a given equation; construct an equation for a line given two points on the line or one point and the slope; 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

Function concepts

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. *Function notation is not required in Grade 8.*
2. Evaluate expressions that define functions, and solve equations to find the input(s) that correspond to a given output.
3. Compare properties of two functions represented in different ways (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.*

4. Understand that a function is linear if it can be expressed in the form $y = mx + b$ or if its graph is a straight line. *For example, the function $y = x^2$ is not a linear function because its graph contains the points (1,1), (–1,1) and (0,0), which are not on a straight line.*

Functional relationships between quantities

5. Understand that functions can describe situations where one quantity determines another.
6. 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.
7. 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

Congruence and similarity

1. Use coordinate grids to transform figures and to predict the effect of dilations, translations, rotations and reflections.
2. Explain using rigid motions the meaning of congruence for triangles as the equality of all pair of sides and all pairs of angles.
3. Give an informal explanation using rigid motions of the SAS and ASA criteria for triangle congruence, and use them to prove simple theorems.
4. Explain using similarity transformations the meaning of similarity for triangles as the equality of all pairs of angles and the proportionality of all pairs of sides.
5. Give an informal explanation using similarity transformations of the AA and SAS criteria for triangle similarity, and use them to prove simple theorems.

The Pythagorean Theorem

6. The side lengths of a right triangle are related by the Pythagorean Theorem. Conversely, if the side lengths of a triangle satisfy the Pythagorean Theorem, it is a right triangle.
7. Explain a proof of the Pythagorean Theorem and its converse.
8. Use the Pythagorean Theorem to determine unknown side lengths in right triangles and to solve problems in two and three dimensions.
9. Use the Pythagorean Theorem to find the distance between two points in a coordinate system.

Plane and solid geometry

10. 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.
11. Understand that slicing a three-dimensional figure with a plane produces a two-dimensional figure. Describe plane sections of right rectangular prisms and right rectangular pyramids.
12. Use hands-on activities to demonstrate and describe properties of: parallel lines in space, the line perpendicular to a given line through a given point, lines perpendicular to a given plane, lines parallel to a given plane, the plane or planes passing through three given points, and the plane perpendicular to a given line at a given point.

Statistics and Probability 8-SP

Patterns of association in bivariate data

1. Understand that scatter plots for bivariate measurement data may reveal patterns of association between two quantities.
2. Construct and interpret scatter plots for bivariate measurement data. Describe patterns such as clustering, outliers, positive or negative association, linear association, nonlinear association.
3. Understand that a straight line is a widely used model for exploring 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.
4. 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, an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*
5. 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?*

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Where is the College-and-Career-Readiness line drawn?

The high school standards specify the mathematics that all students should learn in order to be college and career ready. The high school standards also describe additional mathematics that students should learn to pursue careers and majors in science, technology, engineering and mathematics (STEM) fields. Other forms of advanced work are possible (for example in discrete mathematics or advanced statistics) and can be eventually added to the standards.

Standards beyond the college and career readiness level that are necessary for STEM careers are prefixed with a symbol STEM, as in this example:

> STEM Graph complex numbers in polar form and interpret arithmetic operations on complex numbers geometrically.

Any standard without this tag is understood to be in the common core mathematics curriculum for all students.

How are the high school standards organized?

The high school standards are listed in conceptual categories, as shown in the Table below. **Appendix A (online) contains drafts of model course descriptions based on these standards**. 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.

Conceptual Organization of the High School Standards

CCRS Draft September 17th	High School Standards Draft March 10
Number	Number and Quantity
Quantity	
Expressions	Algebra
Equations	
Coordinates	
Functions	Functions
Geometry	Geometry
Statistics	Statistics and Probability
Probability	
Modeling	Modeling**

* Standards formerly appearing under Coordinates now appear under other headings.

** Making mathematical models is now a Standard for Mathematical Practice. Standards formerly appearing under Modeling are now distributed under other major headings. High school standards with relevance to modeling are flagged with a (★) symbol. A narrative description of modeling remains in the high school standards, but there are no specific standard statements in that narrative description.

Mathematics | High School—Number and Quantity

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 7, 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.

Students sometimes have difficulty accepting new kinds of numbers when these differ in appearance and properties from those of a familiar system. For example, students might decide that complex numbers are not numbers because they are not written with numerical digits, or because they do not describe positive or negative quantities. Indeed, 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. Historically, number systems have been extended when there is an intellectual or practical benefit in using the new numbers to solve previously insoluble problems.[1]

Although the referent of "number" changes, the four operations stay the same in important ways. The commutative, associative, and distributive laws extend the properties of operations to the integers, rational numbers, real numbers, and complex numbers. The inverse relationships between addition and subtraction, and multiplication and division are maintained in these larger systems.

Calculators are useful in this strand 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, volume, and so forth. In high school, students encounter novel situations in which they themselves must conceive the attributes of interest. 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, who must conceptualize relevant attributes and create or choose suitable metrics by which to measure them.

Content Outline

The Real Number System

Quantities

The Complex Number System

Vector Quantities and Matrices

[1] See Harel, G., "A Standpoint of Research on Middle/Higher Number and Quantity," a research review provided for the Common Core State Standards Initiative.

The Real Number System N-RN

1. Understand that the laws of exponents for positive integer exponents follow from an understanding of exponents as indicating repeated multiplication, and from the associative law for multiplication.
2. Understand that the definition of the meaning of zero, positive rational, and negative exponents follows from extending the laws of exponents to those values, allowing for a notation for radicals in terms of rational exponents. *For example, since* $(5^{1/3})^3 = 5^{(1/3)\cdot 3} = 5^1 = 5$, $5^{1/3}$ *is a cube root of* 5.
3. Understand that sums and products of rational numbers are rational.
4. Understand 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.
5. Rewrite expressions using the laws of exponents. *For example,* $(5^{1/2})^3 = 5^{3/2}$ *and* $1/5 = 5^{-1}$.

Quantities★ N-Q

1. Understand that the magnitude of a quantity is independent of the unit used to measure it. *For example, the density of a liquid does not change when it is measured in another unit. Rather, its measure changes. The chosen unit "measures" the quantity by giving it a numerical value ("the density of lead is 11.3 times that of water").*
2. Use units as a way to understand problems and to guide the solution of multi-step problems, involving, 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.
3. Define metrics for the purpose of descriptive modeling. *For example, find a good measure of overall highway safety; propose and debate measures such as fatalities per year, fatalities per year per driver, or fatalities per vehicle-mile traveled.*
4. Add, subtract, multiply, and divide 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.
5. Use and interpret quantities and units correctly in algebraic formulas.
6. Use and interpret quantities and units correctly in graphs and data displays (function graphs, data tables, scatter plots, and other visual displays of quantitative information). Generate graphs and data displays using technology.

The Complex Number System N-CN

1. Understand that the relation $i^2 = -1$ and the commutative, associative, and distributive laws can be used to calculate with complex numbers.
2. STEM Understand that polynomials can be factored over the complex numbers, e.g., as in $x^2 + 4 = (x + 2i)(x - 2i)$.
3. STEM Understand that complex numbers can be visualized on the complex plane. Real numbers correspond to points on the horizontal (real) axis, and imaginary numbers to points on the vertical axis.
4. STEM Understand that on the complex plane, arithmetic of complex numbers can be interpreted geometrically: addition is analogous to vector addition, and multiplication can be understood as rotation and dilation about the origin. Complex conjugation is reflection across the real axis.
5. STEM Understand that on the complex plane, as on the real line, the distance between numbers is the absolute value of the difference, and the midpoint of a segment is the average of the numbers at its endpoints.
6. Add, subtract, and multiply complex numbers.
7. STEM Find the conjugate of a complex number; use conjugates to find absolute values and quotients of complex numbers.
8. STEM Solve quadratic equations with real coefficients that have complex solutions using a variety of methods.
9. STEM Graph complex numbers in rectangular form.
10. STEM Graph complex numbers in polar form and interpret arithmetic operations on complex numbers geometrically.
11. STEM Explain why the rectangular and polar forms of a complex number represent the same number.

★ Standard with close connection to modeling.

1. STEM Understand that vector quantities have both magnitude and direction. Vector quantities are typically represented by directed line segments. The magnitude of a vector $\mathbf{v}$ is commonly denoted $|\mathbf{v}|$ or $||\mathbf{v}||$.
2. STEM Understand that vectors are determined by the coordinates of their initial and terminal points, or by their components.
3. STEM Understand that vectors can be added end-to-end, component-wise, or by the parallelogram rule. The magnitude of a sum of two vectors is typically not the sum of the magnitudes.
4. STEM Understand that a vector $\mathbf{v}$ can be multiplied by a real number c (called a scalar in this context) to form a new vector $c\mathbf{v}$ with magnitude $|c|v$. When $|c|v \neq 0$, the direction of $c\mathbf{v}$ is either along $\mathbf{v}$ (for $c > 0$) or against $\mathbf{v}$ (for $c < 0$). Scalar multiplication can be shown graphically by scaling vectors and possibly reflecting them in the origin; scalar multiplication can also be performed component-wise, e.g., as $c(v_x, v_y) = (cv_x, cv_y)$.
5. STEM Understand that vector subtraction $\mathbf{v} - \mathbf{w}$ is defined as $\mathbf{v} + (-\mathbf{w})$. Two vectors can be subtracted graphically by connecting the tips in the appropriate order.
6. STEM Understand that matrices can be multiplied by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. Matrices of the same dimensions can be added or subtracted. Matrices with compatible dimensions can be multiplied. Unlike multiplication of numbers, matrix multiplication is not a commutative operation, but still satisfies the associative and distributive laws.
7. STEM Understand that a vector, when regarded as a matrix with one column, can be multiplied by a matrix of suitable dimensions to produce another vector. A 2×2 matrix can be viewed as a transformation of the plane.
8. STEM Understand that a system of linear equations can be represented as a single matrix equation in a vector variable.
9. STEM 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.
10. STEM Perform basic vector operations (addition, subtraction, scalar multiplication) both graphically and algebraically.
11. STEM Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum.
12. STEM Solve problems involving velocity and quantities that can be represented by vectors.★
13. STEM Add, subtract, and multiply matrices of appropriate dimensions.
14. STEM Use matrices to store and manipulate data, e.g., to represent payoffs or incidence relationships in a network.
15. STEM Represent systems of linear equations as matrix equations.
16. STEM Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension greater than 3×3).

★ Standard with close connection to modeling.

Expressions. An expression is a description of a computation on numbers and symbols that represent numbers, using arithmetic operations and the operation of raising a number to rational exponents. 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 deductions from the commutative, associative, and distributive laws and the inverse relationships between the four operations, and the conventions of algebraic notation. These extend what students have learned about arithmetic expressions in K–8 to expressions that involve exponents, radicals, and representations of real numbers, and, for STEM-intending students, complex numbers.

At times, an expression is the result of applying operations to simpler expressions. Viewing such an expression by singling out these simpler expressions can sometimes clarify its underlying structure.

A spreadsheet or a CAS environment can be used to experiment with algebraic expressions, perform complex algebraic manipulations,and understand how algebraic manipulations behave.

Equations and inequalities. An equation is a statement that two expressions are equal. Solutions to an equation are numbers that make the equation true when assigned to the variables in it. If the equation is true for all numbers, then it is called an identity; identities are often discovered by using the laws of arithmetic or the laws of exponents to transform one expression into another.

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 graphed 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 transforming it into one or more simpler equations. The process is governed by deductions based on the properties of equality. 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, stimulating the extension of that 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. Equations in two variables may also define functions. Asking when two functions have the same value leads to an equation; graphing the two functions allows for the approximate solution of the equation. Converting a verbal description to an equation, inequality, or system of these is an essential skill in modeling.

Content Outline

Seeing Structure in Expressions

Arithmetic with Polynomials and Rational Expressions

Creating Equations that Describe Numbers or Relationships

Reasoning with Equations and Inequalities

Seeing Structure in Expressions A-SSE

1. Understand that different forms of an expression may reveal different properties of the quantity in question; a purpose in transforming expressions is to find those properties. *Examples: factoring a quadratic expression reveals the zeros of the function it defines, and putting the expression in vertex form reveals its maximum or minimum value; 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%.*
2. Understand that complicated expressions can be interpreted by viewing one or more of their parts as single entities.
3. Interpret an expression that represents a quantity in terms of the context. *Include interpreting parts of an expression, such as terms, factors and coefficients.* ★
4. Factor, expand, and complete the square in quadratic expressions.
5. See expressions in different ways that suggest ways of transforming them. *For example, see* $x^4 - y^4$ *as* $(x^2)^2 - (y^2)^2$, *thus recognizing it as a difference of squares that can be factored as* $(x^2 - y^2)(x^2 + y^2)$.
6. Rewrite expressions using the laws of exponents. *For example,* $(x^{1/2})^3 = x^{3/2}$ *and* $1/x = x^{-1}$.
7. Use the laws of exponents to interpret expressions for exponential functions, recognizing positive rational exponents as indicating roots of the base and negative exponents as indicating the reciprocal of a power. *For example, identify the per unit percentage change in functions such as* $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and conclude whether it represents exponential growth or decay. Recognize that any nonzero number raised to the zero power is 1, for example,* $12(1.05)^0 = 12$. *Avoid common errors such as confusing* $6(1.05)^t$ *with* $(6 \cdot 1.05)^t$ *and* $5(0.03)^t$ *with* $5(1.03)^t$.
8. STEM Prove the formula for the sum of a geometric series, and use the formula to solve problems.

Arithmetic with Polynomials and Rational Expressions A-APR

1. Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication.
2. Understand that polynomial identities become true statements no matter which real numbers are substituted. *For example, the polynomial identity* $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ *can be used to generate Pythagorean triples.*
3. 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 $p(x)$.
4. STEM Understand that the Binomial Theorem gives the expansion of $(x + a)^n$ in powers of x for a positive integer n and a real number a, with coefficients determined for example by Pascal's Triangle. The Binomial Theorem can be proved by mathematical induction or by a combinatorial argument.
5. STEM Understand that rational expressions are quotients of polynomials. They form a system analogous to the rational numbers, closed under division by a nonzero rational function.
6. Add, subtract and multiply polynomials.
7. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the polynomial.
8. Transform simple rational expressions using the commutative, associative, and distributive laws, and the inverse relationship between multiplication and division.
9. Divide a polynomial $p(x)$ by a divisor of the form $x - a$ using long division.
10. STEM Identify zeros and asymptotes of rational functions, when suitable factorizations are available, and use the zeros and asymptotes to construct a rough graph of the function.
11. STEM Divide polynomials, using long division for linear divisors and long division or a computer algebra system for higher degree divisors.

Creating Equations That Describe Numbers or Relationships A-CED*

1. Understand that equations in one variable are often created to describe properties of a specific but unknown number.
2. Understand that equations in two or more variables that represent a relationship between quantities can be built by experimenting with specific numbers in the relationship.
3. Write equations and inequalities that specify an unknown quantity or to express a relationship between two or more quantities. Use the equations and inequalities to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*

★ Standard with close connection to modeling.

4. Rearrange formulas to highlight a quantity of interest. *For example, transform Ohm's law $V = IR$ to highlight resistance R; in motion with constant acceleration, transform $v_{f,x}^2 - v_{i,x}^2 = 2a_x(x_f - x_i)$ to highlight the change in position along the x-axis, $x_f - x_i$.*

Reasoning with Equations and Inequalities A-REI

1. Understand that to solve an equation algebraically, one makes logical deductions from the equality asserted by the equation, often in steps that replace it with a simpler equation whose solutions include the solutions of the original one.
2. Understand that the method of completing the square can transform any quadratic equation in x into an equivalent equation of the form $(x - p)^2 = q$. This leads to the quadratic formula.
3. Understand that given a system of two linear equations in two variables, adding a multiple of one equation to another produces a system with the same solutions. This principle, combined with principles already encountered with equations in one variable, allows for the simplification of systems.
4. Understand that the graph of an equation in two variables is the set of its solutions plotted in the coordinate plane, often forming a curve or a line.
5. Understand that solutions to two equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
6. Understand that the solutions to a linear inequality in two variables can be graphed as a half-plane (excluding the boundary in the case of a strict inequality).
7. Understand that solutions to several linear inequalities in two variables correspond to points in the intersection of the regions in the plane defined by the solutions to the inequalities.
8. Understand that equations and inequalities can be viewed as constraints in a problem situation, e.g., inequalities describing nutritional and cost constraints on combinations of different foods.★
9. STEM Understand that the relationship between an invertible function f and its inverse function can be used to solve equations of the form $f(x) = c$.
10. Solve simple rational and radical equations in one variable, noting and explaining extraneous solutions.
11. Solve linear equations in one variable, including equations with coefficients represented by letters.
12. Solve quadratic equations in one variable. *Include methods such as inspection (e.g. for $x^2 = 49$), square roots, completing the square, the quadratic formula and factoring. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.*
13. Solve equations $f(x) = g(x)$ approximately by finding the intersections of the graphs of $f(x)$ and $g(x)$, e.g. using technology to graph the functions. *Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, exponential, and logarithmic functions.*
14. Solve linear inequalities in one variable and graph the solution set on a number line.
15. Solve systems of linear equations algebraically and graphically, focusing on pairs of linear equations in two variables.
16. Solve algebraically a simple system consisting of one linear equation and one quadratic equation in two variables; for example, find points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.
17. Graph the solution set of a system of linear inequalities in two variables.
18. In modeling situations, represent constraints by systems of equations and/or inequalities, and interpret solutions of these systems as viable or non-viable options in the modeling context.★
19. In the context of exponential models, solve equations of the form $a\,b^{ct} = d$ where a, c, and d are specific numbers and the base b is 2, 10, or e.★
20. STEM Relate the properties of logarithms to the laws of exponents and solve equations involving exponential functions.
21. STEM Use inverse functions to solve equations of the form $a\sin(bx + c) = d$, $a\cos(bx + c) = d$, and $a\tan(bx + c) = d$.

★ Standard with close connection to modeling.

Mathematics | High School—Functions

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 nature and society are full of dependencies between quantities, 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"; or by an algebraic expression like $f(x) = a + bx$. The graph of a function is often a useful way of visualizing the relationship the function models, and manipulating a mathematical expression for a function can throw light on the function's properties. Graphing technology and spreadsheets are also useful tools in the study of functions.

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 CAS can be used to experiment with properties of the 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 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.

Content Outline

Interpreting Functions

Building Functions

Linear, Quadratic, and Exponential Models

Trigonometric Functions

Limits and Continuity†

Differential Calculus†

Applications of Derivatives†

Integral Calculus†

Applications of Integration†

Infinite Series†

† Specific standards for calculus domains are not listed.

Interpreting Functions A-IF

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.
2. Understand that functions of a single variable have key characteristics, including: zeros; extreme values; average rates of change (over intervals); intervals of increasing, decreasing and/or constant behavior; and end behavior.
3. Understand that a function defined by an expression may be written in different but equivalent forms, which can reveal different properties of the function.
4. Use function notation and evaluate functions for inputs in their domains.
5. Describe qualitatively the functional relationship between two quantities by reading a graph (e.g., where the function is increasing or decreasing, what its long-run behavior appears to be, and whether it appears to be periodic). ★
6. Sketch a graph that exhibits the qualitative features of a function that models a relationship between two quantities. ★
7. Compare properties of two functions represented in different ways (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, draw conclusions about the graph of a quadratic function from its algebraic expression.*
8. 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.* ★
9. Describe the qualitative behavior of functions presented in graphs and tables. *Identify: intercepts; intervals where the function is increasing, decreasing, positive or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.* ★
10. Use technology to exhibit the effects of parameter changes on the graphs of linear, power, quadratic, square root, cube root, and polynomial functions, and simple rational, exponential, logarithmic, sine, cosine, absolute value, and step functions. ★
11. Transform quadratic polynomials algebraically to reveal different features of the function they define, such as zeros, extreme values, and symmetry of the graph.

Building Functions A-BF

1. Understand that functions can be described by specifying an explicit expression, a recursive process or steps for calculation.
2. Understand that sequences are functions whose domain is a subset of the nonnegative integers.
3. STEM Understand that composing a function f with a function g creates a new function called the composite function—for an input number x, the output of the composite function is $f(g(x))$.
4. STEM Understand that the inverse of an invertible function "undoes" what the function does; that is, composing the function with its inverse in either order returns the original input. One can sometimes produce an invertible function from a non-invertible function by restricting the domain (e.g., squaring is not an invertible function on the real numbers, but squaring is invertible on the nonnegative real numbers).
5. Write a function that describes a relationship between two quantities, for example by varying parameters in and combining standard function types (such as linear, quadratic or exponential functions). Use technology to experiment with parameters and to illustrate an explanation of the behavior of the function when parameters vary. ★
6. Solve problems involving linear, quadratic, and exponential functions. ★
7. 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.
8. Generate an arithmetic or geometric sequence given a recursive rule for the sequence. ★
9. As a way to describe routine modeling situations, write arithmetic and geometric sequences both recursively and in closed form, and translate between the two forms. ★
10. STEM Evaluate composite functions and compose functions symbolically.
11. STEM Read values of an inverse function from a graph or a table, given that the function has an inverse.
12. STEM For linear or simple exponential functions, find a formula for an inverse function by solving an equation.
13. STEM Verify symbolically by composition that one function is the inverse of another.

Linear, Quadratic, and Exponential Models A-LQE

1. Understand that a linear function, defined by $f(x) = mx + b$ for some constants m and b, models a situation in which a quantity changes at a constant rate, m, relative to another. ★
2. Understand that quadratic functions have maximum or minimum values and can be used to model problems with optimum solutions. ★
3. Understand that an exponential function, defined by $f(x) = ab^x$ or by $f(x) = a(1 + r)^x$ for some constants a, $b > 0$ and $r > -1$, models a situation where a quantity grows or decays by a constant factor or a constant percentage change over each unit interval. ★
4. Understand that linear functions grow by equal differences over equal intervals; exponential functions grow by equal factors over equal intervals. ★
5. Understand that in an arithmetic sequence, differences between consecutive terms form a constant sequence, and second differences are zero. Conversely, if the second differences are zero, the sequence is arithmetic. Arithmetic sequences can be seen as linear functions. ★
6. Understand that in a sequence that increases quadratically (e.g., $a_n = 3n^2 + 2n + 1$), differences between consecutive terms form an arithmetic sequence, and second differences form a constant sequence. Conversely, if the second differences form a constant sequence with nonzero value, the sequence increases quadratically. ★
7. Understand that in a geometric sequence, ratios of consecutive terms are all the same. ★
8. Understand that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. ★
9. 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. ★
10. Construct a function to describe a linear relationship between two quantities. Determine the rate of change and constant term of a linear function from a graph, a description of a relationship, or from two (x, y) values (include reading these from a table). ★
11. Use quadratic functions to model problems, e.g., in situations with optimum solutions. ★
12. Construct an exponential function in the form $f(x) = a(1 + r)^x$ or $f(x) = ab^x$ to describe a relationship in which one quantity grows with respect to another at a constant percent growth rate or a with a constant growth factor. ★
13. Interpret the rate of change and constant term of a linear function or sequence in terms of the situation it models, and in terms of its graph or a table of values. ★
14. Calculate and interpret the growth factor for an exponential function (presented symbolically or as a table) given a fixed interval. Estimate the growth factor from a graph. ★
15. Recognize a quantitative relationship as linear, exponential, or neither from description of a situation. ★
16. Compare quantities increasing exponentially to quantities increasing linearly or as a polynomial function. ★

Trigonometric Functions F-TF

1. STEM Understand that the unit circle in the coordinate plane enables one to define the sine, cosine, and tangent functions for real numbers.
2. STEM Understand that trigonometric functions are periodic by definition, and sums and products of functions with the same period are periodic.
3. STEM Understand that restricting trigonometric functions to a domain on which they are always increasing or always decreasing allows for the construction of an inverse function.
4. STEM Revisit trigonometric functions and their graphs in terms of radians.
5. STEM Use the unit circle to determine geometrically the values of sine, cosine, tangent for integer multiples of $\pi/4$ and $\pi/6$.
6. STEM Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.
7. STEM Solve simple trigonometric equations formally using inverse trigonometric functions and evaluate the solutions numerically using technology. *Solving trigonometric equations by means of the quadratic formula is optional.*

Limits and Continuity† F-LC

★ Standard with close connection to modeling.

† Specific standards for calculus domains are not listed.

Differential Calculus† F-DC

Applications of Derivatives† F-AD

Integral Calculus† F-IC

Applications of Integration† F-AI

Infinite Series† F-IS

DRAFT

† Specific standards for calculus domains are not listed.

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.

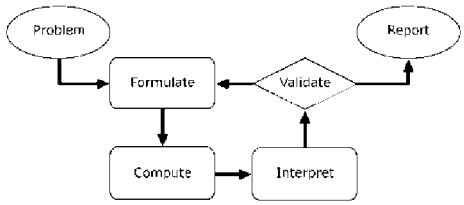
A model can be very simple, such as writing total cost as a product of unit price and number bought, or using a geometric shape to describe a physical object like a coin. Even such simple models involve making choices. It is up to us whether to model a coin as a three-dimensional cylinder, or whether 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, like 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 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 than 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, CAS environments, 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 (★).

DRAFT

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. One begins to make a probability model by listing or describing the possible outcomes (the sample space) and assigning probabilities. 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 additive and multiplicative laws of probability. 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, functional models, and correlation coefficients, and to simulate many possible outcomes in a short amount of time.

Connections to Functions and Modeling. Functional models may be used to approximate data; if the data are approximately linear, the relationship may be modeled with a regression line and the strength and direction of such a relationship may be expressed through a correlation coefficient.

Content Outline

Summarizing Categorical and Measurement Data

Probability Models

Independently Combined Probability Models

Making Inferences and Justifying Conclusions Drawn from Data

Conditional Probability and the Laws of Probability

Experimenting and Simulating to Model Probabilities

Using Probability to Make Decisions

* Most or all of the standards in Statistics and Probability have a close connection to modeling.

Summarizing Categorical and Quantitative Data S-SI

1. Understand that statistical methods take variability into account to support making informed decisions based on data collected to answer specific questions.
2. Understand that visual displays and summary statistics condense the information in data sets into usable knowledge.
3. Understand that patterns of association or relationships between variables may emerge through careful analysis of multi-variable data.
4. Summarize comparative or bivariate categorical data in two-way frequency tables. Interpret joint, marginal and conditional relative frequencies in the context of the data, recognizing possible associations and trends in bivariate categorical data.
5. Compare data on two or more count or measurement variables by using plots on the real number line (dot plots, histograms, and box plots). Use statistics appropriate to the shape of the data distribution to summarize center (median, mean) and spread (interquartile range, standard deviation) of the data sets. Interpret changes in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
6. Represent bivariate quantitative data on a scatter plot and describe how the variables are related.
7. Fit a linear function for scatter plots that suggest a linear association. Informally assess the fit of the model function by plotting and analyzing residuals.
8. Use a model function fitted to the data to solve problems in the context of the data, interpreting the slope (rate of change) and the intercept (constant term).
9. Compute (using technology) and interpret the correlation coefficient for a linear relationship between variables.
10. Distinguish between correlation and causation.

Probability Models S-PM

1. Understand that in a probability model, individual outcomes have probabilities that sum to 1. When outcomes are categorized, the probability of a given type of outcome is the sum of the probabilities of all the individual outcomes of that type.
2. Understand that uniform probability models are useful models for processes such as (i) the selection of a person from a population; (ii) the selection of a number in a lottery; (iii) any physical situation in which symmetry suggests that different individual outcomes are equally likely.
3. Understand that two different empirical probability models for the same process will rarely assign exactly the same probability to a given type of outcome. But if the data sets are large and the methods used to collect the data for the two data sets are consistent, the agreement between the models is likely to be reasonably good.
4. Understand that a (theoretical) uniform probability model may be judged by comparing it to an empirical probability model for the same process. If the theoretical assumptions are appropriate and the data set is large, then the two models should agree approximately. If the agreement is not good, then it may be necessary to modify the assumptions underlying the theoretical model or look for factors that might have affected the data used to create the empirical model.
5. Use a uniform probability model to compute probabilities for a process involving uncertainty, including the random selection of a person from a population and physical situations where symmetry suggests that different individual outcomes are equally likely.
    a. List the individual outcomes to create a sample space.
    b. Label the individual outcomes in the sample space to reflect important characteristics or quantities associated with them.
    c. Determine probabilities of individual outcomes, and determine the probability of a type or category of outcome as the fraction of individual outcomes it includes.
6. Generate data by sampling, repeated experimental trials, and simulations. Record and appropriately label such data, and use them to construct an empirical probability model. Compute probabilities in such models.
7. Compare probabilities from a theoretical model to probabilities from a corresponding empirical model for the same situation. If the agreement is not good, explain possible sources of the discrepancies.

Independently Combined Probability Models S-IPM

1. Understand that to describe a pair of random processes (such as tossing a coin and rolling a number cube), or one random process repeated twice (such as randomly selecting a student in the class on two different days), two probability models can be combined into a single model.

a. The sample space for the combined model is formed by listing all possible ordered pairs that combine an individual outcome from the first model with an individual outcome from the second. Each ordered pair is an individual outcome in the combined model.

b. The total number of individual outcomes (ordered pairs) in the combined model is the product of the number of individual outcomes in each of the two original models.

2. Understand that when two probability models are combined independently, the probability that one type of outcome in the first model occurs together with another type of outcome in the second model is the product of the two corresponding probabilities in the original models (the Multiplication Rule).
3. Combine two uniform models independently to compute probabilities for a pair of random processes (e.g., flipping a coin twice, selecting one person from each of two classes).
   a. Use organized lists, tables and tree diagrams to represent the combined sample space.
   b. Determine probabilities of ordered pairs in the combined model, and determine the probability of a particular type or category of outcomes in the combined model, as the fraction of ordered pairs corresponding to it.
4. For two independently combined uniform models, use the Multiplication Rule to determine probabilities.

Making Inferences and Justifying Conclusions S-IC

1. Understand that statistics is a process for making inferences about population parameters based on a sample from that population; randomness is the foundation for statistical inference.
2. Understand that the design of an experiment or sample survey is of critical importance to analyzing the data and drawing conclusions.
3. Understand that simulation-based techniques are powerful tools for making inferences and justifying conclusions from data.
4. Use probabilistic reasoning to decide if a specified model is consistent with results from a given data-generating process. (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?)
5. Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each.
6. 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.
7. Use data from a randomized experiment to compare two treatments; justify significant differences between parameters through the use of simulation models for random assignment.
8. Evaluate reports based on data.

Conditional Probability and the Laws of Probability S-CP

1. Understand that events are subsets of a sample space; often, events of interest are defined by using characteristics (or categories) of the sample points, or as unions, intersections, or complements thereof ("and," "or," "not"). A sample point may belong to several events (categories).
2. Understand that if A and B are two events, then in a uniform model the conditional probability of A given B, denoted by $P(A \mid B)$, is the fraction of B's sample points that also lie in A.
3. Understand that the laws of probability allow one to use known probabilities to determine other probabilities of interest.
4. Compute probabilities by constructing and analyzing sample spaces, representing them by tree diagrams, systematic lists, and Venn diagrams.
5. Use the laws of probability to compute probabilities.
6. Apply concepts such as intersections, unions and complements of events, and conditional probability and independence to define or analyze events, calculate probabilities and solve problems.
7. Construct and interpret two-way tables to show probabilities when two characteristics (or categories) are associated with each sample point. Use a two-way table to determine conditional probabilities. ★
8. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. ★
9. Use permutations and combinations to compute probabilities of compound events and solve problems.

★ Standard with close connection to modeling.

Experimenting and Simulating to Model Probabilities S-ES

1. Understand that sets of data obtained from surveys, simulations or other means can be used as probability models, by treating the data set itself as a sample space, in which the sample points are the individual pieces of data.
2. Understand that the probability of an outcome can be interpreted as an assertion about the long-run proportion of the outcome's occurrence if the random experiment is repeated a large number of times.
3. Calculate experimental probabilities by performing simulations or experiments involving a probability model and using relative frequencies of outcomes.
4. Compare the results of simulations with predicted probabilities. When there are substantial discrepancies between predicted and observed probabilities, explain them.
5. 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.

Using Probability to Make Decisions S-MD

1. Understand that the expected value of a random variable is the weighted average of its possible values, with weights given by their respective probabilities.
2. Understand that when the possible outcomes of a decision can be assigned probabilities and payoff values, the decision can be analyzed as a random variable with an expected value, e.g., of an investment.
3. Calculate expected value, e.g. to determine the fair price of an investment.
4. Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).
5. Evaluate and compare two investments or strategies with the same expected value, where one investment or strategy is safer than the other.
6. Evaluate and compare two investments or strategies, where one investment or strategy is safer but has lower expected value. Include large and small investments, and situations with serious consequences.
7. Analyze decisions and strategies using probability concepts (e.g. product testing, medical testing, pulling a hockey goalie at the end of a game).

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Mathematics | High School—Geometry

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.

Understanding the attributes of geometric objects often relies on measurement: a circle is a set of points in a plane at a fixed distance from a point; a cube is bounded by six squares of equal area; when two parallel lines are crossed by a transversal, pairs of corresponding angles are congruent.

The concepts of congruence, similarity and symmetry can be united under the concept of geometric transformation. 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. Applying a scale transformation to a geometric figure yields a similar figure. The transformation preserves angle measure, and lengths are related by a constant of proportionality.

The definitions of sine, cosine and tangent for acute angles are founded on right triangle similarity, and, with the Pythagorean theorem, are fundamental in many real-world and theoretical situations.

Coordinate geometry is a rich field for exploration. How does a geometric transformation such as a translation or reflection affect the coordinates of points? How is the geometric definition of a circle reflected in its equation? Coordinates can describe locations in three dimensions and extend the use of algebraic techniques to problems involving the three-dimensional world we live in.

Dynamic geometry environments provide students with experimental and modeling tools that allow them to investigate geometric phenomena in much the same was as CAS environments allow them to experiment with algebraic phenomena.

Connections to Equations and Inequalities. 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.

Content Outline

Congruence

Similarity, Right Triangles, and Trigonometry

Circles

Expressing Geometric Properties with Equations

Trigonometry of General Triangles

Geometric Measurement and Dimension

Modeling with Geometry

Congruence G-CO

1. Understand that two geometric figures are congruent if there is a sequence of rigid motions (rotations, reflections, translations) that carries one onto the other. This is the principle of superposition.
2. Understand that criteria for triangle congruence are ways to specify enough measures in a triangle to ensure that all triangles drawn with those measures are congruent.
3. Understand that criteria for triangle congruence (ASA, SAS, and SSS) can be established using rigid motions.
4. Understand that geometric diagrams can be used to test conjectures and identify logical errors in fallacious proofs.
5. Know and use (in reasoning and problem solving) definitions of angles, polygons, parallel, and perpendicular lines, rigid motions, parallelograms and rectangles.
6. 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; two lines parallel to a third are parallel to each other; points on a perpendicular bisector of a segment are exactly those equidistant from the segment's endpoints.*
7. Prove theorems about triangles. *Theorems include: measures of interior angles of a triangle sum to 180°, base angles of isosceles triangles are congruent, the triangle inequality, the longest side of a triangle faces the angle with the greatest measure and vice-versa, the exterior-angle inequality, and the segment joining midpoints of two sides of a triangle parallel to the third side and half the length.*
8. Use and prove properties of and relationships among special quadrilaterals: parallelogram, rectangle, rhombus, square, trapezoid and kite.
9. Characterize parallelograms in terms of equality of opposite sides, in terms of equality of opposite angles, and in terms of bisection of diagonals; characterize rectangles as parallelograms with equal diagonals.
10. 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.*
11. Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle.
12. Use two-dimensional representations to transform figures and to predict the effect of translations, rotations, and reflections.
13. Use two-dimensional representations to transform figures and to predict the effect of dilations.

Similarity, Right Triangles, and Trigonometry G-SRT

1. Understand that dilating a line produces a line parallel to the original. (In particular, lines passing through the center of the dilation remain unchanged.)
2. Understand that the dilation of a given segment is parallel to the given segment and longer or shorter in the ratio given by the scale factor. A dilation leaves a segment unchanged if and only if the scale factor is 1.
3. Understand that the assumed properties of dilations can be used to establish the AA, SAS, and SSS criteria for similarity of triangles.
4. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of sine, cosine, and tangent.
5. Understand that a line parallel to one side of a triangle divides the other two proportionally, and conversely.
6. Use triangle similarity criteria to solve problems and to prove relationships in geometric figures. *Include a proof of the Pythagorean theorem using triangle similarity.*
7. Use and explain the relationship between the sine and cosine of complementary angles.
8. Use sine, cosine, tangent, and the Pythagorean Theorem to solve right triangles[2] in applied problems.
9. STEM Give an informal explanation using successive approximation that a dilation of scale factor r changes the length of a curve by a factor of r and the area of a region by a factor of r^2.

Circles G-C

1. Understand that dilations can be used to show that all circles are similar.
2. Understand that there is a unique circle through three non-collinear points, and four circles tangent to three non-concurrent lines.

[2] A right triangle has five parameters, its three lengths and two acute angles. Given a length and any other parameter, "solving a right triangle" means finding the remaining three parameters.

3. Identify and define radius, diameter, chord, tangent, secant, and circumference.
4. Identify and describe relationships among angles, radii, and chords. *Include the relationship between central, inscribed and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.*
5. Determine the arc lengths and the areas of sectors of circles, using proportions.
6. STEM Construct a tangent line from a point outside a given circle to the circle.
7. STEM Prove and use theorems about circles, and use these theorems to solve problems involving:
   a. Symmetries of a circle
   b. Similarity of a circle to any other
   c. Tangent line, perpendicularity to a radius
   d. Inscribed angles in a circle, relationship to central angles, and equality of inscribed angles
   e. Properties of chords, tangents, and secants as an application of triangle similarity.

Expressing Geometric Properties with Equations G-GPE

1. Understand that two lines with well-defined slopes are perpendicular if and only if the product of their slopes is equal to –1.
2. Understand that the equation of a circle can be found using its definition and the Pythagorean Theorem.
3. Understand that transforming the graph of an equation by reflecting in the axes, translating parallel to the axes, or applying a dilation in one of the coordinate directions corresponds to substitutions in the equation.
4. STEM Understand that an ellipse is the set of all points whose distances from two fixed points (the foci) are a constant sum. The graph of $x^2/a^2 + y^2/b^2 = 1$ is an ellipse with foci on one of the axes.
5. STEM Understand that a parabola is the set of points equidistant from a fixed point (the focus) and a fixed line (the directrix). The graph of any quadratic function is a parabola, and all parabolas are similar.
6. STEM Understand that the formula $A = \pi ab$ for the area of an ellipse can be derived from the formula for the area of a circle.★
7. Use the slope criteria for parallel and perpendicular lines 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).
8. Find the point on the segment between two given points that divides the segment in a given ratio.
9. Use coordinates to compute perimeters of polygons and areas for triangles and rectangles, e.g. using the distance formula.★
10. Decide whether a point with given coordinates lies on a circle defined by a given equation.
11. 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).
12. Complete the square to find the center and radius of a circle given by an equation.
13. STEM Find an equation for an ellipse given in the coordinate plane with major and minor axes parallel to the coordinate axes.
14. STEM Calculate areas of ellipses to solve problems.★

Trigonometry of General Triangles G-TGT

1. STEM Understand that the formula $A = \frac{1}{2} ab \sin(C)$ for the area of a triangle can be derived by drawing an auxiliary line from a vertex perpendicular to the opposite side. Applying this formula in three different ways leads to the Law of Sines.
2. STEM Understand that the Law of Cosines generalizes the Pythagorean Theorem.
3. STEM Understand that the sine, cosine and tangent of the sum or difference of two angles can be expressed in terms of sine, cosine, and tangent of the angles themselves using the addition formulas.
4. STEM Understand that the Laws of Sines and Cosines embody the triangle congruence criteria, in that three pieces of information are usually sufficient to completely solve a triangle. Furthermore, these laws yield two possible solutions in the ambiguous case, illustrating that "Side-Side-Angle" is not a congruence criterion.
5. STEM Explain proofs of the Law of Sines and the Law of Cosines.

★ Standard with close connection to modeling.

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

Geometric Measurement and Dimension G-GMD

1. Understand that the area of a decomposed figure is the sum of the areas of its components and is independent of the choice of dissection.
2. STEM Understand that lengths of curves and areas of curved regions can be defined using the informal notion of limit.
3. STEM Understand that Cavalieri's principle allows one to understand volume formulas informally by visualizing volumes as stacks of thin slices.
4. Find areas of polygons by dissecting them into triangles.
5. Explain why the volume of a cylinder is the area of the base times the height, using informal arguments.
6. For a pyramid or a cone, give a heuristic argument to show why its volume is one-third of its height times the area of its base.
7. Apply formulas and solve problems involving volume and surface area of right prisms, right circular cylinders, right pyramids, cones, spheres and composite figures.
8. STEM Identify cross-sectional shapes of slices of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.
9. STEM Use the behavior of length and area under dilations to show that the circumference of a circle is proportional to the radius and the area of a circle is proportional to the square of the radius. Identify the relation between the constants of proportionality with an informal argument involving dissection and recomposition of a circle into an approximate rectangle.

Modeling with Geometry G-MG

1. Understand that models of objects and structures can be built from a library of standard shapes; a single kind of shape can model seemingly different objects. ★
2. Use geometric shapes, their measures and their properties to describe objects (e.g., modeling a tree trunk or a human torso or as a cylinder). ★
3. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot). ★
4. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy constraints or minimize cost; working with typographic grid systems based on ratios). ★

★ Standard with close connection to modeling.

Glossary

Addition and subtraction within 10, 20, or 100. Addition or subtraction of whole numbers with whole number answers, and with sum or minuend at most 10, 20, or 100. 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 $3/4 + (-3/4) = (-3/4) + 3/4 = 0$.

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.[3]

Complex fraction. A fraction A/B where A and/or B are fractions.

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

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."

Decade word. A word referring to a single-digit multiple of ten, as in *twenty*, *thirty*, *forty*, etc.

Dot 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 line plot.[4]

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.

Empirical probability model. A probablity model based on a data set for a random process in which the probability of a particular type or category of outcome equals the percentage of data points included in the category. Example: If a coin is tossed 10 times and 4 of the tosses are Heads, then the empirical probability of Heads in the empirical probability model is $4/10$ (equivalently 0.4 or 40%).

Equivalent fractions. Two fractions a/b and c/d that represent the same number.

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, $643 = 600 + 40 + 3$.

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.[5] *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.

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.

Laws of arithmetic. See Table 3 in this Glossary.

Line plot. See dot plot.

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.[6] 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.

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.

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[3] Adapted from Wisconsin Department of Public Instruction, http://dpi.wi.gov/standards/mathglos.html, accessed March 2, 2010.

[4] Adapted from Wisconsin Department of Public Instruction, *op. cit.*.

[5] 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),

[6] To be more precise, this defines the *arithmetic mean*.

Multiplication and division within 100. Multiplication or division of whole numbers with whole number answers, and with product or dividend at most 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 $3/4 \times 4/3 = 4/3 \times 3/4 = 1$.

Properties of equality. See Table 4 in this Glossary.

Properties of inequality. See Table 5 in this Glossary.

Properties of operations. Associativity and commutativity of addition and multiplication, distributivity of multiplication over addition, the additive identity property of 0, and the multiplicative identity property of 1.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).

Rational number. A number expressible in the form a/b or $-a/b$ for some fraction a/b. The rational numbers include the integers.

Related fractions. Two fractions are said to be related if one denominator is a factor of the other.[7]

Rigid motion. A transformation of points in space consisting of one or more translations, reflections, and/or rotations. Rigid motions are here assumed to preserve distances and angle measures.

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.[8]

Similarity transformation. A rigid motion followed by a dilation.

Tape diagrams. Drawings that look like a segment of tape, used to illustrate number relationships. Also known as strip diagrams, bar models or graphs, fraction strips, or length models.

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

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.

Uniform probability model. A probability model in which the individual outcomes all have the same probability ($1/N$ if there are N individual outcomes in the sample space). If a given type of outcome consists of M individual outcomes, then the probability of that type of outcome is M/N. Example: if a uniform probability model is used to model the process of randomly selecting a person from a class of 32 students, and if 8 of the students are left-handed, then the probability of randomly selecting a left-handed student is $8/32$ (equivalently $1/4$, 0.25 or 25%).

Whole numbers. The numbers 0, 1, 2, 3, ...

[7] See Ginsburg, Leinwand and Decker (2009), *Informing Grades 1-6 Mathematics Standards Development: What Can Be Learned from High-Performing Hong Kong, Korea, and Singapore?*, Table A1, p. A-5, grades 3 and 4.

[8] Adapted from Wisconsin Department of Public Instruction, *op. cit.*.

TABLE 1. Common addition and subtraction situations.[9]

	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[10]
Put Together/ Take Apart[11]	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[12]	("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

[9] Adapted from Box 2-4 of National Research Council (2009, op. cit., pp. 32, 33).

[10] 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*.

[11] 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.

[12] 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.[13]

	Unknown Product	**Group Size Unknown** ("How many in each group?" Division)	**Number of Groups Unknown** ("How many groups?" Division)
	$3 \times 6 = ?$	**$3 \times ? = 18$ and $18 \div 3 = ?$**	**$? \times 6 = 18$ and $18 \div 6 = ?$**
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,[14] Area[15]	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 $p \div b = ?$

[13] The first examples in each cell are examples of discrete things. These are easier for students and should be given before the measurement examples.
[14] 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.
[15] 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 laws of arithmetic, including the properties of operations (identified with °). Here a, b and c stand for arbitrary numbers in a given number system. The laws of arithmetic apply to the rational number system, the real number system, and the complex number system.

°*Associative law of addition*	$(a + b) + c = a + (b + c)$
°*Commutative law 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 law of multiplication*	$(a \times b) \times c = a \times (b \times c)$
°*Commutative law 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 law 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 $a \div c < b \div c$.

DRAFT

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Appendix B1-4

International Benchmarking of Common Core Standards

The following is information on international benchmarking of the Common Core Standards provided by the Council of Chief State School Officers.

International Benchmarking and the Common Core

The Common Core State Standards (CCSS) are designed to be **college- and career-ready** and **internationally benchmarked**. To that end, the development process included the review and consideration of many sources, including research studies, existing standards from the U.S and abroad, and the professional judgment of teachers, content area experts, and college faculty. This paper will briefly describe how international benchmarking was used to develop the CCSS.

What documents were used to ensure that the CCSS were internationally benchmarked?
To ensure that the standards prepare students to be globally competitive, the development team used a number of sources, including: the frameworks for PISA and TIMSS; the International Baccalaureate syllabi; the American Institutes for Research report, **Informing Grades 1-6 Mathematics Standards Development: What Can Be Learned From High-Performing Hong Kong, Korea, and Singapore** and; the A+ Composite found in **A Coherent Curriculum: The Case for Mathematics** ***by Bill Schmidt, Richard Houang, and Leland Cogan.***

In addition, the development team looked to the standards of a number of individual countries and provinces to inform the content, structure and language of the CCSS. In *mathematics*, twelve set of standards were selected to help guide the writing of the standards: Belgium, Canada [Alberta], China, Chinese Taipei, England, Finland, Hong Kong, India, Ireland, Japan, Korea, and Singapore.[1] In *English language arts*, the writing team looked closely at ten sets of standards from Australia (New South Wales and Victoria), Canada (Alberta, British Columbia, and Ontario), England, Finland, Hong Kong, Ireland, and Singapore.[2]

How were the international benchmarks used to inform the development of the CCSS?
The goal of the international benchmarking in the common core state standards development process was to ensure that the CCSS are as rigorous as comparable standards in the high-performing and other countries. However, the use of international benchmarks as evidence is no easy feat; it is not simply a matter of identifying the "best" source and copying it, or of aggregating all viable sources to find some set of shared expectations. Rather, international benchmarks were used to guide critical decisions in the following areas:

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[1] Eight of these were high-performers on either TIMSS, PISA or both: Belgium, Canada [Alberta], Chinese Taipei, Finland, Hong Kong, Japan, Korea, and Singapore. England and Ireland, which have uneven performances on international assessments, were included because of their cultural links to the United States. China and India were included because of their growing global competitiveness.

[2] Differences in language have a greater impact on the teaching and learning of language arts than of mathematics, so the teams looked primarily at English-speaking countries. All were high-performers on PISA except Singapore, which did not participate, and England, which as in mathematics was selected partly for its cultural links to the United States.

- *Whether particular content should be included:* One of the principal ways international standards were used in this development process was as a guide when making tough decisions about whether content should be included or excluded.
- *When content should be introduced and how that content should progress*: The progression of topics in the international mathematics standards helped the development team make decisions about when to introduce topics in the CCSS as well as when to stop focusing on them.
- *Ensuring focus and coherence*: Standards from other countries tend to be very focused, including only what is absolutely necessary.
- *Organizing and formatting the standards*: Certain organizational aspects or characteristics of international standards that promoted clarity and ease of reading and use served as a model for the CCSS.
- *Determining emphasis on particular topics in standards*: Where emphasis on particular topics was found repeatedly in international standard, this was instructive in determining their importance for inclusion in the CCSS.

* * * * *

When the final version of the K-12 Common Core State Standards is released, it will be accompanied by a discussion of the evidence that was used in their development. In the meantime, the evidence from the September 2009 draft of the College and Career Ready Standards is available: The URL for the ELA document is http://www.corestandards.org/Files/ELAEvidence.pdf, and the URL for the mathematics document is http://www.corestandards.org/Files/MathEvidence.pdf.

Appendix B2-1

PARCC Consortium MOU

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS
MEMORANDUM OF UNDERSTANDING

Purpose. This document commits states to participate in the Partnership for Assessment of Readiness for College and Career, a state-led consortium that will collaborate on the development of common, high-quality assessments aligned to the Common Core State Standards (CCSS) in English language arts and mathematics for grades 3-8 and high school. The primary goal of the Partnership's work is to measure and document students' college and career readiness against common academic standards and to measure students' progress toward this target throughout the rest of the system.

While participating in the Partnership demonstrates the state's commitment to pursue a common assessment system that enables comparisons against the CCSS across all Partnership states, it does not commit the state to a specific assessment design at this point. Partnership states are still considering several options for the design of a common assessment system in pursuit of the Race to the Top (RTTT) Comprehensive Assessments Grant and will not be asked to commit to the Partnership's application until a later date. Until that time, all participating states will have the opportunity to contribute to and shape the Partnership's proposal.

Preliminary Design Principles. Partnership states have identified the following major purposes and uses for the assessment system. As the Partnership collaborates to develop its application for the RTTT assessment competition, these purposes will guide its work.

- The primary purpose is to measure and document students' **college and career readiness** and to measure students' progress toward this target throughout the rest of the system. Students meeting the college and career readiness standards will be eligible for placement into entry-level credit-bearing, rather than remedial, courses in public 2- and 4-year postsecondary institutions in participating states.

- Additionally, the partnership is committed to ensuring that the assessment results:
  - Are **comparable across states** at the student level;
  - Meet **internationally rigorous benchmarks**;
  - Support valid assessment of **student longitudinal growth**; and
  - Serve as a **signal for good instructional practices**.

- The results must be able to support multiple levels and forms of accountability including:
  - Decisions about **promotion and graduation for individual students**,
  - **Teacher and leader evaluations**, and
  - **School accountability** determinations.

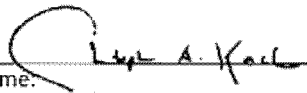
Roles and Responsibilities of Partnership States. The Partnership will employ a multi-level governance and management structure designed to guide the partnership through the submission of the proposal.

- The **Governing States** are comprised of a representative group of leaders from Partnership states that are committed to implementing the assessment system developed by the partnership, should it win a grant from the Race to the Top Comprehensive Assessment System competition, and are responsible for guiding the proposal development process. Each Governing State will commit a team comprised of the chief, assessment director, and other key officials from the SEA, Governor's office, and higher education as appropriate.
- The **Proposal Design Team** will include officials from partnership states who will work with an advisory group of national and international experts to create an assessment system design for the Partnership's proposal. The design team will include as many states as are interested in and capable of contributing to and shaping the design of the proposed next generation assessment system.

- **Participating States** will include other partnership states that are unable to provide staff time to the design team but will provide rapid feedback on drafts of the proposal through the development phase.

State Commitment. This memorandum of understanding is voluntary and non-binding for states. States signing this MOU should do so with the intent of continuing in the Partnership through the proposal development, assessment development, and implementation phases. However, there will be an opportunity for states re-assess their participation in the Partnership before it submits its application for a Race to the Top Comprehensive Assessment Systems Grant by June 23, 2010.

Agreement. The undersigned state leader agrees to the process and structure as described above and attests accordingly by his/her signature below.

Signature(s) for the State of: Illinois	
Authorized State Signature: 	
Name: Christopher A. Koch, Ed.D.	Date: May 11, 2010
Title: State Superintendent of Education	

Appendix B2-2

PARCC Consortium Participants

(as of May 25, 2010)

1. Alabama
2. Arizona
3. Arkansas
4. California
5. Colorado
6. Delaware
7. District of Columbia
8. Florida
9. Georgia
10. Hawaii
11. Illinois
12. Indiana
13. Kentucky
14. Louisiana
15. Maryland
16. Massachusetts
17. Mississippi
18. New Hampshire
19. New Jersey
20. New York
21. North Dakota
22. Ohio
23. Oklahoma
24. Pennsylvania
25. Rhode Island
26. South Carolina
27. Tennessee

Total: 27 States

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