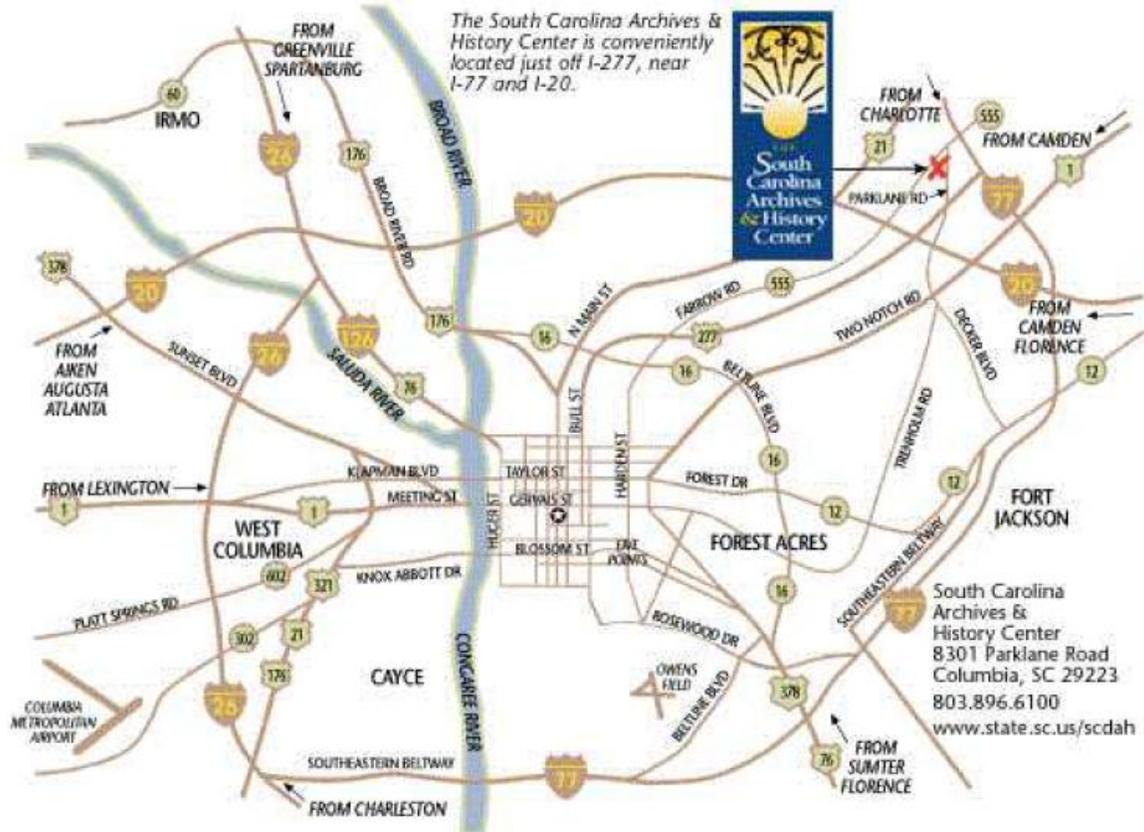


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- If driving from Charleston on Interstate 26 West take exit 116 Charlotte Interstate 77 North. Off of I-77 North take exit 19 Farrow Road (Highway 555 South). Bear right onto Farrow Road. At the second traffic light on Farrow Road turn left onto Parklane Road. The History Center is three tenths of a mile on the right.
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- If driving from Augusta on Interstate 20 East take exit 73B Interstate 77 North/Highway 277 North. Take the Parklane Road exit off Highway 277 North and turn left at the traffic light. Cross the bridge and the History Center is on the left.
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EDUCATION OVERSIGHT COMMITTEE

July 1, 2012 through June 30, 2013

Meeting Schedule

<u>Subcommittee</u>	<u>Full Committee</u>
	August 13
September 17	October 8
November 19	December 10
January 28 *	February 11
March 18	April 8
May 20	June 10

* January 21 is Martin Luther King Day; therefore, the subcommittee meetings are moved to the following Monday, January 28.

SOUTH CAROLINA EDUCATION OVERSIGHT COMMITTEE
Minutes of the Meeting
June 11, 2012

Members Present: Mr. Robinson; Mr. Drew; Senator Fair; Senator Hayes; Mr. Martin; Dr. Merck; Rep. Neal; Mrs. Taylor; Mr. Warner; Mr. Whittemore; and Dr. Zais

- I. Welcome and Introductions: Mr. Robinson welcomed members and guests to the meeting.
- II. Approval of the Minutes of April 9, 2012: The minutes of April 9, 2012 were approved as distributed.

At the request of Mr. Warner, Senator Fair made a motion that, having voted on the prevailing side, the motion to approve the minutes be reconsidered. The motion to approve the minutes was reconsidered, and the minutes were amended to delete all references to an "education incubator." The minutes as amended were adopted.

- III. Key Constituencies

Dr. Gerrita Postlewait, representing the Innovation Steering Committee, addressed the Committee. She described the goal of the Innovation Steering Committee to be increasing the supply of high quality public school options for students. Regarding assessments, the objective is to measure those things which we value for all students, namely, knowledge, skills and disposition. She also provided an overview of the Committee's actions since January. Dr. Postlewait focused on: (1) explaining the cycle of innovation; (2) a review of eight non-traditional, promising learning models that result in significantly higher student success rates; and (3) five common elements among the eight models. Dr. Postlewait then turned over the presentation to the following two successful non-traditional models:

Anson New Tech High School in Wadesboro, North Carolina

The presenters were: (1) Jacki Martin, Associate Director of the Riley Institute at Furman University; (2) Chris Stinson, Principal of New Tech High School; (3) Blaine Maples a math teacher at the school; and (4) Casey McElroy, a student. The presenters documented that New Tech currently manages a national network of 86 New Tech schools serving more than 8,500 students. Fourteen new schools will open this fall, including two in South Carolina in Clarendon and Colleton Counties, both within seventy miles of the new Boeing facility.

The staff and student from Anson High School documented the school's implementation and successes over time. New Tech schools are standards-driven, often team taught, and rooted in Project-based learning. A culture of trust, respect and responsibility are the hallmarks of New Tech culture. At New Tech schools, students acquire a level of responsibility similar to what they would experience in a professional work environment. Working on projects and in teams, students are accountable to their peers, while taking individual responsibility to get work done. In this trusted, respectful environment, students decide how to allocate their time, team roles and how to collaborate. Smart use of technology supports innovative approaches to instruction and culture. All classrooms have a one-to-one computing ratio. With access to Web-enabled computers, every student becomes a self-directed learner who no longer needs to rely primarily on teachers or textbooks for knowledge and direction.

Mrs. Taylor inquired as to whether children with disabilities are served in the program. Mr. Stinson responded yes. Mr. Neal asked about the recruitment of students into the program. Sen. Fair asked about the impact of Common Core on the program. Dr. Merck asked about the optimum size of a New Tech high school. Mr. Drew asked about the importance of leadership to successfully implement the program.

Early College High School in Horry County, South Carolina

The presenters were: (1) Joan Grimmatt, Principal of the Early College High School and (2) Marilyn Fore, Senior VP, Academic Affairs and Provost at Horry-Georgetown Technical College. The presenters described that there are three Early College High Schools currently operating in Beaufort, Greenville and Horry Counties. The presenters described how the Horry County business and education community came together to implement the program. The initial goal was to improve the district's dropout rate. The program targeted students of color who were in the middle quartile academically and who would be first-generation college-going students. The presenters gave evidence of the impact of the program on the graduation and college-going rates of the students along with personal testimonies from students. Mr. Neal asked about the minimum academic qualifications.

Dr. Postlewait summed up the next steps for the Innovation Steering Committee, focusing on how to move models like these to large-scale implementation. Mr. Warner asked about the obstacles holding back the system. Dr. Postlewait noted that in her opinion the threat of change that comes with transforming the traditional learning environment and delivery system is probably the greatest impediment.

Mr. Warner and Rep. Neal then discussed the issue of where the greatest challenge in our educational system exists. Mr. Warner contended that getting the affluent, educated parents concerned about their children not performing as well as the top 10% of children in other states will help raise public awareness for all students. Rep. Neal argued that he worried most about the children at the other end, who typically end up in prison or with limited resources and need the attention first. Both concurred that inertia and ambivalence are the greatest obstacles to transforming the system for all children.

IV. Subcommittee Reports

The committee then turned to the Subcommittee reports.

A. Academic Standards and Assessments:

Dr. Merck summarized the findings and recommendations of the three panels that reviewed the current science standards. There being no discussion, the recommendation of the subcommittee to approve the report on the science standards was approved unanimously.

Dr. Merck then summarized the results of the three-year analysis of PASS achievement data. With respect to student achievement, differences in achievement by gender existed for Reading, but not for Mathematics. Students who receive free lunch achieve at substantially lower levels than do full-pay lunch students. Reduced lunch students achieve midway between these groups. The patterns of student achievement on PASS are similar to the patterns of student achievement on PACT. With respect to retention, the retention rate at each grade level is small, approximately 1 percent of students. Compared to promoted students, larger percentages of retained students are Male, African-American, have a Disability, and

participate in the federal school lunch program. And, based on the PASS data analyzed, academic benefits of retention for success at the next grade level were present from grade 3 to grade 4, but were minimal for all other grade transitions.

B. EIA and Improvement Mechanisms:

Mr. Drew reviewed the status of the 2012-13 General Appropriation Bill, noting those items for which the EOC had made policy and budgetary recommendations

C. Public Awareness:

Due to Mrs. Hairfield being out of the country, Mrs. Barton reported for the subcommittee on the implementation of the 2020 Public Awareness Campaign. She noted the results of the Teacher Appreciation Week mailings and student contests.

- V. Dr. Zais then presented how South Carolina might transform the current education model “from one that fails too many children and provides a mediocre education to many others to a more effective model that satisfies the aspirations and matches the abilities of all students.” The Superintendent focused on transforming the following elements: (1) standards, what is taught; (2) environment, where it is taught; (3) intensity, when it is taught; (4) curriculum, how it is taught; (5) instructors, who teaches it; (6) testing, how it is evaluated; and (7) control, how schools are governed.
- VI. The EOC then went into Executive Session for the purpose of discussing a personnel matter.

The veil having been lifted, the EOC came out of Executive Session. Mr. Robinson announced that he would pursue finalizing a three-year contract for an individual to become Executive Director of the agency.

- VII. Mr. Robinson asked if there was any additional information that needed to come before the Committee. Having no other business, the EOC adjourned.

Current Mission of the EOC

The mission of the Education Oversight Committee (EOC), adopted in July 1999, affirms the statutory purpose and expectations for the agency:

Our mission is to affect the dramatic, results-based and continuous improvement of South Carolina's educational system by creating a truly collaborative environment of parents, educators, community leaders and policymakers.

The values underlying the mission are the following:

- A sole focus on what is best for students;
- A belief in broad-based inclusion and collaboration;
- A belief in standards, assessments, and publicly known results;
- The implementation of research-and-fact-based solutions that improve results; and
- A passion for immediate, dramatic and continuous improvement that is unaffected by partisan politics

2020 Vision Statement

In August 2009, the EOC established the following vision and measures for 2020:

By 2020 all students will graduate with the knowledge and skills necessary to compete successfully in the global economy, participate in a democratic society and contribute positively as members of families and communities.

The attainment of this goal is to be reported annually using progress toward three-year achievements (i.e., expectations specified for 2011, 2014, 2017 and 2020) including reading proficiency, high school graduation, preparedness for post-high school success and schools rated at-risk.

	<p>Education Oversight Committee <i>Legislative agency established in Section 59-6-10 of the Code of Laws (Education Accountability Act)</i></p>
<p>General Powers EOC (§59-6-110) State Board (§59-5-60)</p>	<ul style="list-style-type: none"> • Review and monitor the implementation and evaluation of the Education Accountability Act and Education Improvement Act programs and funding; • make programmatic and funding recommendations to the General Assembly; • report annually to the General Assembly, State Board of Education, and the public on the progress of the programs; • recommend Education Accountability Act and EIA program changes to state agencies and other entities as it considers necessary. (§59-6-10) • monitor and evaluate the implementation of the state standards and assessment; • oversee the development, establishment, implementation, and maintenance of the accountability system; • monitor and evaluate the functioning of the public education system and its components, programs, policies, and practices and report annually its findings and recommendations in a report to the General Assembly no later than February first of each year; and perform other studies and reviews as required by law.

<p>Specific Roles and Responsibilities</p>	<p>Academic Content Standards</p> <ul style="list-style-type: none"> • Approve <i>academic content standards</i> and participate in <i>cyclical review of standards</i> in accordance with guidelines produced by EOC and SCDE. (§59-18-350) • Publicize standards in parent-friendly terms (§59-28-200) <p>Assessments</p> <ul style="list-style-type: none"> • Approve all <i>assessments</i>, including End-of-Course tests (§59-18-320) • With State Board of Education, conduct <i>cyclical reviews of assessments</i> (§59-18-350) <p>Evaluation</p> <ul style="list-style-type: none"> • Evaluate <i>SC Teacher Loan Program</i> (§59-26-20) • Evaluate <i>virtual school</i> use (§59-16-70) • Evaluate <i>parental involvement</i> by surveying parents to determine if state and local efforts are effective in increasing parental involvement. (§59-28-190) <p>Accountability</p> <ul style="list-style-type: none"> • Establish criteria for student performance levels and school/district ratings. (§59-18-900) • In consultation with State Board, conduct cyclical review of ratings system (§59-18-910)
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	<ul style="list-style-type: none"> • Work with the State Board of Education and SCDE to establish a comprehensive annual report card for schools and districts. (§59-18-900) <p>Rewards and interventions</p> <ul style="list-style-type: none"> • Establish criteria for <i>Palmetto Gold and Silver Awards Program</i> (§59-18-1100) <p>Funding</p> <ul style="list-style-type: none"> • Recommend changes in programs, policies and funding (§59-6-10) • Recommend EIA funding (§59-6-10) <p>Public Awareness</p> <ul style="list-style-type: none"> • Report on the monitoring, development, and implementation of the accountability system (§59-6-100) • Conduct a public awareness campaign about status of public schools, importance of high standards (§59-18-1700) <p>Appointed membership with other agencies</p> <ul style="list-style-type: none"> • Charter School Advisory Committee • Governor’s School for Arts and Humanities • EEDA Coordinating Council • SC Public Charter School District Board <p>Other duties</p> <ul style="list-style-type: none"> • Perform tasks and exercises responsibilities outlined in either statute or proviso and work with legislative staffs to provide information and analysis, particularly on finance issues. • Establish goals for state’s public education system
Budget	The EOC is appropriated approximately \$1.2 in EIA revenues, of which \$503,088 in authorization to spend was vetoed by Governor Haley in Veto 11. With the state spending over \$3.3 billion on public education, the EOC budget is four/one-hundredths of one percent of that investment (0.04%).
Composition of agency/board	The EOC is made up of 18 educators, business people, and elected officials who have been appointed by the legislature and governor.
Staff	The EOC employs five (5) full-time staff persons and two (2) part-time staff persons.

New Provisos in the 2012-13 General Appropriation Act

Pertaining to Duties and Functions of the EOC

Proviso 1A.57. (SDE-EIA: PowerSchool Dropout Recovery Data) With the funds appropriated to the Department of Education for PowerSchool and data collection, the department will begin in the current fiscal year to collect data from schools and school districts on the number of students who had previously dropped out of school and who reenrolled in a public school or adult education to pursue a high school diploma. The Education Oversight Committee working with the Department of Education will determine how to calculate a dropout recovery rate that will be reflected on the annual school and district report cards. The Department of Education shall report to the Senate Education Committee and the House Education and Public Works Committee on the implementation of a dropout recovery rate.

Proviso 70.32. (LEG: EOC Efficiency Review) Funds appropriated to the Education Oversight Committee for the School District Efficiency Review Pilot Program shall be used to review certain school districts' central operations with a focus on non-instructional expenditures so as to identify opportunities to improve operational efficiencies and reduce costs for the district. The Education Oversight Committee shall make the school districts aware of the pilot program, and accept applications to participate in the program. In the current fiscal year, the Education Oversight Committee shall select at least three applicant school districts to participate. The Education Oversight Committee may contract with an independent entity to perform the review. The review shall include, but not be limited to, examinations of (i) overhead, (ii) human resources, (iii) procurement, (iv) facilities use and management, (v) financial management, (vi) transportation, (vii) technology planning, and (viii) energy management. The review shall not address the effectiveness of the educational services being delivered by the district. The review shall be completed no later than June 30, 2013. Upon completion, the Education Oversight Committee shall submit a report to the Chairman of the Senate Finance Committee, Chairman of the Senate Education Committee, Chairman of the House Ways and Means Committee, Chairman of the House Education and Public Works Committee, and the Governor detailing the findings of the review including the estimated savings that could be achieved, the manner in which the savings could be achieved, and the districts' plan for implementation of the recommendations. Unexpended funds appropriated for this purpose may be carried forward from the prior fiscal year into the current fiscal year and expended for the same purpose.

Note: \$300,000 in non-recurring funds also appropriated for this function.

MISSION DEVELOPMENT WORKSHEET

Directions: The mission of an organization speaks to the reasons and purposes for which it exists. To help identify the major elements of the Education Oversight Committee's (EOC) mission, please answer the following questions:

In broad terms, what does the EOC exist to do?

If the EOC did not exist, what would be the consequences?

Jon B. Pierce
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Sea Change in Assessment

How Technology Is
Transforming K-12 Testing

Inside

- New State Tests for 2014–2015
- Testing That Supports Instruction
- Accessibility for All Children
- Simulations and Serious Games
- Planning for Technology Upgrades
- Challenges and Opportunities Ahead

Welcome Letter from Pat Forgione and the K-12 Center at ETS

A Journey into the Future of Teaching and Learning

In January 2002, when the No Child Left Behind Act was signed into law, I was an urban district superintendent and a supporter of it. The achievement gaps in my schools and across the nation were much too large. My hope was that this new law would create greater urgency for equity and excellence for all students and, over time, help us close those gaps.



Pat Forgione

But despite steady improvements in student learning, the gaps have not closed and the law has had many unintended consequences. It locked us into the long-standing age-based grouping of students and calendar-based, rather than readiness-based, testing. As this law ratcheted up the amount of required state testing, budgets were stretched thin and the range and complexity of question types on state assessments decreased.

Moreover, the singular focus on proficiency has left us, in many cases, unable to detect growth and determine when and where teachers, schools, and instructional practices are accelerating learning. In too many ways, therefore, it locked us into place rather than driving us forward.

But we have the opportunity to launch a new era through the systems of online assessments and digital portals now being developed by several large consortia of states. One-time federal development funds are providing an unprecedented opportunity to carefully design and develop these systems of assessments, and the consolidated buying power of the consortia should enable them to better maintain quality over time.

This special Education Week supplement describes some of the most exciting work under way to leverage technology to improve assessment and to enable it to play a much more powerful role in enhancing teaching and learning. The content is drawn from a recent research symposium in Washington, D.C. that was co-hosted by the K-12 Center at ETS and the Council of Chief State School Officers. Full papers are available at www.k12center.org.

It isn't realistic to expect the assessment consortia to revolutionize assessment, as they must have their assessments ready for use in spring 2015. But it is realistic to expect that this transition to the digital assessment of rigorous, common academic standards will stimulate a new era in public education – one in which technology becomes a powerful tool for personalizing learning, supporting great teachers, and figuring out the strategies and policies that lead to well-prepared graduates.

So get ready for a trip into the future. On the following pages, we will describe not only the current state of the art in assessment, but several promising initiatives that have yet to be brought to scale and for which, in some cases, major measurement, logistical, and economic challenges still exist. We hope you enjoy the journey.

Best regards,



Pat Forgione
Executive Director, K-12 Center at ETS

States Leading Sea Change in K-12 Assessment

“The way the Common Core comes to life is through the assessments,” observed Gene Wilhoit, Executive Director of the Council of Chief State School Officers. “If we get this right, we will put our students on a course for a better future.”

Addressing a gathering of some 200 state, higher education, and industry assessment professionals last month at the Invitational Research Symposium on Technology Enhanced Assessments, Wilhoit expressed confidence that the new assessments being developed by two large consortia of states will be much better than most that exist in states today.

At the same time, he cautioned that “the danger is that the new assessments become the anchor.”

Wilhoit’s observations put in sharp focus both the great opportunities and the great challenges embodied in the effort to create a new system of assessments for the nation’s schools.

To achieve their goal, the assessment consortia are drawing upon new advances in technologies, cognitive science, and measurement as they develop this next, improved generation

of assessments. At the same time, they are being challenged to address a wide range of concerns frequently raised about existing state tests, namely that they measure skills too narrowly and return results that are “too little, too late” to be useful. Most current state tests also fail to determine whether students can apply their skills to solve complex problems that more accurately mirror the competencies needed for success in college, the workplace, and citizenship.

But how many advances can these new assessments incorporate? They must be in place and made operational by the spring



Gene Wilhoit, Executive Director of the Council of Chief State School Officers, moderated a panel discussion on “Teaching and Testing the Common Core.”

Read and hear more To read the complete papers prepared for the TEA Symposium, or to access video of the closing sessions, visit the website www.k12center.org.

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of 2015 and must meet professional and legal standards for use in high-stakes accountability systems. And what other innovations might be built into instructional activities and formative and interim assessments that will accelerate advances in rich, engaging assessment approaches to support improved teaching and learning?

The potential for leveraging new technologies to improve assessment and support high quality instruction is great. And the Race to the Top Assessment Program was designed with just that potential in mind.

New tests for new standards

A total of 45 states plus the District of Columbia are participating in two assessment consortia – The Partnership for Assessment of Readiness for College and Careers and the Smarter Balanced Assessment Consortium. These consortia were awarded \$360 million in Race to the Top Assessment grants in the fall of 2010 to design, develop and pilot test new systems of summative assessments in English language arts (ELA) and mathematics for students in Grades 3-12 to replace existing state tests. Both consortia will also develop interim and formative assessments that are not high stakes, as well as instructional and professional development resources.

The new assessments are being designed to measure mastery of the Common Core State Standards, whose development was initiated by the National Governors Association.

Standard writers first studied standards of high performing states and countries, and drafts were then vetted with U.S. post-secondary faculty and employers. Within the standards are both the long-standing basics of ELA and mathematics, as well as knowledge and skills rarely seen within current state standards.

“If we get this right, we will put our students on a course for a better future.”

The ELA standards place strong emphasis on students' ability to read complex texts, conduct electronic searches, evaluate sources, draw evidence from them, and craft well-supported written arguments. The mathematics standards reduce the number of topics to be taught in a given school year to promote greater depth of understanding and mastery of core skills, particularly in the early grades. By the end of high school, the standards expect all students to have a solid foundation in algebra, geometry, statistics, and modeling, and to be able to apply their knowledge and skills in solving complex, real-world problems.

Going digital

Much of what is new, different, and important in these standards “cannot be adequately assessed by conventional methods,” said Jim Pellegrino, member of the Technical Advisory Committee for both of the Assessment Consortia at the recent Technology Enhanced Assessment (TEA) Symposium.

The plans of the consortia to transition to online testing will help address this gap, Pellegrino explained, as online testing will allow for a richer range of items and tasks, and for the capture of student responses during activities involving research, design, and problem solving. Moving to online testing also will allow for a wider range of accommodations for students with special needs, such as read-aloud and large print; faster scoring and return of results; the incorporation of current productivity tools such as spreadsheets; and better engagement of today's “digital natives.”

Designing for the future

Done well, this major shift from paper-and-pencil tests to online systems of assessments and accompanying resources has the potential to create a new foundation for K-12 education – one that is much more adaptable and designed to fuel continuous improvement. But only if the systems are designed with the capacity to evolve over time. It's a huge responsibility on the shoulders of states and the larger assessment field to “get it right,” commented Kit Viator, former Director of Assessment for Massachusetts who now works at ETS.

The following pages explore technologies that can be incorporated into the 2014-2015 summative assessments to measure some of the new, hard-to-measure standards, as well as other technologies that probably won't be ready for summative use that soon.

Additionally, we explore integrated, adaptive learning systems and virtual internship environments that blur the line between instruction and assessment. Much as bar code technology allowed stores to track inventory in real time instead of closing down for days, many educators and parents dream of getting much more timely information about student progress so that instruction can be adjusted to meet individual needs.

To that point, Carl Wieman, Associate Director for Science at the White House Office of Science and Technology Policy, observed that “testing is here to stay because ultimately people are looking for how it can guide and drive improvement, but we really have to do it right so it actually supports good teaching.”



Leading a discussion on the topic “What Does Going Digital Mean for the Future of K-12 Teaching, Learning and Assessment” were Jim Shelton, left, Assistant Deputy Secretary for Innovation and Improvement at the U.S. Department of Education, and Tom Vander Ark, CEO of Open Ed Solutions and author of “Getting Smart: How Digital Learning Is Changing the World.”

Task Is Huge and Time Is Short to Execute a ‘Game Changer in Public Education’

New assessments must provide richer data — and be fully digital by the 2014-2015 school year

The revolution now under way in student assessment will have profound consequences for schools, teachers, and every public school parent in the nation.

In just three years, new state assessment systems that include both interim assessments and end-of-year summative assessments are scheduled to be put in place to measure achievement against new and more rigorous Common Core State Standards in math and English language arts. They will measure individual growth as well as proficiency. They will assess hard-to-measure skills such as critical thinking and the application of skills to solve complex problems. They will gauge whether students are on track for college or career readiness. They will gather information in a timely way so that adjustments can be made to instruction during the school year.

And perhaps most revolutionary of all, they will be fully digital, replacing the time worn paper-and-pencil tests that students have taken for generations.¹

This revolution, which Education Secretary Arne Duncan has called an “absolute game-changer in public education,” was set in motion by the Race to the Top Assessment Program, which was allocated \$350 million to develop 21st century assessments aligned with the new Common Core State Standards.

Two consortia representing different groups of states – the Partnership for Assessment of Readiness for College and Careers (PARCC) and the

Smarter Balanced Assessment Consortium – won grants to create the new assessments.

But the task is huge, and time is short.

Working from the Common Core State Standards, the consortia first delineated with greater specificity the constructs to be

Did you realize that there are currently **FIVE** Assessment Consortia?

Five groups of states have received federal funds to support the development of next-generation assessments.

Two are developing comprehensive assessment systems for use by 99% of students:

- PARCC
- Smarter Balanced

Two are developing alternate assessments for students with the most significant cognitive disabilities:

- DLM
- NCSC

One is developing an assessment of English proficiency.

- ASSETS

The K-12 Center at ETS is pleased to provide a guide to their work, with consortia-approved summaries of their designs and current membership. Please feel free to reprint the guide, share it with others, and/or post a copy on your website. Also, join our email list for notices of future publications: www.k12center.org.

Coming Together to Raise Achievement
New Assessments for the Common Core State Standards

Updated April 2012
Prepared by the
Center for K-12 Assessment & Performance Management at ETS

assessed at each grade level and now must write, program, pilot, and field test the new assessments – all in time for the 2014-2015 school year.

That is just three years from this spring, the minimum time it typically takes to develop a new test or assessment.

Unprecedented integration

The integration of technology in unprecedented ways is adding an additional layer of challenge.

“The use of technology in assessments is very attractive for many reasons...” Karen Barton and Gretchen Schultz said at the Invitational Research Symposium on Technology Enhanced Assessments (TEAs), when presenting a paper for CTB/McGraw-Hill on the use of technology to assess hard-to-measure constructs in English language arts.

“... However,” they added, “the infusion of technology in assessments ... must still be subjected to validity analyses and result in at least acceptable levels of validity evidence. Technology can enhance the validity of assessments by opening the options for assessing a construct, but only when the utilization of the technology is considered in light of the evidence about the construct.”

The benefits of using technology in assessments are many, Barton and Schultz said, ranging from motivation and alignment with students’ interests to flexibility in administration, collection of new interactive and cognitively relevant data, providing greater linkage between learning and assessment, and reduced costs in administration, scoring, and reporting.

Yet all these data provide a challenge in itself.

Still to be resolved is how to program the assessments to sift through all the data that can be collected and focus on the most useful or relevant information.

A team of ETS researchers, in a paper presented at the TEA Symposium, took note of that challenge.² A “key advantage”

of TEAs is that they can create “a dynamic environment” that “allows us to capture new kinds of evidence, especially information about the processes students use to complete a task, and not just the final outcome of their response,” the ETS team suggested.

However, “although it is possible in theory to capture every observable action in the “click stream” of interactive behaviors ... we need to establish which of those actions are cognitively informative ... to understand which aspects of the data provide the greatest informational value.”

To help illuminate where research and development stands on the new assessments, the TEA Symposium challenged teams of assessment experts to present tasks that would address key challenges.

The teams, one each focused on mathematics, science, and English language arts, were asked to present items or tasks that would address the following goals:

- Measure important hard-to-measure constructs within the Common Core State Standards
- Increase student engagement and motivation
- Improve the precision of measurement
- Signal good instruction
- Be financially feasible to develop and score.

The model tasks in mathematics and English language arts are described on Pages 7-10.

¹ A pencil-and-paper option will be made available as an accommodation and, potentially, during the initial years until adequate technology infrastructure is in place.

² See back cover for complete listing of authors of the ETS paper.

How TEAs Could Transform Assessments in Mathematics

Right answers will count, but so will the ability to solve real-world problems

Mathematics is often viewed as a black and white subject. Answers are either right or wrong, and there is no gray in between.

Yet the process of mastering mathematics is not nearly so black and white, because no mathematics procedure exists in isolation and real world problems rarely come with an instruction sheet telling you which skill or formula to apply.

The “gray” of mathematics is how knowledge and skills in mathematics fit together to create deep conceptual understanding – the type that allows one to then solve novel problems in the real world.

Traditional assessments have generally performed well in measuring the black and white aspect of discrete mathematics skills. Multiple-choice, right-or-wrong questions are tailor made to determine if a student can get the right answer.

They have done less well determining whether students can apply those skills to novel situations, *how* students came to that answer, or where, along a continuum, the student’s understanding began to break down.

The introduction of smart technology to the assessment process could dramatically change that. Technology Enhanced Assessments (TEAs) may not only provide a means to determine whether or not students are proficient in a given hard-to-measure skill, but they may also provide more specific information about a student’s current level of skill, even if the student is well above or below the proficiency bar.

At the Invitational Research Symposium on Technology Enhanced Assessments, the ETS presentation team, composed of Madeleine Keehner, Cara Laitusis, Gabrielle Cayton-Hodges and Liz Marquez, was challenged to present a set of

tasks that would demonstrate how technology can be used to improve the quality and instructional value of assessments in mathematics.

Multi-layered task

In response, the ETS team presented a multilayered task on proportional reasoning that followed the principles outlined in the ETS research initiative *Cognitively Based Assessment of, for, and as Learning* (CBAL). A unique underpinning of this research project is the role of learning progressions which

delineate the sequential stages that students are hypothesized to move through typically as they develop more sophisticated understandings of “key concepts, processes, strategies, practices, or habits of mind.”

The tasks focused on two Common Core State Standards, which require students to demonstrate that they

“understand ratio concepts and [can] use ratio reasoning to solve problems” and that they can “analyze proportional relationships and use them to solve real world and mathematical problems.”

By combining these standards, the ETS team said, it sought to focus the task on a “family of skills” important to both middle school mathematics and careers, while also demonstrating “the key

strengths and considerations” of TEAs.

The ETS assessment task, entitled “Proportional Punch,” tests students’ understanding of proportionality and ratios and how different proportions and ratios affect the sweetness of a cherry punch drink. And it does so within an activity that seeks to model good instruction and yields useful diagnostic information.

The assessment simulates the experience of making punch and employs an interactive “sweetness meter” computer tool

The screenshot shows the CBAL MATH interface. On the left, a table displays recipes for cherry punch:

	Number of	
	Scoops of Mix	Cups of Water
Beth's recipe	2	3
Lula's recipe	1	3

On the right, a question asks: "Which recipe makes the sweeter punch?" with radio buttons for "Beth's recipe" and "Lula's recipe". Below the question, it says: "Explain your answer in terms of number of scoops of mix and cups of water."

Below the question is a "Sweetness Meter" simulation. It features a thermometer-like scale from 0 to 2:1. The current scale shows 2:1. There are buttons for "Add Mix" and "Add Water". A pitcher is shown with red liquid. Text on the screen says: "Scoops of dissolved mix : Cups of water", "Scoops of mix : 2", "Cups of water : 3", and "Assume that adding scoops of punch mix does not add volume to the water".

In the ETS mathematics task, a sweetness meter helps students compare proportions and ratios.

to measure how the ratio between punch mix and water determines the sweetness.

“Technology enhanced assessments allow us to evaluate aspects of student understanding that are not readily observable in paper-based assessments,” the ETS team indicated. “Technology can be incorporated, by design, into the development of online scenario-based tasks” to “... emulate the properties of real world situations.”

In the assessment, the “sweetness meter” is available electronically throughout, and how much students use it could be tracked to gauge their mastery of key concepts.

Moreover, students are asked “to reveal their strategies as they work through the task” so that interventions can be made before they move to the next section of the task” and the assessment can gauge where their knowledge falls in the progression of levels of understanding.

The assessment begins with students becoming acquainted with the computer simulation and then takes them through qualitative questions about the relative sweetness of different punch mixtures. From there it moves on to simple quantitative questions involving specific ratios of scoops of mix to cups of water, and then to more difficult quantitative questions involving more complicated ratios. It ends by asking students to make a generalization and to demonstrate they know how to apply that generalization. “The task is carefully scaffolded, so that students eventually have to solve problems that are not directly supported by the simulation,” the ETS team said.

“Technology enhanced assessments allow us to evaluate aspects of student understanding that are not readily observable in paper-based assessments.”

More substantial data

While tasks such as this one could be used within a summative performance assessment and used to yield a determination of student proficiency in proportional reasoning, they can alternatively be used as instructional activities or interim assessments. “It is important to stress that it is not easy to make sense of the overwhelming amount of data that these assessment

types can produce... The computer makes it possible to track all ... actions, but we need to decide which ones are relevant for the purpose of the assessment and/or instruction.”

Still, the ETS team reported, feedback from both students and teachers in ETS pilot testing has indicated that such TEAs have far-reaching potential, particularly for the engagement and nuanced feedback they might provide in formative assessments.

“Technology enhanced formative assessments should allow us to assess, and drive instruction, in conceptual understanding and reasoning processes more effectively and authentically than traditional assessments,” the team suggested.

The team’s vision – of assessment activities being measures of learning, being *for* (in support of) learning, and being valuable *as* learning activities – is one that may help transform the future of testing.

Read and hear more

To read the complete papers prepared for the TEA Symposium, or to access video of the closing sessions, visit the website www.k12center.org.

For more information about CBAL, go to www.ets.org/research/topics/cbal/initiative.

Language Arts Standards Drive Innovation

Audio, video, the Internet and automated readers will all help measure difficult language constructs

One of the most frequent criticisms of traditional tests has been that multiple-choice questions yield an incomplete measure of key English language arts skills such as the ability to develop a well supported research paper on either a theme in literature or a point of debate in informational texts.

The introduction of smart technology to the assessment process holds great promise for breaking through the limitations of constrained item types and finding ways to assess hard-to-measure constructs and skills.

Karen Barton and Gretchen Schultz and a team of researchers from CTB/McGraw-Hill were challenged by the Invitational Research Symposium on Technology Enhanced Assessments (TEAs) to craft a set of assessments that would demonstrate how technology will handle these difficult-to-measure skills in English language arts.

While they expressed enthusiasm for the possibilities, they acknowledged there is still much to be done so that smart technology can effectively be incorporated into assessments in the 2014-2015 school year.

“Technology in computer-based test administrations provides a wide range of potential innovations in assessment,” they noted. “... the use of technology has been shown to have a positive effect on student motivation, student engagement, and increases in higher order thinking and problem-solving.”

‘Can’t become barriers’

Yet developers need to ensure that “technology enhancements do not become barriers to the targeted construct and that the environment is supportive of students’ needs. ... [Students] should be able to equitably access the test directions and item stimuli, be able to navigate the test, understand what is expected of them in terms of their responses, and be able to provide a response in flexible ways.”

And there is always the question of cost.

The processes for developing technology-based assessments and learning environments “can initially be expensive and time consuming,” the CTB/McGraw-Hill team said. But “... once the authoring process and technologies are in place, the savings can be readily realized.”

That will involve careful work at the beginning to define the claims to be made and the evidence to be collected so that templates can be created to save time and money in subsequent years.

In crafting its model assessment, the CTB/McGraw Hill team presented a five-part task built around a Common Core State

Standard that “is not typically measured in traditional assessments.” Its assessment items also detailed other standards that would demonstrate that students had the knowledge, skills, and abilities (KSAs) to prove proficiency of the “overarching” standard, in this case a writing standard for Grade 7.

The standard requires that students demonstrate they are able to “use technology, including the Internet, to produce and publish writing and [to] link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.”

The related standards, which incorporate audio, video, and multimedia features, were chosen to “reflect the steps in a research process.”

As the assessment items began to take shape, the team said “the features of the technology within each item were refined through storyboarding and [an] interactive review” process.

Among the innovations included in the assessment are pop-up features providing definitions for potentially unfamiliar words beyond grade level, automated essay-scoring programs



for grading writing samples, and an audio option that allows students to hear what they have written read back to them.

In the CTB/McGraw-Hill assessment, students are first asked to read a passage and take notes, using one of several note-taking tools. They then must respond to a short, constructed-response item about the passage, using details from the passage to demonstrate they understand the key ideas. In the second item of the assessment, students are asked to write an extended essay in which one of the author's key claims is summarized and the student is asked to evaluate the degree to which evidence is provided to support the claim.

Pop-up support

The item also features pop-up support and is scored by an automated scoring program such as CTB's Bookette engine, and by human readers on a four-point rubric.

In the third item of the assessment, students move beyond the passage itself and are asked to evaluate and compare additional sources on the topic through a set of hyperlinks set up in a contained environment to simulate Internet resources. The students are asked to evaluate each link and to rate each source for its relevance to the topic, for its trustworthiness and credibility, and for its relation to students' own views or opinions.

This item gauges student abilities on a key 21st century skill that "many people do daily," the CTB/McGraw-Hill team said — conducting an Internet search "to gain information on a topic or answer a question and then evaluate the list of offerings for relevancy and credibility."

Technology enhancements include the use of audio, video,

and search features, as well as a like/dislike voting feature to engage students and tease out their opinions.

In the fourth assessment item, students are asked to compare and contrast the original passage they were given with a video-based resource by using an array of electronic organizers. Students may select any organizer they wish, such as a Venn diagram, table, or chart, and they may record information they gather in a PowerPoint deck, a smartphone spreadsheet, a graphic representation, or on paper.

The technology enhancements of this item electronically segment both the informational text and video, allow students to view both the text and video "within the same online space", and make it easy for students to "drag and drop" text or video clips into their organizer.

The final item in the assessment assesses students' ability to engage in independent inquiry and research by asking

them to write additional research questions and explain why the questions are relevant to the topic. This is a 21st century life and work skill that "is reflective of what a thorough researcher will do," the team said, and also "... parallels the thinking a smart consumer will apply... before purchasing a product."

Read and hear more

To read the complete papers prepared for the TEA Symposium, or to access video of the closing sessions, visit the website www.k12center.org.

“The standard requires that students demonstrate they are able to “use technology, including the Internet, to produce and publish writing and [to] link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.”

Systems of Assessment to Support Instruction

Advances in cognitive sciences and technology create new opportunities

One of the great promises of Technology Enhanced Assessments is that they not only will provide better ways to measure important skills and knowledge, but also will support and model high quality instruction. In other words, “teaching to the test” will become a great thing to do, and the assessments will both inform and reward effective teaching.

As technology enhancements provide feedback on student progress in both assessments and learning materials, they will enable in-time adjustments to instruction, as teachers see what approaches work best and which ones leave students struggling.

Indeed, this constant feedback from instructionally embedded formative and interim assessments has the potential to reshape everyday instruction and someday even replace end-of-year summative assessments.

“One of the things we are beginning to see here is the narrowing of the distance between summative assessments and instruction,” noted Sue Rigney, education specialist with the U.S. Department of Education and co-moderator of a panel on technology and hard-to-measure constructs at the recent TEA Symposium sponsored by the K-12 Center at ETS. “... Clearly we’re seeing a change in the way we think about using these [technology] tools.”

At the TEA Symposium, ETS presenters demonstrated how provisional learning progressions and clustered competency

models, when used as underpinning of embedded assessment tasks, should result in much more diagnostic information to help both students and teachers.

Learning progressions are detailed “maps” that describe how typical students are thought to develop understanding of major concepts over time – the set and sequence of skills and knowledge. The ETS team drew upon CBAL research to develop preliminary learning progressions for the concept of proportional reasoning and then developed integrated formative and interim assessments designed to continuously identify a student’s developmental stage of reasoning and select the next instructional activity accordingly. This serves to both optimize the student’s instructional time and provide valuable diagnostic information to the teacher and parents.

Because they can provide richer and more complex tasks, TEAs, simulated environments, and gaming programs also can model effective teaching techniques.

EcoMUVE and EcoMOBILE, rich simulations developed by Chris Dede at Harvard University, merge research-based instructional practices with state-of-the-art technologies to create electronic “internships.” In EcoMUVE, the scientific investigations occur within a virtual world and the student’s avatar works collaboratively with the avatars of others and computerized agents to figure out what has caused fish in a local pond to suddenly die. In EcoMOBILE students take hand-held digital devices into a real field location where “hotspots” bring up visualizations, video, 3D models, and multiple choice or open-ended questions.

Whether or not immersive environments such as these actually improve student learning is not yet known, pointed out Jere Confrey of North Carolina State University. “The question is what to compare them to,” she observed, as they incorporate skills outside those found within traditional book-based classroom learning activities.

Dede, who has spent the last two decades studying the interplay between instruction and assessment, is now studying the feasibility of immersive virtual performance assessments to assess students’ scientific inquiry skills within summative accountability assessments. His fear is that unless these hi-tech applications make their way into summative assessments, instructional innovations like the virtual internships will “die on the vine.”

As Jim Pellegrino of the University of Illinois noted at the TEA Symposium, when teachers see technology enhanced tasks or simulations that work, “they often don’t want to let go of them because they represent really good instructional environments.”



Designing for Greater Accessibility

Accessibility is a critical component of the foundation for all assessment, because the goal of the process is to provide all students a fair and equal opportunity to demonstrate what they know and can do.

The principles of both Universal Design (UD) and Universal Design for Learning (UDL) provide guidance for building accessibility into the design of assessments rather than retrofitting them later, and those principles may take on even greater significance as Technology Enhanced Assessments (TEAs) advance.

That's because TEAs already have shown that they have the potential to offer new and dynamic ways to make assessments accessible to students with the widest possible range of capabilities, as urged in UD, and to offer multiple means of engagement, access, and expression, as envisioned by UDL.

Like their paper predecessors, TEAs must take into consideration the wide range of learners, including those with special needs, English language learners, and students from diverse cultures. Even more dramatic may be the way TEAs meet the goals of UDL, engaging students in ways that embrace different learning styles and support varied modalities of expression.

The way TEAs meet those needs may be strikingly different, employing simulations, audio, video, and popup prompts. In addition, the ETS researchers Mark Hakkinen and Cara Laitusis demonstrated the emerging use of haptic presentations in which students who are blind may be able to explore the visual aspects of tasks via vibrations created onscreen.

"This is the future," said Roger Ervin, IT System Administrator for the Kentucky Department of Education.

"These technologies not only are supporting the regular population students, they will help us with our different special populations. The most exciting thing is the flexibility. It covers many content areas. I've always felt the world is not multiple choice."

Researchers at SRI have been creating ground-breaking tools for the development of rich and highly accessible assessment tasks through their ongoing PADI-SE Project. Evidence Centered Design (ECD), a conceptual framework for designing and developing assessments, and UDL are at the heart of that work. "Our goal to build 'fair' assessments is expressed in thoughtfully applying the discipline of ECD in order to provide all students with an opportunity to perform at their best in assessment situations," declared the SRI team led by Geneva Haertel.

Greater accessibility must be built into TEAs from the start, they argue, rather than retrofitting solutions to address special needs the way access ramps were once clumsily affixed to the outside of buildings. The team utilizes UDL processes to identify potential barriers, and the features of each task that can be varied, in order to remove or reduce those barriers.

"UDL increases the opportunities for everyone and it needs to be part of the design from the beginning," said Renee Cameto, a member of the SRI team and presenter at the TEA Symposium. "TEAs that follow the principles of UDL, she said, "can customize curriculum and assessment and address different learning styles and the needs of diverse learners."

The processes, tools, and templates developed by the SRI team are available for use by others.

Technology Readiness Poses Big Challenge for Schools

Teachers, principals, superintendents:

Take your marks. The race is on to ready your schools for more rigorous standards that demand new kinds of teaching and computer-based testing.

Get set. You have two years to complete the necessary professional development, upgrade and expand your technology infrastructure, and prepare students for online high-stakes assessments unlike any they have ever seen before.

Go!

If you are already in training for this race, you are well informed about the Common Core State Standards (CCSS) and the assessments coming in 2014-2015. You may be a little nervous, but are eager to get started. You support the goal of ensuring that students are well prepared to compete for college and 21st century jobs.

But if you are in one of the 17 states that currently does not use any computer-based testing, you may be feeling defeated already. Higher standards? New ways of teaching and testing? Your students are struggling and you are stretched thin as it is. Then there's the gap – no, chasm – between the technology you have and the technology you will need.

Whether your school is nearly ready, very far from ready, or somewhere in between, you have a lot of company, according to Geoffrey Fletcher. He is Deputy Director of the State Educational Technology Directors Association (SETDA), which is working closely with the two major consortia of states that are developing the new assessments schools will use to test student mastery of the new standards.

Fletcher's message to teachers, principals, and superintendents: "Wherever you are on the readiness spectrum, resources will soon be available to speed your progress."



Online tool will aid in planning

The resources are being developed by the two comprehensive assessment consortia: Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium. Together they are offering a Technology Readiness Tool to guide schools in taking inventory of their current technology, planning for future technology needs and measuring their progress toward 100% readiness over the next two years.

The free, online Technology Readiness Tool went live in April; schools in the 45 states participating in one or both consortia have until June 30 to answer detailed questions on the computing devices they have, their broadband capacity and network speed, and their comfort level with the tech support available to them.

Also in April, the consortia jointly published computer hardware purchase guidelines so that schools ordering new equipment now will select devices that meet the hardware requirements for 2014-15 online assessments. Specifications are on both consortia websites: www.parcconline.org and www.smarterbalanced.org.

This summer, the consortia will analyze results from the inventory and make decisions about requirements for older hardware schools have on hand. Some of it will be deemed "eligible" to administer the online assessments and some of it will not. The consortia have pledged to balance practical considerations, such as how many

schools are still using a particular outdated device, with the obvious need to provide students with devices capable of delivering the new assessments.

The consortia also will decide the length of the assessment window, which could have just as great an impact on schools' technology readiness as the eligibility of legacy equipment. The ratio of students to computers can be a lot higher if the testing window is four weeks instead of one week, Fletcher explained, "since schools would have the flexibility to test multiple sets of kids on the same machines."

By fall 2012, key decisions about legacy equipment will have been made and sometime later the assessment window decision will be announced. The requirements for 2014-15 will feed into the Technology Readiness Tool, and each school will see clearly what needs to be done to close the readiness gap. “At that point it becomes not so much an inventory tool as a technology planning tool,” Fletcher explained. Schools will be asked to update their inventory information each fall and spring. A measurement rubric will provide a percent-to-goal score that will be recalculated after each update.

Money and teacher PD are hurdles, too

In some school districts, the big question is where the money will come from to be 100% ready from a technology standpoint. The consortia are not providing money to upgrade school computers and neither is the federal government. With cost-cutting sentiment strong in Congress, state legislatures and local districts, obtaining additional funds can be a tough sell.

Fletcher believes the successful approach will be to request more flexibility in how schools can spend the money they have, rather than to request additional money. For example, shifting

from printed textbooks to digital teaching materials and from live professional development courses to online PD are money-saving strategies enabled by technology, he said.

“The bigger question – bigger than how we get the money – is how we get teachers and students ready,” Fletcher said. “We’re going to be using computer-based assessments to test things that couldn’t be tested with pencil and paper. We’re going to more authentically assess problem-solving and higher order thinking skills. We’re going to use different item types and tasks that involve simulations and a lot of writing. Teachers have to know how to teach this, and students need classroom experience with this prior to taking a test.”

Fortunately, the consortia are developing free, online resources to address the PD challenges as well. They are building out extensive digital libraries of professional development modules, tools and lesson plans that, Fletcher said, “will help kids and teachers get where they need to get.”

“This summer, the consortia will analyze results from the inventory and make decisions about requirements for older hardware schools have on hand.”

Note: Articles on what schools can do now to prepare for Common Core assessments in mathematics and English language arts are contained in the free publication “Coming Together to Raise Achievement” available for download on the website www.K12center.org.

Simulation Spreads from Professional License Exams to K-12 Assessments

Authentic scenarios and complex tasks yield instructional insights for educators

High-stakes tests that include computer-based simulations may be new to K-12 educators. To doctors and architects they are old news.

Computer-based case simulations have been part of the United States Medical Licensing Examination since 1999, when they were added to more authentically assess the would-be physician's ability to apply medical knowledge in diagnosing and treating a "real" patient.

The National Council of Architectural Registration Boards patented its computer based simulation examination of architectural practice in 2000, and uses it to test aspiring architects with multiple interactive "vignettes" such as "Design a schematic framing plan for a one-story building with a multi-level roof."

In both of these cases, the stakes were high – not only for the professionals who had spent years preparing for the tests, but also for the public, whose safety could be jeopardized by the licensing of an incompetent doctor or architect.

Clearly, computer-based simulations have proven their value in specific areas of assessment for adult professionals. Their potential to add value in the assessment of K-12 students is so great that intensive research and development is under way. "Highly engaging and authentic simulations were simply beyond the financial reach of individual states but these large multi-state consortia may be able to incorporate them," commented Nancy Doorey, Director of Programs for the K-12 Center at ETS.

The opportunity: Deeper insights into learner's thinking to guide instruction

Simulation-based assessment is exciting to educators because it opens a whole new realm of opportunities to better understand what students know and can do. Simulations

are engaging to young people, who interact every day with a technology-enhanced, multimedia world. Simulations present students with an authentic scenario that, ideally, requires them to behave as they would in the real world, testing their theories and applying their knowledge to complete complex tasks. Data gathered in simulation-based assessments can measure not just the correctness of one final answer, but multiple aspects of the

student's ability to apply skills to solve problems; for example, efficient use of information and tools, systems thinking, as well as accuracy in decisions made at each step.

Best of all, major advances in technology – and related advances in simulation, data collection, and data analysis – are making it possible to gain insights into learners' thinking from their progress through the tasks in a simulation. In addition to the summative score, assessment models currently in development aim to provide the teacher with evidence that suggests, for example, whether the student's strategy was sound, whether that student chose the right tools, where the strategy went wrong, and why.

Few would argue the benefits of such insights in guiding instruction for that student. This is why computer-based simulations are steadily gaining a foothold in formative assessments for K-12 students. Less certain is the role that rich process data from simulations might have in high-stakes summative assessments.

Challenges in designing simulations for assessment was the topic of presentations and discussion at the 2012 Invitational Research Symposium on Technology Enhanced Assessments, in a session moderated by Eva Baker, Director of the UCLA Center for the Study of Evaluation, and Director of the National Center for Research on Evaluation, Standards, and Student Testing.



Alelo simulates realistic social situations in which students use an avatar to learn a second language.

The challenge: Technology is ahead of task design and measurement

For simulation tasks to reach their potential, assessment designers need to do away with traditional thinking that a test item is a question about one thing, with one correct answer, said presenter John Behrens, Vice President of the Pearson Center for Digital Transformation. The goal should be to create the kind of “naturalistic assessment that occurs on the football field, in business presentations, or in assessing a paper for publication ... a complex work product or performance held up against rules,” he said.

Designing tasks that result in complex work products requires that students be given an open workspace, as opposed to the tightly constrained workspace of a multiple-choice test.

Presenter Roy Levy said that openness is “the source of the greatest potential for simulation-based assessments ... also the source of its most daunting challenge.”

Levy framed the discussion of where we stand in simulation-based assessment, and where we need to go, by pointing out that “in some cases, the rush to adopt the physical machinery [of engaging simulations] has outstripped the adoption of the assessment machinery” required to draw valid and defensible inferences from the data.

Behrens and Levy, an Assistant Professor of Measurement, Statistics, and Methodological Studies at Arizona State University, agreed that in order to yield data that can be used to make judgments about student skills, simulations must be carefully developed using the principles of Evidence Centered Design (ECD). When doing so, designers begin with the claims they wish to make about students, determine the evidence that will allow them to confidently make such claims, and design tasks and environments that will allow students to produce that evidence. An open work space “allows for often an incredibly large and possibly infinite number of behaviors” and thus has the potential to capture “the richness of student performance in

terms of processes and nuances,” Levy said.

This richness, however, makes drawing high-stakes conclusions about student skills difficult. The accuracy bar is set very high in high-stakes summative assessments: Test results must stand up in court. Today the measurement models – the methods for moving from the student’s responses to decisions concerning proficiency – for simulation-based assessments are “in their relative infancy,” Levy said, compared with very mature measurement models for traditional tests. The daunting challenge is to develop measurement models that will pay attention to and interpret only the relevant behaviors. The simplest way to meet this challenge is to constrain the work space, but as Levy cautioned, this approach could have “as its casualty the very things that are attractive about simulation-based assessments.”

Students will likely experience early and fairly constrained forms of simulation-based assessments in 2014-2015. Some of the Common Core Standards seem to require, such as the high school mathematics standard that states, “Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.” While high-stakes use of the more nuanced “click and timing” data from such tasks is unlikely in the near term, teachers may receive some process data such as diagnostic feedback concerning student procedural fluency or missteps. Over that same time period, assessment designers will continue to refine the simulations themselves and the psychometrics that underlie them so that they “provide relevant data to understand learners’ thinking,” as presenter Behrens put it.

In doing so, Baker urged, it will be important to think about the design of these new simulations not only from the perspective of the designer, the teacher, and other users, but, “most particularly from the perspective of the student, who has a very different view of technology than we do.”

Changing World Requires Balance of Academic and 21st Century Skills

It's common knowledge that academic knowledge, skills, and abilities are important for success in postsecondary education, workplace, and life in general. Less well known is that several noncognitive factors are equally predictive of success after graduation.

Problem-solving, teamwork, persistence, and initiative – all considered noncognitive skills – also predict future employment and earnings at least as well as cognitive skills.

Employers overwhelmingly rate content knowledge as far less important than employee skills in oral and written communication, teamwork/collaboration, professionalism/work ethic, and critical thinking/problem solving.

Those observations, drawn from meta-analyses of multiple large studies, were cited by Patrick Kyllonen, a Senior Research Director at ETS, in a session on measuring 21st century skills within the Common Core State Standards, at the recent Invitational Research Symposium on Technology Enhanced Assessments (TEA).

Given the importance of noncognitive skills for school and life success, Kyllonen said, “a question is whether such skills can be deliberately developed in school.” He cited two recent meta-analyses that suggest they can.

In fact, such skills must be taught if schools are going to prepare students for the global work environment of the 21st century. “Changes in technology and culture are leading to changing demands in the workplace,” Kyllonen said, “and so the skills that are required in today’s and the future workplace are different from those required in the past.”



Presenter Mark Wilson agreed. The University of California-Berkeley Professor quoted from the international Assessment and Teaching of 21st Century Skills (ATC21S) project sponsored by Cisco, Intel and Microsoft, which asserts that the current practice of schooling is outmoded at a time when technologies and social trends have dramatically changed the way people access, use, and create information and knowledge.

Agreement is widespread on the definition of 21st century skills

While numerous lists of 21st century skills have been published, a review by Kyllonen and his colleagues in the ETS Center for Academic and Workforce Readiness and Success showed “clearly there is a great deal of consensus on the skills that are likely to emerge as most important in school and in the workplace.”

The consensus list is organized into three categories and, oddly, the first category is labeled **cognitive skills**, encompassing critical thinking, problem solving, and creativity. Moderator David Conley, a University of Oregon Professor and CEO of the Educational Policy Improvement Center, pointed out that no categorization is going to be perfect because “soft skills have edges and there is a lot of cognition in noncognitive skills.”

The other two categories are **interpersonal skills**, encompassing communication skills, social skills, teamwork, cultural sensitivity, and dealing with adversity; and **intrapersonal skills**, encompassing self management, self regulation, time management, self development (lifelong learning), adaptability, and executive functioning. Some lists, including one by ATC21S, add a category for **information and communication technology skills**.

Despite widespread agreement among educators that 21st century skills are important, and increasingly so, Kyllonen noted that “21st century skills are not covered very adequately in the Common Core State Standards.” There are two main reasons for this. First, the standards focus on content mastery and respect the disciplinary boundaries of school subjects, while 21st century skills are interdisciplinary and cross-curricular.

The second reason is that 21st century skills present many assessment challenges. The types of problems that would require students to demonstrate these skills are complex, ill-structured, and can’t be solved by recalling facts or applying rules. New problem types must be developed in a much more open and unconstrained testing environment.

Of course, looser constraints multiply the number of possible student behaviors on the test and the difficulty of teasing out and scoring only the relevant behaviors.

‘Soft skills’ present hard challenges in development of valid assessments

Research and demonstration products for assessing 21st century skills show that the challenges, while great, likely will be met within the next five years for purposes of instructional feedback and formative assessment. Presenters in the session on 21st century skills predicted that higher-stakes uses would evolve, possibly fast enough to drive the incorporation of such skills in anticipated future revisions of the state standards.

Current methods for assessing 21st century skills are mostly subjective in that the student and a teacher or other evaluator answer questions about the student’s ability. Assessment experts are placing most of their emphasis on developing more objective, performance-based measurements.

Wilson presented an example: an assessment of collaborative problem solving skills that also requires students to demonstrate literacy in the use of information and communication technology (ICT). “ICT literacy encompasses ... learning in networks, information literacy, digital competence, and technological awareness, all of which contribute to *learning to learn* through the development of enabling skills,” Wilson said. “In the current global economy, learning through digital networks ... is becoming increasingly important.”

The assessment was part of a pilot study that focused on collaborative learning through social networking. The assessment rated student performance on a learning progression in four parallel and interconnected “strands” that step up in difficulty. There were separate scales for how students performed as consumers and as producers, and how they contributed to and took advantage of social capital and intellectual capital in the network. Tasks were presented in one of three academic learning scenarios: a science expedition, a poetry workshop, and a foreign language chat room.

Preliminary results from the pilot study show “students in the 11- to 15-year age group show widely differing knowledge and skills in these areas. Some are only beginning to make first tentative steps toward digital competence while other students exhibit quite breathtaking levels of mastery,” Wilson said. “Differences in what students can do, and the absence of formal teaching and opportunities to learn these skills, point to a fast widening gap between what schools offer and important ICT skills.”

Dierdre Knapp, an industrial-organizational psychologist from HumRRo, agreed with the need for formal teaching of key 21st century skills. “In terms of assessing these skills for high-stakes

purposes, I have some trepidation,” she noted, “but for lower stakes purposes, absolutely.”

Current focus on content mastery may squeeze out 21st century skills

With all the pressure on educators to prepare students for assessment of mastery in the Common Core State Standards, where will teaching 21st century skills fit in?

Kyllonen pointed to the success of intervention programs in social and emotional learning. Wilson showed how development of 21st century skills can be embedded in instruction on academic subjects.

Henry M. Levin, Professor of Economics and Education at Columbia University Teachers College, offered a third perspective on that question in a paper presented as part of the session. Levin’s paper examined the need to prepare students for the labor force of the mid-21st century. Since we can’t know what skills will be needed 15, 20, 25 years from now, he suggested focusing on what we do know: that academic skills are not sufficient for success and must be balanced with development of interpersonal and intrapersonal skills.

Levin said the key element added by acquiring such skills is adaptability to change, particularly the ability to adjust to disequilibria by making decisions and taking action as new circumstances arise.

He also pointed to strong evidence that, historically, the average person’s adaptability has increased with each year of schooling — regardless of school quality, curriculum rigor, or the student’s test scores.

That fact points up the pressing need to “increase vastly the numbers of high school and college completers, and especially those from minority and poverty populations,” Levin said.

While it is certainly good news that the school experience, indirectly at least, has supported development of adaptability, Levin warns that “educational policy in the U.S. has taken an ominously narrow departure by focusing obsessively on test scores,” creating an imbalance.

“Increasing the educational attainment of the labor force and maintaining and expanding its adaptability ought to be the top two educational priorities for meeting workplace requirements in the middle of the 21st century,” Levin concluded. “This cannot be done without creating greater balance and interaction in the educational system among the cognitive, interpersonal, and intrapersonal goals.”

Tools for Real-Time Personalized Learning

Technology is breaking down the barriers between assessment and instruction

Assessment and instruction have long been separate silos in education, particularly if the data from an assessment is to be used outside the classroom to inform curricular, programmatic, or accountability decisions. By and large, instruction stops when assessments used for such purposes are taking place.

With the advent of Technology Enhanced Assessments, the separate but equal relationship between instruction and assessment is changing. Barriers are being broken, boundaries blurred, and opportunities for cross-pollination are being opened up like never before. The purpose of assessment is being expanded from simply making judgments concerning student knowledge and skills to actively supporting learning and improving instruction.

From the Open Learning Initiative to ASSISTments – both of which grew out of federally funded research projects – to the Khan Academy – which began as an uncle tutoring his niece via YouTube – elements of assessment are being incorporated into instruction through technology, and the data collected as students move through activities are allowing instruction to be adjusted to the needs of the learner in real time.

In addition, the data are being used to improve the instructional activities themselves, often within a continuous improvement loop of just days or weeks rather than years.

“One of the things the data can do for us is let us better understand what the knowledge, skills, and abilities really are for students,” said Ken Koedinger of Carnegie Mellon University and a co-developer of ASSISTments with Neil Heffernan of Worcester Polytechnic Institute. “The finer-grain-level skills can be mapped to various standards ... so you can get a finer-grained

look at students’ performance.” In addition, the system reports out information on student effort and persistence – using variables such as the amount of time spent on difficult problems and the number of hints used. This becomes valuable feedback for the teacher, student, and parents.

The ultimate goal of all this innovation and data collection, various presenters and participants at last month’s Invitational Research Symposium on Technology Enhanced Assessments agreed, is to take education to that elusive place that educators have dreamed about for years — a place in which each student is deeply engaged in class discussions and group projects while also being supported with individualized instruction that allows them to make optimal progress.

Countless curriculum initiatives have sought to provide students with individualized learning experiences, but many have fallen by the wayside.

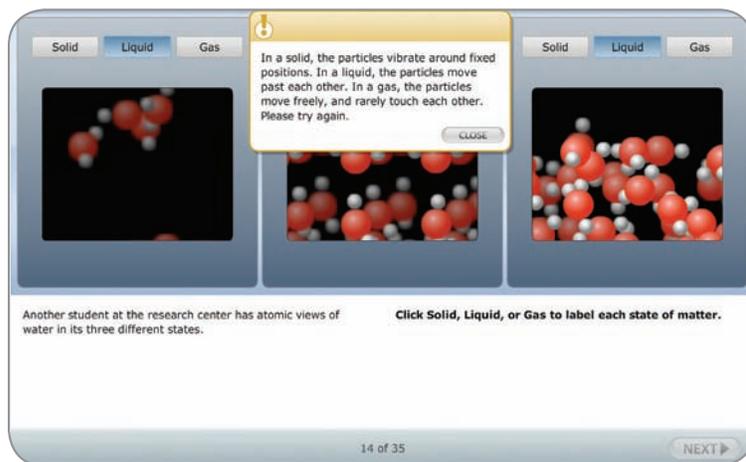
“For the first time we are about to see a place where innovation takes on meaning for education,” said Jim Shelton, Assistant Deputy Secretary for Innovation and Improvement for the U.S. Department of Education. “We’ve had many great ideas and great inventions that have appeared, gotten excellent results yet have failed to make it down the hall, let alone to the next building, to the next district or the next state. ... We are becoming more and more comfortable with allowing people to learn in different contexts.”

Current innovations may be what get education over the hump to provide Personalized Adaptive Learning Systems. In these systems, students can proceed at their own pace, get remediation without embarrassment in the privacy of online programs, practice as much as they need on their own, and move ahead to greater challenges when motivated by interest or data that demonstrates they have mastered a skill.

Playlists for learning

Educational playlists, crafted electronically in the fashion of iTunes or Amazon book lists, will draw upon the most effective educational resources on the web, both free and fee-based, to offer students personalized content, additional online resources, and learning activities best suited to their specific instructional needs, preferences, and learning styles.

The use of smart prescription engines to personalize the delivery of just-in-time learning activities will not reduce the importance of teachers, but increase it, according to Sal Kahn, founder of Kahn Academy (see related story on facing page). By helping students to work on mastery of specific skills at their own pace, in and out of school, teachers are given greater flexibility, he argues, to guide and support students and to incorporate more project-based activities and rich discussion into the school day.



WestEd’s SimScientists program uses science simulations for curriculum-embedded, formative assessment purposes and for unit benchmark, summative purposes.

“What we’re trying to do is take the passivity out of the classroom, so that ... a teacher, will have more flexibility,” Khan said in a television interview on the news magazine “60 Minutes” in March 2012. “We view teachers playing the role of more like a coach or a mentor.”

Blended classrooms

Blended classrooms that utilize both the personalized playlists and project-based learning activities, are already in use in pilot programs like the School of One in New York, in field tests, in experimental private schools, and in select charter and public classrooms.

At the higher education level, the Open Learning Initiative (OLI) at Carnegie Mellon University is conducting powerful research into the design of effective Personalized Adaptive Learning Systems.

Developed by Director Candace Thille, the OLI program offers free courses to independent learners that they can follow at their own pace, and also can be used in classroom settings. Courses in biology, engineering, and other subjects, are based on scientific research of best learning practices for online learning, and interactive features like electronic hint systems and dashboards that gather instruction and research data and track student progress.

“The hint structure scaffolds students through the thought process we want them to go through while they figure out how

to do a task,” Thille said at the TEA Symposium. “The student is getting all this feedback, and more important, feedback is going to the instructor.”

Still, many technical issues remain to be resolved before Personalized Adaptive Learning can be effectively brought to scale. Better tagging schemes are needed to allow prescription engines to find the best-fit resources, as well as better means of determining the effectiveness of resources for different learners.

The larger point, however, is that this trend is well under way toward individualized instruction that uses embedded assessment analytics to personalize both the content and the delivery and continuously improve the instructional activity.

Moreover, the pace of innovation will only accelerate now that most of the country has adopted a single set of academic expectations for students in English language arts and mathematics; and new science standards, that are expected to also be widely adopted, are soon to be released.

“If you look at the accomplishments of the last three to five years, who would have thought that any of this would be possible,” said David Conley of the University of Oregon at the TEA Symposium. “We’ve gone down a road we never thought we would get down at all.”

Classroom teachers striving to prepare more diverse learners for the increased academic demands of college and careers can only hope that the pace of innovation can bring these smart technologies to scale quickly as powerful new allies.

Examples of the New Generation of e-Learning and e-Assessment Tools

The following are just a small sample of noteworthy innovations in e-learning and e-assessment, selected by an independent Selection Committee.

Alelo Automated Assessment in Social Simulations

Simulations of realistic settings allow learners to practice communication skills, in their native language or in a second language. www.alelo.com

Aspire

Students build their own computer networking businesses and a dashboard monitors their progress.

<https://learningnetworkstore.cisco.com>

Gamestar Mechanic

Students ages 8–14 design video games to practice systems thinking, problem solving, critical thinking, iterative design, creativity, collaboration. www.gamestarmechanic.com

CityOne and Innov8

Developed by IBM to teach business students and those working in businesses and municipalities to effectively manage complexity, these games provide continuous feedback.

www.ibm.com/cityone and www.ibm.com/innov8

FLOW

Similar to a Wii game, FLOW uses interactive, embodied games to engage students in math and science in authentic, applied ways.

www.smallablearning.com

PhET Interactive Simulations Project

This University of Colorado Boulder project provides more than 115 free, research-proven, interactive simulations for STEM education. <http://phet.colorado.edu>

Reading in the Real World: The Sports Network-2

Students create an avatar and assume the role of managing director of a sports network, while being assessed “behind the scenes” on how well they understand the content they read.

www.classroominc.org

SimScientist

These research-based middle school science simulations include formative assessments that provide individualized feedback and coaching and benchmark assessments that generate proficiency reports. <http://simscientists.org>

Khan Academy Takes the Personal Tutor Online

Since it was founded in 2009, Khan Academy has spurred debates about what education may look like in the future.

Fueled by viral Internet popularity, it has expanded how online resources can drive instruction. It has demonstrated new ways to teach students individually at their own level and pace – ways that students are voluntarily utilizing in massive numbers. It has even upended the notion of what is school and what is homework through an approach designed to “flip the classroom.”

With its individualized tutoring system, and a high-tech “dashboard” system for tracking student progress, Khan Academy has become an early indicator of one way technology might be used to improve instruction as use of digital devices increases and better analytics are developed to enhance and personalize online learning.

Begun by Sal Khan as a tutorial for a niece, the approach that became Khan Academy now reaches more than 6 million students a month. It offers more than 3,100 free video lessons, and has achieved a track record of success for helping students learn outside of school. Now it is piloting programs to see if the Khan approach can also transform instruction inside of school in traditional settings.

It is not without critics – many teachers and educational leaders chafe at the idea of videos replacing the traditional teacher presentations on concepts.

But Khan stresses that the goal of the program is not to replace teachers but to free them to use school time for richer activities like group projects and individualized mentoring.

Khan himself still records every video lesson used for Khan Academy, but with support from the Gates Foundation and Google, Khan Academy now has bigger goals, and a bigger team.

It is aligning its lessons, past and present, with the new Common Core State Standards. It is translating its lessons into different languages. And it has field tested its high-tech “dashboard” system for tracking student progress in public schools.

The dashboard is a significant step in the movement toward Personalized Adaptive Learning Systems, through which students will be able to learn at their own pace and style.

“It is all about individualized, personalized learning,” says Sundar Subbarayan, who heads Khan’s School Implementation Team. “Our focus is the learner and all our product features are focused on that end user.”

The strength of the Khan approach is that students can view the video lessons at their own pace, and review them – again and again if necessary – without the embarrassment of doing it in front of the class.



The dashboard, developed with funds from Gates and Google, enables classroom teachers to monitor the progress of each student through a “heat map” of the class that flags struggling students in red.

“When they see red, they can drill down and see how a particular student is doing on a particular topic,” Subbarayan says. They can check how long a student worked on a problem, whether they watched the video more than once, where learning bogged down.

“The teacher won’t do this for each and every student but will focus on students who are struggling and figure out what they are struggling with and then intervene,” Subbarayan says. “We are providing very rich granular data about students.”

More crucial work needs to be done to align Khan Academy’s “learning map” for proficiency with Common Core assessment standards, because both enhancing the quality of online learning and personalizing independent learning depend on highly accurate and reliable embedded assessments.

Khan needs to be “absolutely sure that what we say a student is proficient in, he *is* actually proficient in,” Subbarayan says. “We take that very seriously.”

'Serious Games' Gain Ground in Instruction and Assessment

The online biochemistry game Foldit has motivated 250,000 people to spend their free time trying to solve mysteries of protein folding that have baffled legions of experts. So how hard can it be to develop games that motivate K-12 students to solve complex problems in mathematics, language arts and science?

Well, it is hard, but it has been done for decades, and designers of "serious games" are getting better at it all the time. Online and computer-based games are used in classrooms across the country as adjuncts to instruction and to extend the school day by encouraging learning in homes and community centers.

Now designers of educational games face a more difficult challenge: Can they maintain the elements of fun that make games exciting for players while making the games more purposeful in their contribution to classroom instruction and assessment of complex tasks?

It turns out this is really, really hard. Examples of the state of the art in serious game development were showcased at the recent Invitational Research Symposium on Technology Enhanced Assessments (TEA). Presenters and discussants shared reasons for hope, as well as caution, about the future of games as guides to better teaching and as a means to assess what individual students know and can do in an academic domain.

K-12 game developers build on success of games in other realms

Foldit grabbed headlines in 2009 when a 13-year-old led the team that scored highest in the hardest category, and again in 2011 when self-selected teams of unpaid players provided insights that led to a breakthrough in AIDS research. But most of the progress being made in the gamification of complex tasks goes on without such notoriety.

Since 2006, more than 30,000 U.S. Military personnel have been trained in the language and culture of the country where they will be deployed using a fun, immersive, interactive 3D video game developed by Alelo. In the game, trainees interact with intelligent avatars who respond not only to the trainee's speech but also to intent, gestures, and behavior.

Games are being used in business as well. The Cisco Academy's Aspire game helps student computer network technicians, engineers, and administrators to practice running their own network configuration business, providing constant feedback on a dashboard of performance metrics regarding their content knowledge and business decision-making. IBM's CityOne game — used by hundreds of MBA programs around the world — involves players in quests to optimize the complex systems that deliver energy, water, banking, and retail services to city residents.

Alelo, Cisco, and IBM were among the 10 game developers selected to demonstrate their products

at the TEA Symposium. Together the products showcased the here-and-now in games that integrate complex challenges and provide robust feedback to both trainee and trainer.

Educators hope games can help with student engagement and persistence

Arthur Graesser, a University of Memphis professor who presented at a TEA Symposium session on "Assessment Within Serious Games," quipped that too many teachers view the term serious games as an oxymoron. No doubt such skepticism will be a hurdle in selling schools on games like the one Graesser helped to develop, Operation ARA. But serious games have several important elements in common with their more frivolous cousins.

Paramount among these common elements is engagement. People are gifted puzzle solvers — one of the few areas in which



In IBM's CityOne game, the player must solve real-world business, environmental and logistical problems within the energy, water, retail and banking industries in an effort to revitalize a metropolitan area.

we actually outperform computers. We also like to win. Solving puzzles so that we can win is fun for most people, hence the popularity of games as a leisure activity. For educators, lack of student engagement is a huge problem. Many are hopeful that making learning and test taking more game-like can help to overcome this.

Games also motivate people to be persistent in their problem-solving efforts by offering constant feedback on progress, points or other rewards for reaching milestones, and the chance to bask in public glory if your name tops the leader board. Even more crucial to persistence, there are no demerits for making a mistake and no embarrassment; you just figure out what went wrong and try again. TEA presenter Tom Vander Ark, who is CEO of Open Education Solutions, has espoused “public victories and private failures” as perhaps the most important benefit of games. Educators frustrated with the “you failed – game over” consequences in typical classroom tests hope that student persistence can be improved in a game-like learning and assessment environment.

Finally, games challenge players with escalating levels of complexity. To succeed, players are expected to acquire content knowledge (the factual who, what, when, where, and why of the game). But possibly much more important to their success is how well they employ 21st century skills such as problem-solving, critical thinking, and creativity. In a multi-player or team game, the complexity is multiplied by having to manage collaboration and social interactions with one’s fellow players. Educators hope that games will present new opportunities to teach and test complex skill sets that combine content knowledge and 21st century skills.

Challenges for games include teaching to standards and reporting useful data

While hopes are high, developers of games for K-12 use face a unique set of challenges. David Williamson Shaffer, a University of Wisconsin professor and co-presenter with Graesser in the “Assessment Within Serious Games” session, cautioned that “too often, games for learning turn into chocolate-covered broccoli.” Graesser agreed: “Students are skeptical. You have to be subtle to smuggle in the learning” by engaging students emotionally with “an epic story, love interests, events, and surprises,” as his Operation ARA game does.

Additional notes of caution raised at the TEA Symposium were that serious games for classroom use must be purposeful in teaching complex skills and competencies within the Common Core State Standards, and that the huge amount of assessment data collected by recording every click and movement the student makes in the game must be sifted, sorted, and presented to the teacher in a practical way that informs next steps for instruction of that student.

Game designers represented at the TEA Symposium are working from the assumption that the two foregoing “musts” are really one integrated design challenge. As University of Illinois-Chicago Professor Jim Pellegrino put it, “Really good assessment tasks are really good instructional tasks.” Once the series of tasks that make up the game passes muster from a teaching standpoint, sophisticated data analysis could produce evidence of the student’s level of mastery for each task. At that point, the game would be useful in guiding instruction and formative assessment. No one is ready to say when or whether games will ever play a role in high-stakes summative assessments.

Navigating Change: Challenges, Choices and Trade-Offs Ahead

K-12 assessment is at the beginning of a sea change. Many of the competencies now considered to be essential – those required for success in college and the workplace – are much more complex than those of even a decade ago. While multiple-choice and other simple item types will still play a valuable role in measuring fundamental knowledge and skills, they will not be sufficient to tell us whether students have met many of the Common Core Standards.

This change in expectations is driving the need for new types of assessment tasks, new design processes, and new measurement models. The assessment consortia, caught in the midst of this sea change and ever aware of the implications of their choices for the on-going costs and instructional impacts of these new assessment systems, must navigate through a series of difficult challenges, choices, and trade-offs. Through the discussions at last month's Invitational Research Symposium on Technology Enhanced Assessments (TEAs), several big themes emerged.

Complex skills and abilities, such as those within the Common Core State Standards, must be assessed within the summative assessments – as best they can at this point in time.

This may seem obvious, but there are many potential barriers to assessing some of the more complex competencies – mea-

surement issues due to the need for legal defensibility of the proficiency determinations, the limits of bandwidth and technology infrastructure within schools, and development costs, to name a few. Consequently, this will be a bigger stretch than it might seem. But the presentations by ETS, CTB/McGraw-Hill and SRI demonstrated that, with disciplined development processes, many of these important skills and knowledge can be measured well. As Kathleen Scalise, an expert in technology enhanced assessment development, advised, states and consortia would be wise to define “reasonable success metrics” for their near-term development work, seeking to make advances over the current state of affairs and planning to evolve and improve over time.

Measuring these complex skills will require the judicious use of technology enhancements.

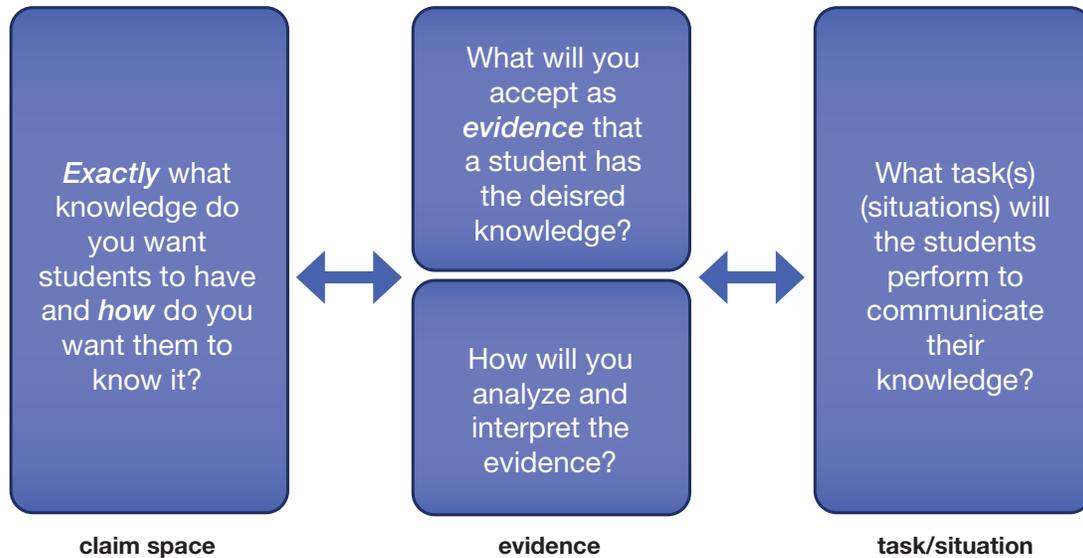
Some of the Common Core Standards require the use of technologies within the assessment tasks, such as the ELA standard requiring electronic searches or the mathematics practice standard, requiring proficiency with modern mathematical tools, including spreadsheets and statistical software. Many states' science standards require the determination of whether students can conduct scientific investigations. The desire to understand not only the student's content knowledge, but also the processes used to solve complex problems, requires that assessments gather more than just the final answer. TEAs significantly enhance the ability to gather such information. Finally, the timely return of results is not feasible without automated scoring engines and, where human scoring is required or desired, the use of automated distributed scoring systems.

In addition, TEAs tend to be more expensive to develop than paper-and-pencil items (although there can be cost savings down the road when state-of-the-art development processes are used) and, for the more complex competencies such as the development of a well-supported written argument, require more student time to complete. For all these reasons, states and consortia will need to ensure that they are not seduced by “the technology coolness factor,” Sue Rigney warned, but are using it as needed to measure important constructs.

Referring to the issue of development costs, Kathleen Scalise pointed to new research projects that indicate the possibility of developing rich technology-enhanced scenarios that can be used both within the classroom and, because they do not lend themselves to being readily memorized, can also be used within the summative assessments for that grade level. “This could really change what you could invest in,” she observed, “but will require rich, demanding tasks.”



EVIDENCE CENTERED DESIGN



From presentation by Jim Pellegrino, Learning Sciences Research Institute, University of Illinois at Chicago

New development and alignment processes will be required.

Teachers across the country have participated in item alignment work – reviewing potential state assessment items and determining which state standard they assess. But many of the Common Core State Standards (CCSS) cannot be assessed with a single item or even a set of discrete items. Instead, they require multi-step tasks or activities that are carefully structured to yield evidence of student understanding. The fundamental processes of assessment development and alignment, therefore, must change. Evidence Centered Design (ECD) lays out the principles for specifying: the claims one wants to be able to make about what students know and can do; the evidence that will allow those claims to be made; the tasks/situations that can be used to elicit that evidence in fair and valid ways; and how the evidence can be aggregated to make valid claims. “ECD provides the foundation needed to build tests that will really let us understand what students know about the CCSS,” stated Rigney. “It demands an up-front opportunity cost,” she explained, due to the time required for initial development, “but saves on the back end,” as it allows numerous variant tasks to be generated from the same initial body of work. The paper presented by the SRI team concerning the PADI project included tools and templates that task developers – from testing companies to individual teachers – can use.

For summative assessments, the alignment between the assessments, their purposes, and the intended uses of the data must be carefully attended to at all stages of development.

The requirements within the Race to the Top Assessment Program for the new consortia assessments systems reflect the growing demands that educators, policymakers, and parents are placing on state assessment systems. These assessments must go far beyond the determination of whether or not a student has met grade level standards. They must allow for the measurement of individual growth for all students, and therefore must yield more accurate information concerning students who are performing well above or well below the standard. The results must also be useful in informing instructional and programmatic decisions, so they must be more fine-grained than just a proficiency determination. In addition, the data must be appropriate for use by states in their educator and student accountability systems, which will vary from state to state, to make high-stakes decisions.

It is therefore essential, cautioned Kit Viator of ETS, that the consortia clearly articulate the intended purposes and uses of the data, and then build assessments that are strongly aligned to those purposes and uses. This is particularly important when high-stakes decisions will be made regarding individuals based, in part or in full, on the data.

This may mean that the assessment system components intended to provide more detailed instructional feedback will be incorporated within the interim and formative components of the new assessment systems.

While the summative assessments to be delivered in 2014-2015 will be limited in the advances that they can incorporate, they must be designed to support a continued evolution in the assessments over time.

The consortia need to develop and field test tens of thousands of items prior to the spring of 2015. Scott Norton, the Assessment Director for Louisiana and member of the PARCC leadership team, commented on the many benefits of TEAs but also reflected, “If we walked out of here knowing everything we needed to know about technology enhanced items, we still would have a difficult time. So hopefully that can happen over time, and maybe some at the beginning.”

This points to the need, as Gene Wilhoit observed, for new assessments to be developed “with the capacity to evolve.” Rapid advances are occurring within the supporting sciences, including cognitive science, data modeling, and psychometrics. If the vision of much more seamlessly integrated instruction and assessment is to be realized, with assessment serving not only to measure learning but also to actively support it, then it is essential that the new systems be designed to evolve and incorporate new advances as soon as there is sufficient research to support doing so.

In many ways technology, as it occurs within the workplace, postsecondary education, and learning activities, has outpaced measurement. Perhaps the greatest benefit of the coalescence of states around a common set of academic standards and two comprehensive assessment systems is the creation of the critical mass needed to accelerate research and development, across all aspects of K-12 education. “This cross-vendor conversation,” Juan D’Brot, the Assessment Director for West Virginia, observed at the symposium, “is changing the paradigm, all to the benefit of the students.”

The development and use of learning progressions as an underpinning of assessments will allow more diagnostic feedback for instruction and learning.

For assessments, whether summative, interim or formative, to provide targeted information about a given student’s immediate instructional needs, the assessment must have as part of its

foundation a clear delineation of the stages or levels of understanding a student moves through as that student progresses toward sophisticated mastery. In other words, in order to pinpoint where a student is along the path to deep understanding, the assessment designers must have that map in hand and then design the assessment to locate the student based on markers along the way. The Common Core Standards delineate some of the major markers, but more research is needed to develop and validate fully refined learning progressions.

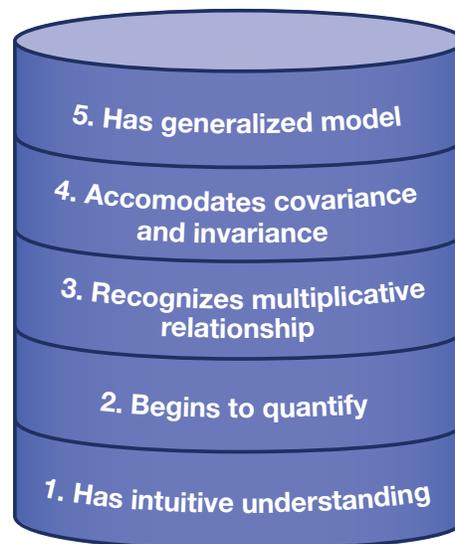
This too, then, reinforces the need for flexible systems of aligned formative, interim, and summative assessments. In such systems of aligned assessments, that deeper research and experimentation can occur within the low-stakes elements and, as the needed bodies of evidence are generated, the next iteration of the system components can be designed to more powerfully support teaching and learning, and possibly to be incorporated in the consequential summative assessment component.

“This isn’t a problem to be solved in one year or two years or probably even five years,” said Carl Wieman, Associate Director for Science for the White House Office of Science and Technology Policy. “Moving forward, we need to have the best assessments we can as the Common Core come online. And we have to do that in such a way that this is very clearly the first step, not the end point, so we don’t get locked in to where

we are but [instead] are automatically upgrading routinely as we improve our understand of better ways to assess and better technology to do it.”

LEARNING PROGRESSION

The ETS proportional reasoning task learning progression



Based on Baxter and Junker, 2001
(cited in Weaver and Junker, 2004)

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Materials from the Invitational Research Symposium on Technology Enhanced Assessments

The 10 research papers listed below and the accompanying slides presented at the Invitational Research Symposium on Technology Enhanced Assessments are available on the K-12 Center's website at www.k12center.org. In addition, the 18 slide sets presented by Moderators, Discussants, and Breakout Session presenters are also available.

Using Technology to Assess Hard-to-Measure Constructs in the CCSS and to Expand Accessibility

- Barton, K., & Schultz, G. (2012, May). *Using technology to assess hard-to-measure constructs in the Common Core State Standards and to expand accessibility: English language arts.*
- Cayton-Hodges, G., Marquez, L., van Rijn, P., Keehner, M., Laitusis, C., Zapata-Rivera, D., Bauer, M., & Hakkinen, M.T. (2012, May). *Technology enhanced assessments in mathematics and beyond: Strengths, challenges, and future directions.*
- Haertel, G. D., Cheng, B.H., Cameto, R., Fujii, R., Sanford, C., Rutstein, D., & Morrison, K. (2012, May). *Design and development of technology enhanced assessment tasks: Integrating evidence-centered design and universal design for learning frameworks to assess hard-to-measure science constructs and increase student accessibility.*
- Behrens, J. T., DiCerbo, K. E., & Ferrara, S. (2012, May). *Intended and unintended deceptions in the use of simulations.*
- Levy, R. (2012, May). *Psychometric advances, opportunities, and challenges for simulation-based assessment.*

Looking Ahead: Integrating Assessment with Instruction to Support Learning

- Dede, C. (2012, May). *Interweaving assessments into immersive authentic simulations: Design strategies for diagnostic and instructional insights.*
- Heffernan, N. T., & Koedinger, K. R. (2012, May). *Integrating assessment within instruction: A look forward.*

Measuring Problem Solving, Creativity, Communication, and Other Cross-Curricular 21st Century Skills Within the CCSS

- Kyllonen, P.C. (2012, May). *Measurement of 21st century skills within the Common Core State Standards.*
- Levin, H. M. (2012, May). *The importance of educational adaptability. Paper presented at the K-12 Center at ETS invitational research symposium on technology enhanced assessments.*
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Webinar on Technology Enhanced Assessments June 25, 2012

The Alliance for Excellent Education will host a webinar discussion of the near-term realities and future potential of Technology Enhanced Assessments on June 25 from 1 to 2:30 p.m. Eastern Daylight Time. Particular consideration will be given to the item and task types that may be seen within the new summative consortia state assessments to be deployed in the spring of 2015.

Bob Rothman of the Alliance will moderate the webinar with Nancy Doorey of the K-12 Center at ETS.

The guest panelists will be:

- Kathleen Scalise, Associate Professor of Educational Methodology, Policy, and Leadership at the University of Oregon;
- Sue Rigney, Education Specialist at the U.S. Department of Education; and
- Juan D'Brot, Executive Director of Assessment and Accountability for the West Virginia Department of Education.

Participants in the webinar will be able to submit questions to spark discussion among the panelists.

To register prior to June 25 or to view the recorded webinar, go to www.k12center.org/events/webinars.html

A Message from Kurt Landgraf of ETS

Turning Promise to Reality with Technology



Kurt Landgraf

A remarkable thing happened recently. Policymakers and educators from 46 states representing disparate interests, diverse perspectives and 46 million K–12 public school students agreed on a plan to transform American public education by adopting common academic standards.

Adoption of the Common Core State Standards is among the most significant developments in the history of American public education. When they go into effect in the 2014-2015 school year, we will enter a new era of educational excellence.

We'll also enter a new era of technology-enhanced measurement. The assessment systems being developed by two of the state consortia – the Partnership for Assessment of College and Career Readiness (PARCC) and the Smarter Balanced Assessment Consortium – are expected to use technology in ways that were not possible prior to broad adoption of the core standards.

PARCC's online Interactive Data Tool, for example, will allow educators in all 23 PARCC states to create customized learning reports, compare school performance, and help identify the professional development needs of teachers at the classroom, grade and school levels. The Smarter Balanced system will make extensive use of computer-adaptive testing, permitting teachers to use data from optional interim tests to individualize their instruction.

Both consortia will use artificial-intelligence engines to score complex items quickly and cost-effectively. Both will also build digital libraries of model instructional units, formative assessments and professional learning resources.

It is anticipated that the data these next-generation systems produce will dramatically improve instruction, accountability and decision-making, and help equip students with the knowledge and skills they'll need for college and careers. Most importantly, they'll attempt to do what assessment should always do: put student learning first.

Technology-related breakthroughs of the kind being developed for the common assessments, and those that were showcased at our K-12 Center's recent Invitational Research Symposium on Technology Enhanced Assessments, come just as the web-based Open Educational Resources movement is creating unprecedented new learning opportunities.

In K–12, the pioneering Khan Academy offers free access to a digital video library of more than 3,000 lessons and learning tools, mostly in math and science. At the postsecondary level, digital courses offered by startups such as Udacity and collaboratives of leading universities such as Coursera are reshaping higher education, making advanced learning more accessible,

more affordable, and more convenient for a wider range of learners, including adult learners.

These new approaches hold tremendous promise. Fulfilling that promise will require valid, reliable, research-based measures of what individual students have mastered, what they need to learn next and how they learn best.

At ETS, we're committed to making the promise a reality. We're making substantial investments in research into such areas as cognitive and learning science, simulations, serious gaming, and noncognitive skills to develop tools to extend, personalize and accelerate learning.

Technology is not a substitute for teaching. And the most meaningful interactions will always occur between teacher and student. But new assessment systems, like those being developed for the common standards, have the potential to create powerful new ways for students and teachers to interact — and to reaffirm the quintessentially American notion that every child is entitled to a high-quality education, regardless of circumstance.



The next-generation assessment systems now in development will put student learning first by producing data that dramatically improves instruction, accountability, and decision-making in schools.



Ready for College and Ready for Work: Same or Different?

Results of a new ACT study provide empirical evidence that, whether planning to enter college or workforce training programs after graduation, high school students need to be educated to a comparable level of readiness in reading and mathematics. Graduates need this level of readiness if they are to succeed in college-level courses without remediation and to enter workforce training programs ready to learn job-specific skills.

We reached this conclusion by:

- Identifying the level of reading and mathematics skills students need to be ready for entry-level jobs that require less than a bachelor's degree, pay a wage sufficient to support a family, and offer the potential for career advancement
- Comparing student performance on ACT tests that measure workforce readiness with those that measure college readiness
- Determining if the levels of performance needed for college and workforce readiness are the same or different

The study results convey an important message to U.S. high school educators and high school students: We should be educating all high school students according to a common academic expectation, one that prepares them for both postsecondary education and the workforce. Only then—whether they are among the two-thirds who enter college directly after graduation or those who enter workforce training programs—will they be ready for life after high school.

Although the contexts within which these expectations are taught and assessed may differ, the level of expectation for all students must be the same. Anything less will not give high school graduates the foundation of academic skills they will need to learn additional skills as their jobs change or as they change jobs throughout their careers. The results of this study provide ample evidence that we must move the agenda for high school redesign in a direction that will prepare *all* students for success no matter which path they choose after graduation.

Introduction

For decades it has been a commonly held belief that high school students planning to go to college need to take more rigorous coursework than those going directly into the workforce. Today, however, many employers are convinced that in an expanding global economy, entry-level workers need much the same knowledge and skills as college-going students. But such claims have been based mostly on anecdotal rather than empirical evidence. This research brief examines the relationship between college readiness and workforce readiness by asking the question: Are readiness for college and readiness for work the same, or different?

The WorkKeys® System

WorkKeys is ACT's job skills assessment system measuring the "real-world" skills that employers believe are critical to job success. The skills are valuable for any occupation—skilled or professional—and at any level of education. WorkKeys is used by businesses, workforce development groups, and schools to find, hire, train, and retain qualified employees.

Components include:

Job Analysis (Profiling)

Identify the skill requirements and WorkKeys skill levels an individual must have to perform successfully. The WorkKeys job profile database currently includes profiles for more than 12,000 jobs across all industry verticals.

WorkKeys Assessments

Measure the current skills of individuals in nine key areas. WorkKeys tests in Reading for Information and Applied Mathematics were used for the present study.

Training

Improve skills that make individuals more employable and business more competitive through a better trained workforce.

The primary mission of our public education system is to give every student the opportunity to live a meaningful and productive life, which includes earning a wage sufficient to support a small family. All students need to develop the knowledge and skills that will give them real options after high school. No student's choices should be limited by a system that can sometimes appear to have different goals for different groups. Educating some students to a lesser standard than others narrows their options to jobs that, in today's economy, no longer pay well enough to support a family of four. Widening access to the American dream through public education has always been one of the foundations of our society, and it is more critical than ever to our ability to remain competitive in today's global economy.

Our new finding has important implications for U.S. high school education. It suggests that all high school students should be educated according to a common academic expectation that prepares them for both postsecondary education and the workforce. This means that all students should be ready and have the opportunity to take a rigorous core preparatory program in high school, one that is designed to promote readiness for both college and workforce training programs.

What Is the Expectation for Workforce Training Readiness?

Our first step was to define workforce readiness. We began by referring to the Occupational Information Network (O*NET), a comprehensive national database of job and worker attributes developed for the Employment and Training Administration of the U.S. Department of Labor. O*NET classifies jobs using five zones, each defined by particular education, training, and experiential requirements.

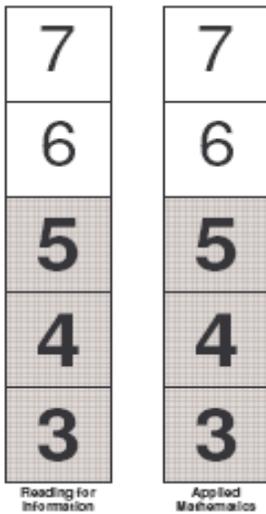
We focused on Job Zone 3 because the occupations in this zone are likely to offer a wage sufficient to support a small family¹, provide the potential for career advancement, and are projected to increase in the future (U.S. Department of Labor, 2004). Zone 3 is the highest O*NET level that includes jobs that do not require a bachelor's degree, but which likely require some combination of vocational training and/or on-the-job experience, or an associate's or higher degree (*O*NET OnLine Help*, n.d.). Examples include electricians, construction workers, upholsterers, and plumbers.

By selecting O*NET Zone 3, we are essentially defining workforce readiness as workforce *training* readiness, since Zone 3 jobs require high school graduates to

WorkKeys Level Scores

Developed with input from employers, labor organizations, educators, and policymakers, ACT’s WorkKeys tests are criterion-referenced tests anchored to the skills needed for workforce readiness in nine areas.

Jobs are profiled using the same levels to assess individuals’ workforce readiness skills. An individual’s readiness for a particular job can be compared to the requirements of the job, as defined through the job profiling process. In this study, the level of knowledge and skills considered to represent work readiness was profiled at a Level 5 for both reading and mathematics.



Level 5 WorkKeys Applied Mathematics and Reading for Information scores are often used in state and community workforce readiness certificate programs across the nation. These programs are used to qualify prospective worker readiness for a majority of jobs in a particular locale.

have the foundational skills necessary to learn additional job-specific skills throughout their careers.

What are the minimum skill standards that high school graduates need to enter Zone 3 occupations? We used job profiles from ACT’s WorkKeys program (see sidebar, previous page), O*NET occupational data that identify the minimum level of knowledge and skills needed to enter each of these profiled jobs, and expert ratings to derive a profile that identifies the reading and mathematics skills needed for students to be ready to enter the vast majority—90 percent—of the profiled Zone 3 occupations after high school.² On a WorkKeys scale that reports scores for Reading for Information and Applied Mathematics ranging from Level 3 to Level 7 (see sidebar, this page), this level of knowledge and skills was profiled at a Level 5 for *both* reading and mathematics.

Do College Readiness and Workforce Training Readiness Represent a Common Expectation?

After defining workforce training readiness for 90 percent of the profiled Zone 3 occupations that require training after high school, we examined whether the level of readiness for workforce training programs is the same as or different than the level of readiness needed for success in college.

Commonalities: Readiness Levels

Because WorkKeys and the ACT[®] test are measures of workforce and college readiness, respectively, we based our analysis on WorkKeys and ACT scores from a statewide sample of high school eleventh-grade students over a four-year period. We conducted a statistical concordance between the respective college and workforce training readiness levels in reading and mathematics from both programs.³ The concordance between the ACT College Readiness Benchmarks (see sidebar, next page) and WorkKeys Level 5 shows that the levels of readiness in reading and mathematics are comparable. Therefore, it is reasonable to conclude that the expectations of students who choose to enter workforce training programs for jobs that are likely to offer both a wage sufficient to support a small family and potential career advancement should be no different from the expectations of students who choose to enter college after high school graduation. Table 1 summarizes the comparability analysis.

Table 1
Comparability between WorkKeys Job Profile Level 5 and ACT College Readiness Benchmarks in Reading and Mathematics⁴

WorkKeys Test	WorkKeys Readiness Level	Comparable ACT Score Range and College Readiness Benchmark
Reading for Information	5	19–23 Benchmark = 21
Applied Mathematics	5	18–21 Benchmark = 22

ACT College Readiness Benchmarks

The ACT, the most widely accepted and used test by postsecondary institutions across the U.S. for college admission and course placement, measures students' academic readiness to make successful transitions to college and work after high school. ACT has defined college readiness empirically by establishing College Readiness Benchmarks representing the minimum ACT test scores required for students to have a high probability of success in corresponding credit-bearing first-year college courses. The ACT Benchmarks are based on course placement data from a nationally representative sample of postsecondary institutions. The Benchmarks reflect the ACT scores students need to earn to have at least a 75 percent or greater chance of obtaining a course grade of C or better. The College Readiness Benchmarks for Reading and Mathematics are:

- Reading: 21
- Mathematics: 22

The results of this analysis address the comparability of the *levels of expectation* represented by college and workforce training readiness. Because each test measures only one of the two kinds of readiness and is not perfectly correlated with the other test, a given individual's ACT test score *cannot* be substituted for a WorkKeys test score or vice versa.

Commonalities: Skills

This analysis provides empirical evidence supporting the contention that the expectations for college readiness and for workforce training readiness are comparable. This empirical comparability is further supported by similarities in the skills defined for college and workforce training readiness shown in Tables 2 and 3.

For reading and mathematics, respectively, the two tables contain all of the ACT College Readiness Standards in the 20–23 range (the score range that contains the corresponding College Readiness Benchmark) and all of the WorkKeys skills at Level 5. Because WorkKeys is designed expressly to reflect what businesses expect of entering workers and the ACT is designed expressly to reflect what colleges expect of entering students, the two assessment programs have uniquenesses in what they measure and in the scores they report. But there are also commonalities in the expectations for readiness in the two tests, as shown by the skill groupings in these tables.

**Table 2
Reading Skills for College and Workforce Training Readiness**

Skill Group	ACT Reading Test College Readiness Standards (20-23 Range)	WorkKeys Reading for Information Test Skills (Level 5)
Main Ideas and Supporting Details	Infer the main idea or purpose of straightforward paragraphs Understand the overall approach taken in a passage (e.g., point of view, kinds of evidence used) Locate important details Make simple inferences about how details are used in a passage	Understand main ideas, topic sentences, and the relationships among sentences in a paragraph Correctly use technical terms when describing the main idea and supporting details in a passage Recognize organizational structures of passages to identify pertinent details and recognize appropriate applications Select important details to clarify meaning
Sequential, Comparative, and Cause-Effect Relationships	Order simple sequences of events Identify clear relationships between people, ideas, and events Identify clear cause-effect relationships	Apply straightforward instructions to new situations Apply complex instructions that include conditionals to situations described in a passage

Skill Group	ACT Reading Test College Readiness Standards (20-23 Range)	WorkKeys Reading for Information Test Skills (Level 5)
Meaning of Words	Use context to determine the appropriate meaning of some figurative and nonfigurative words, phrases, and statements	Figure out the correct meaning of a word based on how the word is used Understand the definitions of acronyms defined in a passage Identify the appropriate definition of words with multiple meanings based on context
Generalizations and Conclusions	Draw generalizations and conclusions about people, ideas, and events Draw simple generalizations and conclusions using details that support the main point of a passage	Apply technical terms to stated situations Apply given information to new situations

Table 3
Mathematics Skills for College and Workforce Training Readiness

Skill Group	ACT Mathematics Test College Readiness Standards (20-23 Range)	WorkKeys Applied Mathematics Test Skills (Level 5)
Algebra and Algebraic Thinking	Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor Evaluate algebraic expressions by substituting integers for unknown quantities Add and subtract simple algebraic expressions Solve routine first-degree equations Perform straightforward word-to-symbol translations Multiply two binomials Evaluate quadratic functions, expressed in function notation, at integer values	Solve problems that include a considerable amount of extraneous information Calculate using several steps of logic Perform single-step conversions within or between systems of measurement Look up and use a single formula Calculate using mixed units (e.g., 3.5 hours and 4 hours 30 minutes) Find the best deal using one- and two-step calculations and then comparing results Calculate percentages, percentage discounts, or percentage markups Divide negative numbers Decide what information, calculations, or unit conversions to use to solve the problem Use exponents, including exponents in fractions and formulas
Geometry and Geometric Thinking	Compute the area and perimeter of triangles and rectangles in simple problems Use geometric formulas when all necessary information is given Locate points in the coordinate plane Comprehend the concept of length on the number line	Solve geometric problems that include a considerable amount of extraneous information Calculate using several steps of logic Calculate perimeters and areas of basic shapes (rectangles and circles) Look up and use a single formula

Skill Group	ACT Mathematics Test College Readiness Standards (20-23 Range)	WorkKeys Applied Mathematics Test Skills (Level 5)
Geometry and Geometric Thinking (continued)	Exhibit knowledge of slope Find the measure of an angle using properties of parallel lines Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°)	Decide what information, calculations, or unit conversions to use to solve the problem
Data Representation and Statistical Thinking	Calculate the missing data value, given the average and all data values but one Translate from one representation of data to another (e.g., a bar graph to a circle graph) Determine the probability of a simple event Exhibit knowledge of simple counting techniques	Average hours and minutes or other mixed units in one system Solve problems that include a considerable amount of extraneous information Calculate using several steps of logic sometimes involving graphs, charts, or tables

Commonalities: Sample Test Questions

Further parallels in the levels of readiness for college and workforce training programs can be seen in the test questions used to assess the skills measured in the two tests. Table 4 contains examples from the ACT Reading Test and the WorkKeys Reading for Information Test. Although the contexts of the passages are unique—the ACT passage is a prose selection and the WorkKeys passage is a workplace communication—the underlying reading skills being measured are similar.

**Table 4
Comparison of College and Workforce Training Readiness:
Reading Test Questions**

ACT Reading 20-23 Range [Order simple sequences of events]	WorkKeys Reading for Information Level 5 [Apply straightforward instructions to new situations]
<p><i>Excerpt from passage*:</i></p> <p>Mr. Brook had come home early and lighted a fire in the little grate in his sitting room. He felt comfortable and at peace that evening. He sat before the fire in his stocking feet, with a volume of William Blake on the table by his side, and he had poured himself a halfglass of apricot brandy. At ten o'clock he was drowsing cozily before the fire, his mind full of cloudy phrases of Mahler and floating half-thoughts. . . . He had been walking across the campus that afternoon when Madame Zilensky stopped him and began some preposterous rigmarole, to which he had only halflistened: he was thinking about the stack of canons turned in by his counterpoint class. Now the words, the inflections of her voice, came back to him with insidious exactitude. Madame Zilensky had started off with the following remark: "One day, when I was standing in front of a <i>pâtisserie</i> (pastry shop), the King of Finland came by in a sled." Mr. Brook jerked himself up straight in his chair and put down his glass of brandy. The woman was a</p>	<p><i>Passage:</i></p> <p>MEMO TO: Publications Department Assistants FROM: Publications Department Manager</p> <p>Thank you in advance for helping the editors proof the Valve Adjustment manual and documents associated with the new line of valves. The following instructions are for proofing the manuscript copy of the manual scheduled for the beginning of next week. Additional instructions will be provided when the preliminary copy with typefaces, graphics, copy placement, and headings is proofed.</p> <p>Team Proofing Stage You will be paired with another proofer, the <i>reader</i>, and you will be issued two versions of the same section. One version is the marked-up copy, which contains modifications in handwritten red ink. The reader will read aloud each word, punctuation mark, and number on the marked-up section.</p>

ACT Reading 20-23 Range [Order simple sequences of events]	WorkKeys Reading for Information Level 5 [Apply straightforward instructions to new situations]
<p>pathological liar. Almost every word she uttered outside of class was an untruth. . . .</p> <p>Mr. Brook finished off the rest of his brandy. And slowly, when it was almost midnight, a further understanding came to him. The reason for the lies of Madame Zilensky was painful and plain. All her life long Madame Zilensky had worked—at the piano, teaching, and writing those beautiful and immense twelve symphonies. Day and night she had drudged and struggled and thrown her soul into her work, and there was not much of her left over for anything else. Being human, she suffered from this lack and did what she could to make up for it. . . . Through the lies, she lived vicariously. The lies doubled the little of her existence that was left over from work and augmented the little rag end of her personal life.</p> <p>* Adapted from Carson McCullers, "Madame Zilensky and the King of Finland." ©1955 by Carson McCullers.</p>	<p>The other copy is the new version, and it should incorporate all edits from the marked-up version. The proofer must mark in red ink any missed edits and any additional modifications. Most likely further corrections will be needed.</p> <p>Single Proofing Stage After the corrections have been made and checked from the team proofing stage, you should do a single proof on the new copy. Mark corrections in red ink. Continue to repeat this process until the materials are error free.</p> <p>During your single proof, read every word aloud. In this way you will both see and hear the copy, which will enable you to better detect a missing word or number.</p> <p>Reminder: Spell-check programs have reduced misspellings considerably, but you should be aware of specialized terms that the computer's dictionary does not know.</p> <p>Once the manual is ready to print, I will need you to follow the same instructions to proof the technical specification sheets for each valve type. If you have any questions, please speak to me or to one of the editors.</p>
<p><i>Question:</i></p> <p>The <i>first</i> insight about Madame Zilensky that came to Mr. Brook during his cozy evening was that she was a great:</p> <p>A. composer. B. teacher. C. performer. D. liar.</p>	<p><i>Question:</i></p> <p>You are an assistant. According to the memo shown, during the team proofing stage, what is the next step after you mark any needed modifications?</p> <p>A. Further clerical corrections will be made. B. The proofing stages will reveal no further corrections. C. The proofing time on the project will be reduced. D. The editors will meet the printer deadline.</p>

The commonalities in mathematics skills are illustrated by the sample questions in Table 5. While the questions present problems in different contexts, the underlying mathematics skills each pair requires for their solutions are similar.

Table 5
Comparison of College and Workforce Training Readiness:
Mathematics Test Questions

ACT Mathematics 20-23 Range [Evaluate algebraic expressions by substituting integers for unknown quantities; solve routine first-degree equations]	WorkKeys Applied Mathematics Level 5 [Look up and use a single formula; perform single-step conversions within or between systems of measurement]
<p>The number of bricks, B, needed to build a wall of uniform length L feet and uniform height H feet can be found by the equation $B = 7LH$. A wall of uniform height that is 20 feet long is constructed using 350 bricks. What is the height, in feet, of the wall?</p> <p>A. 1.75 B. 2.5 C. 17.5 D. 50</p>	<p>A refrigeration system at your company uses temperature sensors fixed to read Celsius ($^{\circ}\text{C}$) values, but the system operators in your control room understand only the Fahrenheit scale. You have been asked to make a Fahrenheit ($^{\circ}\text{F}$) label for the high temperature alarm, which is set to ring whenever the system temperature rises above -10°C. What Fahrenheit value should you write on the label?</p> <p>A. -23°F B. -18°F C. 14°F D. 26°F</p>

ACT Mathematics 20-23 Range	WorkKeys Applied Mathematics Level 5								
[Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average]	[Calculate percentages, percentage discounts, or percentage markups]								
<p>The Sunrise Preschool held its annual book fair for 3 days. The total profit for the 3 days was \$2,525. The profit, in dollars, is shown for each of the 3 days in the bar graph below.</p> <table border="1"> <caption>Book Fair Profit Data</caption> <thead> <tr> <th>Day</th> <th>Profit (Dollars)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1,500</td> </tr> <tr> <td>2</td> <td>600</td> </tr> <tr> <td>3</td> <td>425</td> </tr> </tbody> </table> <p>Approximately what percent of the book fair's profit over the 3 days did the preschool make on Day 1 ?</p> <p>A. 25% B. 33% C. 50% D. 60%</p>	Day	Profit (Dollars)	1	1,500	2	600	3	425	<p>As a dietitian, you help clients manage their sugar intake. A popular fruit drink contains a total of 28 grams of carbohydrates. Of that total, 19 grams are sugar. About what percent of the total carbohydrates is the sugar?</p> <p>A. 7% B. 9% C. 15% D. 68%</p>
Day	Profit (Dollars)								
1	1,500								
2	600								
3	425								

Summary

This study provides empirical evidence that the levels of readiness that high school graduates need to be prepared for college and for workforce training programs are comparable. These empirical results are also supported by commonalities seen in the types of knowledge and skills students need to be ready for college and workforce training programs, even though these skills are often taught and assessed in different contexts. All of these skills can be acquired through rigorous high school courses, regardless of the context (academic or career focused) within which they are taught. The results of this study underscore the importance of having a common expectation for all students when they graduate from high school: one that prepares *all* high school graduates for both credit-bearing entry-level college courses and workforce training programs associated with jobs that are likely to offer both a wage sufficient to support a small family and the potential for career advancement.

If we are to be competitive in today's global economy, it is critical for us as a nation to give every high school graduate the opportunity to live a meaningful and productive life and earn a decent wage. All high school graduates should have a sound foundation of knowledge and skills so that they can enter college or workforce training programs ready to learn.

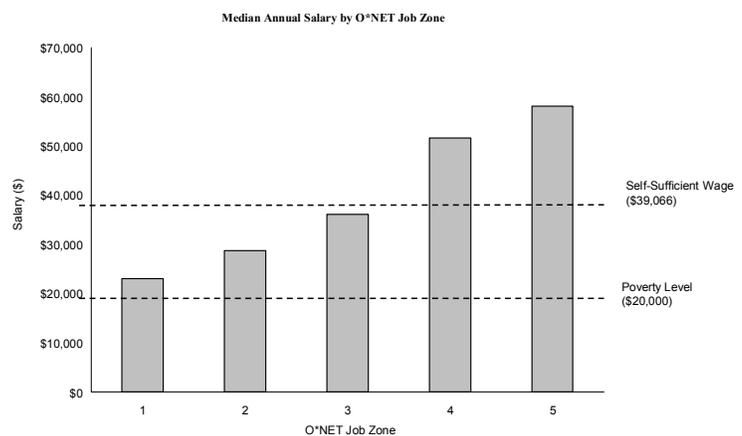
Action Steps for Policymakers

Following are recommended action steps that state policymakers can take toward achieving a common expectation that *all* high school graduates will be ready for college and for workforce training programs:

- Use the common expectation to establish a statewide commitment that all students will be prepared for college and workforce training programs when they graduate from high school.
- Require that all students take a rigorous core preparatory course program in high school.
- Hold schools and states accountable for preparing all students for college and workforce training programs through rigorous core courses.
- Ensure that state standards reflect the skills needed for college and workforce training readiness for all students.
- Provide funding for measures of college and workforce training readiness skills to be used as statewide high school assessments.
- Begin measuring student progress with aligned assessments as early as the eighth grade to monitor progress, make appropriate interventions, and maximize the number of high school graduates who are ready for college and workforce training programs.
- Use the common expectation of college and workforce training readiness as a prerequisite for entry into funded training or development programs (e.g., incumbent worker training) and offer remediation for those who do not meet this expectation.
- Communicate the common expectation of college and workplace training readiness to all stakeholders, including businesses, workforce and economic development associations, and educational institutions.

Notes

¹ Comparison of median wages for O*NET job zones was based on the following chart (*O*NET Consortium - Production Database*, n.d.):



Self-sufficient wage based on median recommended budget for a family of 4 (two parents two children) averaged across 2600 U.S. communities (EPI). Poverty level provided by U.S. Dept of Health and Human Services (2006)

A “self-sufficient” wage is typically defined as the money needed to meet basic needs such as food, housing, utilities, clothing, child care, and health care plus a small allowance for personal expenses and savings.

² ACT’s WorkKeys is a standardized job skills and assessment system that businesses commonly use for employee selection and training. WorkKeys includes a job profiling/job analysis component used to identify the critical skills required to enter a job and perform it effectively. There are 120 O*NET Zone 3 jobs for which ACT has a WorkKeys profile estimate based on either the WorkKeys job profile database or expert

ratings. The WorkKeys profile estimates for these jobs were used to identify the reading and mathematics skills needed for a majority of the profiled Zone 3 occupations.

³ To determine how workforce training readiness compares to college readiness, we analyzed data from 476,847 high school juniors in Illinois who took the ACT, the WorkKeys Reading for Information Test, and the WorkKeys Applied Mathematics Test between 2001 and 2004. These tests are administered as part of the Illinois Prairie State Achievement Examination program, a statewide assessment administered annually to all eleventh-grade students. We statistically aligned the scores on the two WorkKeys Tests (which represent workforce training readiness) to the scores on the ACT Reading and Mathematics Tests (which represent college readiness).

⁴ The statistical concordance reveals that the Level 5 score on the Reading for Information test corresponds to an ACT score range that includes the ACT College Readiness Benchmark for Reading as its midpoint; the Level 5 score on the Applied Mathematics test corresponds to an ACT score range that is just one score point below the ACT College Readiness Benchmark for Mathematics. However, because WorkKeys and the ACT do not measure the same things and are not perfectly correlated, scores on the two tests are not interchangeable.

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2012

COMPUTER ADAPTIVE TESTING

An Introduction to the Process

Abstract

South Carolina recently became a governing member of the Smarter Balanced Assessment Consortium (SBAC), a group of states cooperating to design assessments of the educational content of the English and Mathematics standards referred to as the Common Core State Standards. The assessments being designed to assess the common core are to be presented to students via computer. Further, these assessments are to be designed so that they adjust to each student's achievement level. Tests that have this feature are referred to as computerized adaptive tests (CAT). This brief introduction to CAT testing is intended to provide an understanding of how a CAT test operates.

The goal of any assessment is to obtain the most accurate measure of each student's academic achievement. A paper/pencil test presents the same items in the same order to all students. A paper/pencil test can be computerized, where the same test is presented via computer and student responses are obtained via computer. For these computerized tests, items are presented in the same order as in the paper/pencil test. For example, the South Carolina End-of-Course Evaluation Program (EOCEP) tests are administered in both paper/pencil and computerized formats.

The special attribute of a CAT test is that it is "Adaptive" -- the assessment presented to an examinee is created as the student responds to the test questions. Based on the answer to each question, the CAT selects the next question. When a student answers a question correctly the next question selected is more difficult, and when a student answers a question incorrectly the next question selected is easier. In essence, the computer designs an assessment for each individual student. The Measures of Academic Progress (MAP) test used by most districts in South Carolina to help tailor instruction to each student is a computer adaptive test.

If CAT tests are unique to each student, are scores from student's test on the same scale?

For an assessment such as Palmetto Assessment of State Standards (PASS), EOCEP, or High School Assessment Program (HSAP), there are many more standards to assess than there are questions in a test. Some decisions must be made about what will be included in a test, and what will not.

When creating a paper/pencil test, items are selected by the test creators to include the most important standards, and items that address the remaining standards are selected to balance content. Similarly, the item selection process for a CAT test keeps track of the content of the items presented so that, just as a paper/pencil test, the most important standards are included in each student's test, and the remaining standards are selected to balance content. Through well-managed content sampling, paper/pencil and CAT tests represent the standards similarly.

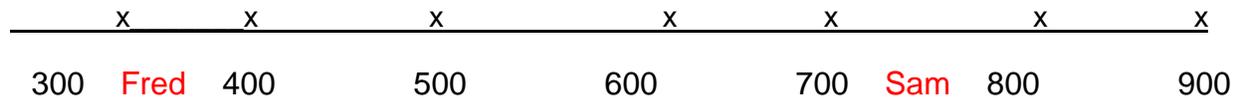
For a large-scale testing program, even when tests are administered in a paper/pencil format, not all students may take the same test. A different PASS test is given each year, and the specific content of the tests across years is not identical. Nevertheless, we interpret a specific score (610, for example) to be the same across years. This is reasonable because although the test content is not identical across years, it has been designed to assess the same standards.

In what way does CAT allow for more precise measurement of achievement?

To make a fair comparison between how a paper/pencil test and a CAT test regarding the precision of measurement, we will consider a situation where both test formats are used to assess a specific skill (e.g., fractions), and that both tests will administer each student the same number of questions (7).

On the paper/pencil test the items are located on the scale to reflect how difficult they are. Each of these questions is located by its difficulty on scale from 300 to 900 (the range of scores used to report student scores for PASS). The easiest item has a difficulty near 340, and the most difficult item has a difficulty near 900.

Fraction Items for a Paper/Pencil Test (7 items):

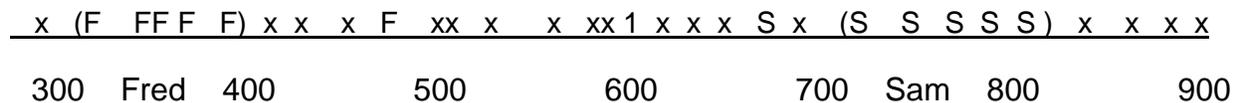


Now consider Fred and Sam, two hypothetical students who differ in their achievement of fractions. Fred’s achievement is near 350 on the PASS scale and Sam’s achievement is near 750 on the PASS scale.

Fred does not understand fractions very well, and any question that has a difficulty of 600 or more would be so difficult that he would likely miss it. If he answers any of these questions correctly, it is most likely due to guessing. In effect, there are only 3 questions that actually help us assess Fred’s achievement. Sam, however, understands fractions very well. The only reason he would only miss a question of difficulty less than 600 if he misreads the item – the only questions that help us know Sam’s achievement have difficulty greater than 600 – only 4 questions.

In a CAT test there are many more items that assess fractions. These items are in an “item pool” waiting to be used rather than automatically included in the test. For this example, there are 35 test questions in the pool to assess fractions. Each of these questions is also located by its difficulty on the PASS scale.

CAT Item Pool for Fractions (35 items):



Now consider the CAT Item Pool and how the difficulties of the questions administered are related to Fred and Sam’s knowledge and skills with fractions. Recall that we have programmed our CAT to include 7 fraction items on each students test. Both Sam and Fred are administered question 1.

Fred answered the first question incorrectly and as a result his 2nd question was easier (near 470). He also answered his 2nd question incorrectly, and was then administered easier questions (between 300 and 400). Fred answered some of these correctly and others incorrectly. When he answered a question correctly, his next question was more difficult, and when he answered a question incorrectly, his next question was easier. Further, as the test progressed, the items selected were closer together in their difficulty, so the CAT could narrow in on the score that represented his achievement.

Sam answered question 1 correctly, so his 2nd question was more difficult (near 680). He also answered his 2nd question correctly and was presented more difficult questions (between 740 and 820). Just as occurred for Fred, the items selected for Sam were easier and harder based on Sam's correct or incorrect answers, and closer together in their difficulty as the test progressed, so the CAT could narrow in on the score that represented Sam's achievement.

Look again at the picture demonstrating assessment with the paper/pencil tests. Only 3 questions are close to Fred's achievement, and none are close enough to enable making a precise estimate of his achievement. Similarly for Sam, only 4 items are near his achievement, and none are close enough to enable making a precise estimate of his achievement. The CAT test, then, can provide more precise measurement of any student's achievement than a paper/pencil test.

In what way are CAT tests “more secure” than paper/pencil tests?

When students have memorized specific test items and shared them with other students, we say that the test has been “compromised”. It is easier for students to cooperate to memorize test items when the same items are presented in the same order on each test. Students could assign specific items (e.g., 1, 11, 21, etc.) to different students to memorize, and share what they learned with later test takers. In a CAT test, however, students do not know which test items they will be presented or the order in which they will be presented, making a systematic approach to memorizing items ineffective. Also, if the test administrators suspect that an item has been “compromised”, it can simply be removed from the item pool.

Computerized tests are also more secure against improper behavior by adults (teachers and school administrators). In Georgia, adults altered student answer documents to increase school results. There are no answer documents to be altered when tests are administered via computer.

How prevalent is the usage of CAT?

CAT testing is currently being used in a number of settings. The National Council of State Boards of Nursing uses CAT testing in its exam for the certification of Nurses (NCLEX). The Graduation Record Examination (GRE) used for admitting students to graduate school utilizes a variation of CAT.

The U.S. Department of Education has approved Utah's plan to replace its current state pencil/paper test with its own state CAT in 2014. Utah piloted CAT testing in one of its districts and evaluated student gains which were significant. Utah attributes the impact on the fact that teachers were able to adapt lesson plans and curriculum to the needs of students more rapidly. The Utah State Board of Education estimates the cost of the new testing structure to be \$6.0 million per year to develop the test and \$30 million per year to have a 3:1 ratio of students to computers to optimize the system.

As already mentioned, the MAP tests used by many South Carolina districts are CAT tests, and have been since 1986. Teachers have observed MAP tests administered to their students and seen that test items are easier for lower achieving students and more difficult for higher achieving students. They appreciate that their lower achieving students do not have to take a test where most of the content is far too difficult or too easy. With experience using resources provided by MAP, teachers have learned that the test gives more detailed information about each student's achievement because the test is adaptive.

How does the "Adaptive" process of a CAT operate?

A visual aid to understanding the process of a CAT test is a flow-chart (Figure 1). It shows the steps that occur and the decisions that need to be made in an operational CAT. The most important steps of the CAT process, which are represented in the flow-chart are:

- 1) When a student takes a CAT test for the first time, the test does not have any information about the student's achievement. To select the first item, the test presumes the student has the average achievement (600 for PASS).

When a student is taking a CAT test for the second (or later) time, the test remembers the achievement from the end of the last test, and selects the first item to match this achievement level.

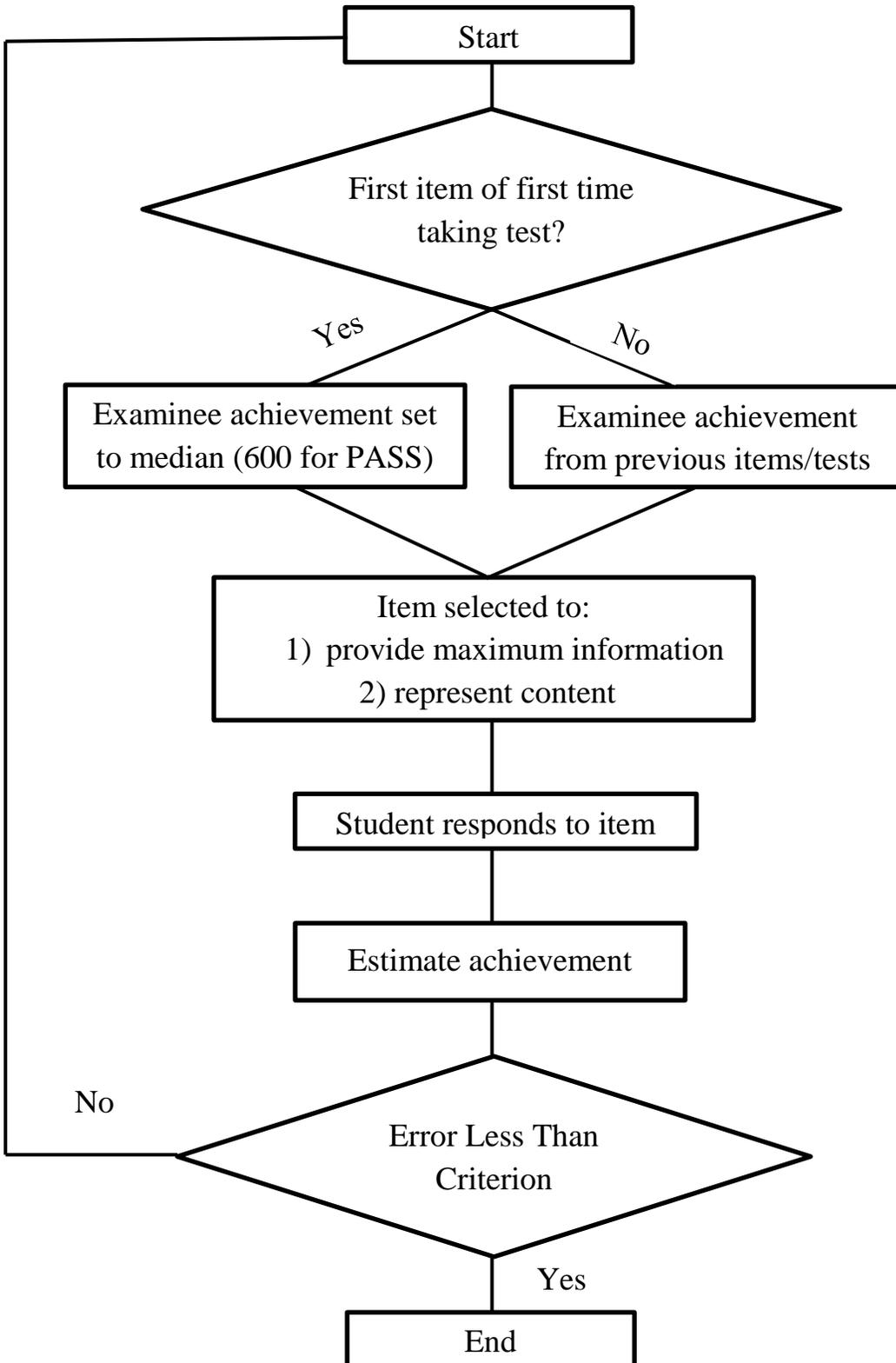
- 2) The next item is selected so that it will (a) provide the most information about the student's achievement, and (b) represent the content of the test.

An item provides the most information about a student's achievement when it matches a student's achievement level.

- 3) The student responds to the item.
- 4) The student's achievement is re-assessed using the response to the item.
- 5) The test ends when either (a) the error associated with the achievement estimate is smaller than some criterion (an amount of error that is small enough to serve the purpose of the test), or (b) some specified number of items have been presented.

With each item administered, we decrease the amount of error in the estimate of each student's achievement. The greatest benefits of CAT are realized when the end of the test is determined by the comparison of the error to a criterion. This ensures that the score obtained is of sufficient quality to be used as part of a decision process.

Figure 1. Flow-Chart for a CAT



Can students interact with a computerized test as they do with a paper/pencil test?

Persons unfamiliar with the process of testing in a computerized environment have many concerns that strategies they use when taking a paper/pencil test are not available when taking a computerized test (the test does not need to be adaptive). Below are some of the common strategies students use when taking tests, and how they are used in paper/pencil and computerized tests.

Before students take any test in a computerized format, test publishers make available tutorials in which students can practice the online testing tools that are available.

- Students can write on the test.
 - Paper/Pencil: students can highlight text, make notes on the text, draw on pictures presented (especially useful for mathematics tests).
 - Computerized: tools are available to highlight text and/or insert their own comments (e.g., sticky-notes).
- Students can return to any location in the test to review an item
 - Paper/Pencil: students mark items and page back through the test
 - Computerized: tools are available that
 - Mark items for review
 - Summary screen is provided that identifies answered, unanswered, and items marked for review
 - From summary screen, students can select any item to return to.
- Answers can be changed
 - Paper/Pencil:
 - Students erase answers
 - Incomplete erasures may result in an item being scored as incorrect because two answers were provided.
 - Computerized:
 - Only one multiple-choice response can be selected at a time
 - The response selected can be changed at any time
- Dictionary/thesaurus
 - Paper/Pencil:
 - Provided in the room or for each student
 - Place for students to hid “cheat sheets”.
 - Not usually subject specific.
 - Computerized:
 - Electronic version available as a part of the test
 - Subject specific vocabulary

- Calculators
 - Paper/Pencil:
 - Provided in the room or for each student
 - Students can store answers in memory for someone taking a test at a later time.
 - Computerized:
 - Calculator for each student provided as a part of the test.
 - All students have the same calculator.
 - Functions on the calculator fit the content of the class.
 - No storing answers for another student.
- Rulers and Protractors:
 - Paper/Pencil – physical rulers and protractors.
 - Computerized: Electronic versions available.
- Test scoring:
 - Paper/pencil:
 - EOCEP: 2 days
 - Day 1: Testing / answer documents sent by overnight carrier
 - Day 2: Scorer receives documents / score
 - PASS - time to receive test scores is 1 ½ months
 - Transportation by ground carrier
 - Volume of documents to verify
 - Computerized: Overnight scoring
 - Electronic transmission of student responses
 - Scored at night
 - Reports available next day
- Items / Tests Compromised:
 - Paper/pencil:
 - Testing stops until secure forms are transported to testing site
 - Computerized:
 - Remove compromised items from item pool – continue testing.

Tutorials are available that allow students to learn how to use the online tools for the EOCEP tests. Practice tests are available for three formats:

- 1) Multiple Choice
- 2) Performance Task (Student creates a response)
- 3) Technology Enhanced (Uses some electronic tool)

If CAT tests are more efficient, why aren't they shorter?

One reason is that in order to create sub-scores of high enough quality to use to guide instruction; a minimum number of questions must be administered that address each sub-score. In general, 7-8 items are the minimum number of questions necessary to create a sufficiently "reliable" sub-score. If there are 6 sub-scores, there must be 42 items in the test, which is only slightly shorter than a typical paper/pencil test of 50 items.

Are CAT tests more or less expensive?

Administering a paper/pencil test that has been computerized may be less expensive because the costs of printing, shipping, and handling have been eliminated.

CAT tests are generally more expensive because of the need to:

- 1) Maintain a pool of items that address each of the content areas/objectives. Items that have been administered to many students are removed because they have been "overexposed". Item development is an ongoing process for CAT tests that repeatedly test students.
- 2) Before being used as an operational item, the difficulty of the item must be obtained. This process is called pre-calibration.
- 3) Information about the difficulty and content of each item must be maintained in a dataset.
- 4) Developing and maintaining the computer code for selecting additional items. Processes are in place, but newer processes are evolving that use more information from students' responses to select the next item. Content balancing must be a part of the item selection process.

What about the proposed Common Core assessment tasks proposed by SBAC?

New item types as described by ETS assess skills in ways that current tests (paper/pencil or CAT) cannot. For example, including the selection and evaluation of online information sources as a part of a writing item is not possible with paper/pencil assessments, but is possible using a computerized test (it need not be a CAT).

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EDUCATION WEEK

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New Tests Put States on Hot Seat as Scores Plunge

Added rigor welcomed, but lower scores sting

By Andrew Ujifusa

As states begin to demand more rigor on their high-stakes tests—and the tests evolve to incorporate revised academic standards—many officials are gambling that an initial wave of lower scores will give way to greater student achievement in the future.

Changes to statewide tests and subsequent plummeting scores sparked controversy and emergency action in Florida last month, and similar shock waves have been felt as Kentucky, Michigan, Texas, and Virginia remake their testing regimes.

The increasing expectations are in many cases a preview of challenges expected nationally when new, rigorous assessments based on the Common Core State Standards are administered by nearly all states starting in 2014-15. To date, 46 states have agreed to adopt the common-core standards in English/language arts and 45 in math, and two consortia with various member states are spending \$360 million in federal money to develop common assessments for the new standards.

States have long endured criticism that their existing tests, aimed at moving the states toward 2014 proficiency levels in reading and mathematics demanded by the No Child Left Behind Act, lacked the rigor necessary to gauge how well students stack up against the demands of college and workforce readiness.

For many states implementing a new generation of tests, there will be a "shock" as test scores drop, a dynamic that typically occurs with each evolution of such assessments, said Kathy Christie, a vice president at the Denver-based Education Commission of the States.

"I would anticipate that the performance is going to be poor, if indeed you have a state where they're making a pretty big shift in expectations. ... The failure numbers are big right off" and start to recover, she said. "That's what I would expect here."

Florida Collision

The conflict between tougher standards on high-stakes exams and the challenge officials face in responding to lower test scores is still playing out in Florida.

In May, the state imposed a tougher scoring method on the Florida Comprehensive Assessment Test, or FCAT, writing exam for such items as grammar and punctuation. That led to sharp drops in passing rates.

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Those writing-test decreases, including a plunge to 27 percent proficiency among 4th graders, from 81 percent last year—so alarmed state school officials and the public that the state school board lowered the cutoff score retroactively, which buffered the impact on schools' ratings. It did so even though board members already had expected a drop in passing rates.

Florida Education Commissioner Gerard Robinson admitted in comments after the results that officials, in changing the FCAT grading system, "did not give enough attention to communicating these basic expectations to our teachers" on what the tests would demand.

But state officials also **noted** that they are well aware that the new, common-core-based assessments are on the way and are trying to prepare for them. States that use common-core assessments won't be able to change the cutoff scores as Florida did with its FCAT.

Kentucky Braced

But in general, focusing on the scores from such newly revised tests misses the point, said Kentucky Education Commissioner Terry Holliday. States are reorienting their tests to measure college and career readiness instead of proficiency, he noted. In effect, they are "measuring something different," Mr. Holliday said.

The first state to adopt the common-core standards, Kentucky used a new set of assessments for the 2011-12 school year called **K-PREP** for grades 3-8. Students are also taking new end-of-course tests in high school. In addition, Kentucky now requires all 11th graders to take the ACT college-admissions exam.

Scores on the exams will drop, Mr. Holliday predicted, because students taking K-PREP now have to deal with longer, nonfiction reading passages, for example, and exhibit greater "technical fluency" in their comprehension skills. But Kentucky officials feel that the state tests match what the common core will demand since the state worked in developing K-PREP with Pearson, the New York City-based

Setting the Bar

States are feeling the heat after adjusting the way student performance is judged on their high-stakes tests, causing student scores to plunge in some cases. Changes come as states gird for assessments based on the Common Core State Standards in 2014-15.

Florida

Scores on the state's FCAT writing tests at various grade levels plunged dramatically this year after the scoring scale's difficulty was increased by giving grammar and punctuation more weight. In response to the drop and public concern, the state board of education lowered the passing score.

Kentucky

The first state to officially adopt the common core, Kentucky has new assessments this year in both grades 3-8 and in high school. The high school tests are designed to count 20 percent toward a student's final grades in their respective subject areas.

Michigan

In 2011, the state set new cutoff scores for both its Michigan Education Assessment Program (for grades 3-9) and Michigan Merit Exam for high schools based on revised standards that include the ACT college-entrance exam. The Merit Exam is designed to show that a student achieving that score or better should receive a B or higher in that subject's entry-level college course.

Texas

After four years of work, new performance standards for 15 end-of-course exams on the State of Texas Assessments of Academic Readiness went into effect this year. The passing standards will increase over the next four years, and more than 1,000 school districts have delayed some requirements for a year.

Virginia

In both 2011 and 2012, the state

education and testing company, which is also developing curriculum for the common core.

"I think we've progressed greatly. ... From what I've seen in the sample items [from K-PREP] and what I've heard from teachers and students after these assessments, these are pretty tough," he said.

Many Southern states, in particular, have moved in the past decade to match their standards with those more closely aligned with the National Assessment of Educational Progress, known as "the nation's report card."

That move has helped states aiming to prepare for the common assessments, said Jeff Gagne, the director of education policies at the Southern Regional Education Board, which has 16 member states. Twelve member states, for example, now have high-stakes tests students must pass to graduate, he said.

"The idea of what's [to be] ... assessed won't be radically different from what's being assessed right now in our states," he said.

Michigan Gears Up

The Michigan Merit Exam for high school students (in addition to incorporating the ACT, like Kentucky) has been redesigned this year to show that students who score at or above the "proficient" level on a subject should be able to get at least a B on the freshman-level college exam in that subject at a public university in Michigan.

Cutoff scores for proficiency on the Michigan Educational Assessment Program, or MEAP, given in grades 3-9 each fall, also increased significantly this school year. Students needed to get 65 percent of answers correct to pass, instead of the previous standard of 39 percent.

Based on that new cutoff—not because of a change in the test itself—math proficiency rates statewide on MEAP in all grades dropped by roughly 35 percentage points from 2010 to 2011, when the new standards went into effect, said Joseph Martineau, the director of the office of educational assessment and accountability at the Michigan education department.

In terms of common-core readiness, "We feel like we are a little bit ahead of the game, and that will serve us well when we're going into this situation, when we're taking this test that is more rigorous," Mr. Martineau said.

To help the public understand the impact of the new cutoff scores, the department last November released **information** illustrating how much MEAP scores in each of the past four years would have dropped if the new standards and scoring had applied retroactively. For example, applying the new cutoff-scores to 2010 results, only 35 percent of 3rd graders would have scored proficient, instead of the 95 percent deemed so currently.

superintendent warned lawmakers that scores on the revised Standards of Learning tests likely would drop as a result of their increased difficulty; passing rates for high school students dropped by 27 percentage points in the fall 2011 administration of the new math tests.

SOURCES: *Education Week*; Associated Press

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Trouble in Texas

Even in Texas, which is among just four states that have not adopted the common-core standards, rising rigor on statewide tests has led to worries from local school officials and to demands for change.

In the 2011-12 school year, high school freshmen took new end-of-course assessments in four subject areas, called the **State of Texas Assessments of Academic Readiness**, or STAAR. A student must pass a total of 15 tests in four subject areas (math, science, social studies, and English) in order to graduate, and the cutoff scores for proficiency will increase by about 14 percent in increments from 2012 to 2016.

But according to Austin-based Save Texas Schools, which champions education funding and limiting high-stakes standardized testing, more than 425 schools this year have adopted a **resolution** calling on the state legislature to re-examine STAAR's impact on classrooms.

"Essentially, the teachers are working on preparing kids without really knowing what's going to be assessed. ... I think there's been anxiety on the part of kids because of the increased rigor," said Ken Baliker, the president of the board of trustees of the 39,000-student Clear Creek Independent School District, the first district in Texas to adopt the resolution.

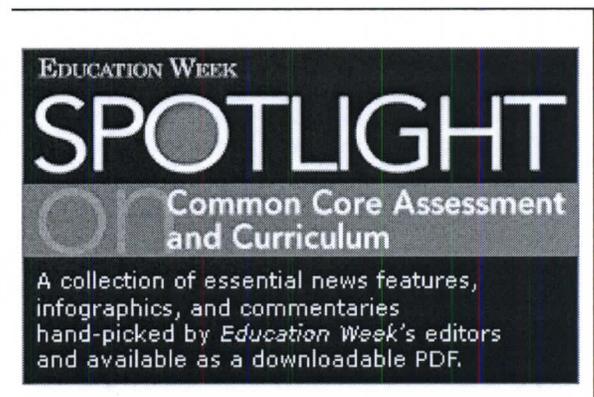
Fairness Issue Raised

Casey McCreary, the assistant executive director for education policy at the Texas Association of School Administrators, said it's unfair to simultaneously roll out new tests and load more pressure onto the tests by linking them to graduation and grades.

"It's going to be a disincentive for students that are struggling. ... Once parents understand how complicated it is for their child to graduate from high school, the backlash is only going to widen and get stronger," she said.

But there's also public sentiment for the view that new testing standards, like those on the FCAT this year, were overdue.

"Some of the things we've heard is people saying, 'So, spelling, grammar, and punctuation weren't [already] a part of the scores?' and more surprised at that," said Jaryn Emhof, a spokeswoman for the Tallahassee, Fla.-based Foundation for Excellence in Education.



EDUCATION WEEK

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COMMENTARY

Doublethink: The Creativity-Testing Conflict

By Yong Zhao

Doublethink is "to hold simultaneously two opinions which canceled out, knowing them to be contradictory and believing in both of them," according to George Orwell, who coined the phrase in his novel *1984*.

American education policymakers have apparently entered the zone of doublethink.

They want future Americans to be globally competitive, to out-innovate others, and to become job-creating entrepreneurs. Last year, the Obama administration **announced** a \$1 billion-plus public-private initiative to support entrepreneurial activities, which included support and rhetoric surrounding youth-entrepreneurship education. And the U.S.

Department of Education says that "entrepreneurship education as a building block for a well-rounded education not only promises to make school rigorous, relevant, and engaging, but it creates the possibility for unleashing and cultivating creative energies and talents among students."

State leaders have taken similar actions. California, Massachusetts, and Oklahoma have begun exploring the development of measures to gauge the extent to which schools foster creative and entrepreneurial qualities in their students, according to a Feb. 1, 2012, **article** in *Education Week*.

In the meantime, the policymakers want students to be excellent test-takers. The federal government is racing to the top of standardization and standardized testing; states are working hard to make two subjects common *and* core for all students; an increasing number of teachers are being paid based on their students' test scores; and students are fed with an increasingly narrow, standardized, uniform, and imagination-depleted education diet. All these measures are intended to improve students' academic achievement, or, in plain English, test scores.

But test scores are not measures of entrepreneurship or creativity. Not even scores on the intensely watched and universally worshiped Program for International Student Assessment, or PISA, are good indicators of a nation's capacity for entrepreneurship and creativity.

In doing research for **my book** *World Class Learners: Educating Creative and Entrepreneurial Students*, I found a significant negative relationship between PISA performance and indicators of entrepreneurship. The Global Entrepreneurship Monitor, or GEM, is an annual assessment of

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"What brings great test scores may hamper entrepreneurial qualities."

entrepreneurial activities, aspirations, and attitudes of individuals in more than 50 countries. Initiated in 1999, about the same time that PISA began, GEM has become the world's largest entrepreneurship study. Thirty-nine countries that participated in the 2011 GEM also participated in the 2009 PISA, and 23 out of the 54 countries in GEM are considered "innovation-driven" economies, which means developed countries.

Comparing the two sets of data shows clearly countries that score high on PISA do not have levels of entrepreneurship that match their stellar scores. More importantly, it seems that countries with higher PISA scores have fewer people confident in their entrepreneurial capabilities. Out of the innovation-driven economies, Singapore, South Korea, Taiwan, and Japan are among the best PISA performers, but their scores on the measure of perceived capabilities or confidence in one's ability to start a new business are the lowest. The correlation coefficients between scores on the 2009 PISA in math, reading, and science and 2011 GEM in "perceived entrepreneurial capability" in the 23 developed countries are all statistically significant. (By the way, these countries have also traditionally dominated the top spots on the other influential international test, the Trends in International Math and Science Study, or TIMSS.)



—Chris Whetzel

China's Shanghai took the No. 1 rank in all three areas of the **2009 PISA**, but the scores do not have any bearing on China's creativity capacity. In 2008, China had only 473 **patent filings** with or granted by leading patent offices outside China. The United States had 14,399 patent filings in the same year. Anil K. Gupta and Haiyan Wang put those figures in a broader context, writing in *The Wall Street Journal* last year: "Starkly put, in 2010 China accounted for 20 percent of the world's population and 9 percent of the world's GDP, 12 percent of the world's [research and development] expenditure, but only 1 percent of the patent filings with or patents granted by any of the leading patent offices outside China." And 50 percent of the China-origin patents, the writers added, were granted to subsidiaries of foreign multinationals.

Moreover, what brings great test scores may hamper entrepreneurial qualities. Standardized testing and a focus on rote memorization, for example, are perhaps the biggest enemies of entrepreneurial capability. A contrast between Finland and the East Asian countries illustrates this point. Although Finland's entrepreneurship activities do not rank as high as its PISA performance, the Finns possess a much higher level of perceived entrepreneurial capabilities than the East Asian countries. In the **2011 GEM survey**, 37 percent of Finns reported having the capability for entrepreneurship, more than 20 percentage points higher than the Japanese (14 percent), at least 10 percentage points higher than the South Koreans (27 percent) and Singaporeans (24 percent), and nearly 10 points higher than the Taiwanese (29 percent). This difference may come from the different style of education in Finland and the East Asian countries.

Unlike their peers in high-performing East Asian nations with well-established reputations for authoritarian and standardized-testing-driven education that emphasizes rote memorization,

Finnish students do not take standardized tests until the end of high school. In fact, Finnish schools are a standardized-testing-free zone, according to Pasi Sahlberg in his book *Finnish Lessons: What Can the World Learn From Educational Change in Finland?* As a result, students in Finland are not pushed toward rote memorization. Finnish education is certainly not nearly as authoritarian as its Asian counterparts.

Most important, as the education historian Diane Ravitch **observed** in *The New York Review of Books* earlier this year: "The central aim of Finnish education is the development of each child as a thinking, active, creative person, not the attainment of higher test scores, and the primary strategy of Finnish education is cooperation, not competition."

The United States saw a decline of creativity over the past two decades, as a 2010 *Newsweek* article **reported**. Titled "The Creativity Crisis," the article cites research by Kyung Hee Kim, an educational psychology professor at the College of William & Mary in Williamsburg, Va. Kim analyzed performance of adults and children on a commonly used creativity measure known as the Torrance Tests of Creative Thinking. The results indicate a creativity decrease in the last 20 years in all categories. This decline coincided with the movement toward more curriculum standardization and standardized testing in American schools exemplified by the No Child Left Behind Act. "NCLB has stifled any interest in developing individual differences, creative and innovative thinking, or individual potential," Kim **said** in an interview on the Encyclopaedia Britannica blog.

Standardized testing rewards the ability to find the "correct answer" and thus discourages creativity, which is about asking questions and challenging the status quo. A narrow and uniform curriculum deprives children of opportunities to explore and experiment with their interest and passion, which is the foundation of entrepreneurship. Constantly testing children and telling them they are not good enough depletes their confidence, which is the fuel of innovation. So, by any account, what policymakers have put in place in American schools is precisely what is needed to cancel out their desire for creative and entrepreneurial talents.

I don't know how policymakers can hold, simultaneously, these two ideas, creative entrepreneurship and test-driven curriculum standardization, that both research and common sense recognize as contradictory unless they change the slogans of 1984's Oceania, "War is Peace, Freedom is Slavery, and Ignorance is Strength" into "Standardization is Innovation, Uniformity is Creativity, and Testing is Enterprising" for education today.

Yong Zhao holds the presidential chair and is associate dean for global education in the college of education at the University of Oregon, in Eugene, and a professor in the department of educational measurement, policy, and leadership. He is the author of Catching Up or Leading the Way: American Education in the Age of Globalization. His latest book, World Class Learners: Educating Creative and Entrepreneurial Students, was published by Corwin Press in June.



July 30, 2012

TO: Members, Education Oversight Committee
 FROM: Melanie Barton *Melanie Barton*
 RE: Report: Where Does South Carolina Rank in Education?

As accountability and the development of standards have proliferated over the last twenty years, the number of rankings has increased. Recently CQ Press, an imprint of SAGE Publications issued *Education State Rankings, 2011-2012: PreK-12 Education Across America*. In the work the 50 states are ranked on over 440 areas based on numerous surveys and statistical compilations. In 2003 the EOC sent the first memorandum to its members looking at some of this data. This is an update.

The 2011-12 Rankings are based on seven overall categories broken down into 19 factors. The nineteen factors include both positive (+) factors for which a high ranking would be a good sign for the state and negative (-) factors which a high ranking would be a troublesome sign for a state. The factors, national average, South Carolina average, and South Carolina's rank for each indicator are indicated below. The source of each category is noted in a list of sources at the end of this report.

CATEGORY	+/- FACTOR	NATIONAL AVERAGE	SC AVERAGE	SC RANK
Public Elementary and Secondary School Revenue per \$1,000 Personal Income ¹	+	\$47.74	\$51.61	13
Percent of Public Elementary and Secondary School Current Expenditures used for Instruction ¹	+	60.2%	57.4%	42
Percent of Population Graduated from High School ²	+	85.3%	83.6%	40
Averaged Freshman Graduation Rate for Public High Schools, 2009 ³	+	75.5%	66.0%	47
Percent of Public School Fourth Graders Proficient or Better in Reading ⁴	+	32%	28%	37
Percent of Public School Eighth Graders Proficient or Better in Reading ⁴	+	30%	24%	42
Percent of Public School Fourth Graders Proficient or Better in Mathematics ⁵	+	38%	34%	39
Percent of Public School Eighth Graders Proficient or Better in Mathematics ⁵	+	33%	30%	34

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CATEGORY	+/- FACTOR	NATIONAL AVERAGE	SC AVERAGE	SC RANK
Percent of Public School Fourth Graders Proficient or Better in Science ⁶	+	32%	33%	25
Percent of Public School Eight Graders Proficient or Better in Science ⁶	+	28%	22%	37
Average Teacher Salary as a Percent of Average Annual Pay of All Workers ⁸	+	120.1%	129.1%	16
Percent of Public School Eighth Graders Proficient or Better in Writing ⁷	+	31%	23%	38
Average Daily Attendance as a Percent of Fall Enrollment in Public Elementary and Secondary Schools ⁸	+	95.0%	93.9%	22
Percent of School-Age Population in Public Schools ⁹	+	92.7%	93.9%	17
Public High School Drop Out Rate ¹⁰	-	4.1%	3.4%	24
Special Education Pupil-Teacher Ratio ¹¹	-	16.3	15.6	23
Percent of Public Elementary and Secondary School Staff Who are School District Administrators ⁹	-	1.0%	1.0%	23
Public Elementary School Pupil-Teacher Ratio ⁹	-	19.1	14.6	39
Public Secondary School Pupil-Teacher Ratio ⁹	-	12.1	15.0	8

The rating for each state was determined through the following process of “Comparison Score”:

“The methodology for determining the state education rankings involves a multi-step process in which rates for each of the nineteen factors are processed through a formula that measures how a state compares to the national average for a given category. The end result is that the farther below the national average a state’s education ranking is, the lower it ranks overall. The farther above the national average a state’s education ranking is, the higher it ranks overall. The editors subjectively determine which factors are “negative” and which are “positive,” as negative and positive factors are treated differently in the formula.” (page xvi).

Using this method, CQ Press ranked the 50 states in this order for 2011-12:

1.	New Jersey	26	North Carolina
2	Vermont	27	Georgia
3	Massachusetts	28	Maryland
4	New Hampshire	29	Florida
5	Wisconsin	30	Utah
6	Pennsylvania	31	Oregon
7	Connecticut	32	Washington
8	Kansas	33	Texas
9	Minnesota	34	Oklahoma
10	Iowa	35	Arkansas
11	Montana	36	South Carolina
12	New York	37	Delaware
13	Virginia	38	Hawaii
14	Ohio	39	Michigan
15	Maine	40	Alabama
16	Idaho	41	South Dakota
17	Nebraska	42	Illinois
18	Indiana	43	Nevada
19	Wyoming	44	West Virginia
20	Rhode Island	45	Louisiana
21	Missouri	46	Alaska
22	North Dakota	47	Arizona
23	Colorado	48	California
24	Kentucky	49	New Mexico
25	Tennessee	50	Mississippi

From 2010-11 to 2011-12, South Carolina's national ranking on the CQ Press's report dropped from 35th to 36th, the same ranking that South Carolina had in 2002-03. The highest ranking that South Carolina earned over the past decade was 26th in 2006-07. The following chart shows the ranking of South Carolina in previous rankings since 2002-03.

Year	National Ranking
2002-03	36
2003-04	41
2004-05	32
2005-06	29
2006-07	26
2007-08	33
2008-09	32
2009-10	41
2010-11	35
2011-12	36

Source: Page xix.

There are many areas ranked in the publication that are not included in the calculation resulting in the overall state rating. The information is divided into several categories, including Districts and Facilities, Finance, Graduates and Achievement, Safety and Discipline, Special Education, Staff, and Students. Some of the rankings show South Carolina is improving its educational system; others indicate areas where improvement is needed.

Academic Achievement and Graduates

Some selected rankings in the area of academic achievement are listed below.

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	SC RANK
ACT Average Composite Score in 2011 ¹²	21.1	20.1	42
Average Scholastic Assessment Test (SAT) Mathematics Scores in 2010 ¹³	516	495	46
Average SAT Critical Reading Scores in 2010 ¹³	501	484	46
Average SAT Writing Scores in 2010 ¹³	492	468	49
Average Reading Score for Public School Fourth Graders in 2009 ⁴	220	216	39
Average Reading Score for Public School Eighth Graders in 2009 ⁴	149	143	38
Average Public School Fourth Grade Mathematics Score in 2009 ⁵	239	236	38
Average Public School Eighth Grade Mathematics Score in 2009 ⁵	282	280	33
Average Science Score for Public School Fourth Graders in 2009 ⁶	149	149	28
Average Science Score for Public School Eighth Graders in 2009 ⁶	149	143	38
Average Writing Score for Public School Eighth Graders in 2007 ⁷	154	148	36
Percent Change in Public High School Graduates: 2005-2009 ⁹	8.7%	17%	5

Districts and Facilities

Below are selected rankings in the area of Districts and Facilities.

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	SC RANK
Public Elementary and Secondary Schools in 2010 ¹⁴	98,817 total	1,206 total	30
Public Elementary and Secondary Charter Schools in 2010 ¹⁴	4,952 total	39 total	23
Private Elementary and Secondary Schools in 2010 ¹⁵	33,366	398	26
Percent of Regular Public Elementary and Secondary School Districts Providing Pre-Kindergarten to 12 th Grade Education in 2010 ¹⁴	78%	100%	1
Average Size of Public High Schools in 2010 ¹⁴	856.3	1,042.7	11
Percent of Elementary and Secondary Schools That Are Vocational Schools in 2010 ¹⁴	1.4%	3.2%	9
Percent of Public Elementary and Secondary Schools that are Title 1 School-Wide Schools in 2010 ⁹	45.0%	76.9%	2

Finance

There are many ways to rank the states in regard to education finance. Some of the selected rankings are below, with South Carolina ranking in the middle of the states in most areas.

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	SC RANK
Public Elementary and Secondary School Total Expenditures in 2009 ¹	604 bil	8.4 bil	24
Per Capita Public Elementary and Secondary School Total Expenditures in 2009 ¹	\$1,970	\$1,844	26
Per Pupil Elementary and Secondary School Total Expenditures in 2009 ¹	\$12,539	\$11,778	26
Public Elementary and Secondary School Current Expenditures in 2009 ¹	517.7 bil	6.7 bil	26
Per Capital Public Elementary and Secondary School Current Expenditures in 2009 ¹	\$1,686	\$1,472	34
Per Pupil Public Elementary and Secondary School Current Expenditures ¹	\$10,499	\$9,277	35
Percent Change in Per Pupil Public Elementary and Secondary School Current Expenditures: 2005 to 2009 (Adjusted for Inflation) ¹⁶	9.8%	11.8%	24
Public Elementary and Secondary School Current Expenditures Instruction in 2009 ¹	311.9 bil	3.9 bil	25
Per Pupil Public Elementary and Secondary School Current Expenditures for Instruction in 2009 ¹	\$6,369	\$5,330	36
Percent of Public Elementary and Secondary School Current Expenditures Used for Instruction in 2009 ¹	60.2%	57.4%	42
CATEGORY	NATIONAL AVERAGE	SC AVERAGE	SC RANK
Percent of Public Elementary and Secondary School Current Expenditures Used for Operations and Maintenance of Facilities in 2009	9.5%	9.2%	31
Percent of Public Elementary and Secondary School Current Expenditures Used for Instructional Staff Support Services in	4.8%	6.5%	4

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	SC RANK
2009			
Percent of Public Elementary and Secondary School Current Expenditures Used for School Administration in 2009	5.4%	5.8%	16
Percent of Public Elementary and Secondary School Current Expenditures for General Administration in 2009	1.9%	1.2%	41
Percent of Public Elementary and Secondary School Revenue from Local Sources in 2009 ¹	43.8%	42.7%	25
Percent of Public Elementary and Secondary School Revenue from State Sources in 2009 ¹	46.7%	47.7%	24
Percent of Public Elementary and Secondary School Federal Revenue from Federal Sources in 2009 ¹	9.5%	9.6%	27

Note: The term "total expenditures" includes capital outlay and interest on indebtedness. "Current expenditures" includes salaries, benefits, services and supplies.

Safety and Discipline

Safety and Discipline encompasses the areas of crime, drug and alcohol usage, amount of television watched daily, the amount of time spent on computers, and sexual activity, among others. This category contains many areas of concern for South Carolina.

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	RANK
Percent of High School Students Who Felt Too Unsafe to Go to School at Some Point in 2009 ¹⁷	5.0%	6.5%	15
Percent of High School Students Who Were Bullied on School Property in 2009 ¹⁷	19.9%	15.1%	33
Percent of High School Students Who Smoked Cigarettes in 2009 ¹⁷	19.5%	20.5%	13
Percent of High School Students Who Drink Alcohol in 2009 ¹⁷	41.8%	35.2%	34
Percent of High School Students Who Were Offered, Sold, or Given an Illegal Drug on School Property in 2009 ¹⁷	22.7%	27.6%	13
Percent of High School Students Sexually Active in 2009 ¹⁷	34.2%	38.6%	8
Teenage Birth Rate in 2008 ¹⁸	41.5	53.1	11
Percent of Children Living in Poverty in 2009 ²	20.0%	24.4%	6
Percent of High School Students Not Participating in 60 or More Minutes of Physical Activity in the Past Week in 2009 ¹⁷	23.1%	21.3%	3
Percent of High School Students Who Watched Three or More Hours of Television Daily in 2009 ¹⁷	32.8%	39.7%	3
Percent of High School Students Who Used Computers Three or More Hours Daily in 2009 ¹⁷	24.9%	22.7%	27
Percent of High School Students Who Were Obese or Overweight in 2009 ¹⁷	27.8%	31.7%	5

Staff

CATEGORY	NATIONAL AVERAGE	SC AVERAGE	RANK
Estimated Average Salary of Public School Teachers ⁸	\$56,069	\$49,434	30
Percentage Change in Number of Public Elementary and Secondary School Teachers, 2000 to 2010 ¹⁹	10.3%	3.3%	33
Percent of Public Elementary and Secondary School Staff Who re School District Administrators in 2010 ²⁰	1.0%	1.0%	23

Sources Used by CQ Press

- ¹ CQ Press using data from U. S. Bureau of the Census, Governments Division “Public Education Finances: 2009”.
- ² CQ Press using data from U.S. Bureau of the Census, American Community Survey: 2009.
- ³ CQ Press using data from U.S. Department of Education, National Center for Education Statistics, “Public School Graduates and Dropouts from the Common Core of Data: School Year 2008-09” (NCES 2011312).
- ⁴ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “The Nation’s Report Card: Reading 2009”.
- ⁵ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “The Nation’s Report Card: Mathematics 2009”.
- ⁶ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “The Nation’s Report Card: Science 2009”.
- ⁷ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “The Nation’s Report Card: Writing 2007”.
- ⁸ CQ Press using data from National Education Association, Washington, D.C. “Rankings & Estimates: Rankings of States 2009 and Estimates of School Statistics 2010”.
- ⁹ CQ Press using data from U.S. Department of Education, National Center for Education Statistics.
- ¹⁰ U.S. Department of Education, National Center for Education Statistics “Public School Graduates and Dropouts: School Year 2008-2009”.
- ¹¹ CQ Press using data from U.S. Department of Education, Office of Special Education Programs “Data Tables for OSEP State Reported Data”.
- ¹² The American College Testing Program “2011 National and State Scores, Average ACT Scores by State.”
- ¹³ CQ Press using data from The College Board, New York, NY “College-Bound Seniors 2010.”
- ¹⁴ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “Numbers and Types of Public Elementary and Secondary Schools.”
- ¹⁵ CQ Press using data from U.S. Department of Education, National Center for Education Statistics “Characteristics of Private Schools in the United States.” (2009-2010).
- ¹⁶ CQ Press using data from U. S. Bureau of the Census, Governments Division “Public Education Finances: 2009 and 2005”.
- ¹⁷ CQ Press using data from U.S. Department of Health and Human Services, Centers for Disease Control and Prevention “Youth Risk Behavior Surveillance – U.S. 2009”
- ¹⁸ CQ Press using data from U.S. Department of Health and Human Services, National Center for Health Statistics “National Vital Statistics Reports” (Vol. 59, No 1, December 2010, <http://www.cdc.gov/nchs/births.htm>).
- ¹⁹ CQ Press using data from U.S. Department of Education, National Center for Education Statistics, “Common Core of DATA (CCD) Database” School Year 1999-2000 to 2009-10.
- ²⁰ CQ Press using data from U.S. Department of Education, National Center for Education Statistics, “Public Elementary and Secondary School Student Enrollment and Staff” School Year 2009-2010.

SECTION 59-18-910

Cyclical review of accountability system; stakeholders.

Beginning in 2013, the Education Oversight Committee, working with the State Board of Education and a broad-based group of stakeholders, selected by the Education Oversight Committee, shall conduct a comprehensive cyclical review of the accountability system at least every five years and shall provide the General Assembly with a report on the findings and recommended actions to improve the accountability system and to accelerate improvements in student and school performance. The stakeholders must include the State Superintendent of Education and the Governor, or the Governor's designee. The other stakeholders include, but are not limited to, parents, business and industry persons, community leaders, and educators.

SECTION 59-6-110. Duties of Accountability Division.

The division must examine the public education system to ensure that the system and its components and the EIA programs are functioning for the enhancement of student learning. The division will recommend the repeal or modification of statutes, policies, and rules that deter school improvement. The division must provide annually its findings and recommendations in a report to the Education Oversight Committee no later than February first. The division is to conduct in-depth studies on implementation, efficiency, and the effectiveness of academic improvement efforts and:

- (1) monitor and evaluate the implementation of the state standards and assessment;
- (2) oversee the development, establishment, implementation, and maintenance of the accountability system;
- (3) monitor and evaluate the functioning of the public education system and its components, programs, policies, and practices and report annually its findings and recommendations in a report to the commission no later than February first of each year; and
- (4) perform other studies and reviews as required by law.

April 9, 2012 Innovation Initiative

The Education Oversight Committee will undertake a project to explore innovative ways to transform the assessment and delivery of public education in South Carolina that will increase student academic achievement.

BOOSTING COLLEGE GRADUATION RATES IN THE BLUEGRASS STATE by 2020

focusing on a public/private initiative

by Gary M. Stern

A public and private partnership created the 55,000 Degrees initiative – adding 40,000 bachelor’s and 15,000 associate degrees by 2020, with the goal of turning Louisville into a more competitive city, prepared for a 21st-century knowledge economy.

Hispanics and African-Americans are also being highlighted because the Latino population in Louisville, though a modest 3.8 percent of the population, has doubled over the last decade and will likely increase. African-Americans have had problems achieving college success, with only 14 percent in Louisville graduating with a postsecondary degree, a rate about half that of its White students. Hence, Louisville is focusing on helping minority and majority students succeed in college.

55,000 Degrees brings together school superintendents, college and university presidents and civic leaders in Louisville to collaborate on a strategy to increase college graduation rates. Its goals included making college affordable, encouraging business leaders to get involved and serve as mentors with colleges, and creating a college-minded culture in which larger numbers of students advance to higher education in Kentucky.

Mary Gwen Wheeler, executive director of 55,000 Degrees, said its leadership identified several clear objectives, including: 1) overcoming any barriers to establishing a college achieving culture, 2) engaging the business community to help reach adults who haven’t achieved degrees, 3) increasing access and affordability, 4) improving college alignment of K-12 grades with higher education.

Like many former manufacturing centers, Louisville faced a number of plant closings including those of Ford and General Electric. “Having a high school diploma is no longer good enough” to secure employment, Wheeler noted.

Creating a public and private partnership can help sustain the initiative, said James Applegate, vice president for program development at the Lumina

Foundation, a leader in funding programs to raise Hispanic college graduation. The initiative transcends the tenure of any mayor or college president and encourages influential leaders in the community to work together toward common goals. “Without college completion, we’re creating a generation of working poor,” he said.

The impetus for establishing 55,000 degrees began in 2003 when the city of Louisville merged with nearby suburban Jefferson County. The newly merged city, whose combined population was 741,000 in 2010, compared Louisville’s performance with that of 15 similar cities and determined that it was in the bottom tier of educational achievement. And that reality could hamper its economic progress.

In 2009, Mayor Jerry E. Abramson, now Kentucky’s lieutenant governor, invited the leaders of Louisville to a retreat and encouraged them to establish a plan to increase college achievement. The 55,000 Degrees resulted from those meetings.

The initiative works closely with eight colleges in Louisville, including six four-year colleges, including the University of Louisville and nearby Indiana University, and community colleges Jefferson Community and Technical College and Ivy Tech Community College.

It serves as a rallying point for all the colleges to increase outreach to students and gain the support of business leaders. But it has a modest budget, \$400,000, supported by local foundations, only three full-time employees and is not a funding source. It doesn’t provide ser-

vices but tries to motivate colleges to offer resources and outreach to students and then measure the results, Wheeler said. For example, it launched Count Me In, a program that encourages parents and other organizations to make a pledge to increase college graduation.

Wheeler noted that the low levels of African-American academic achievement “mirrors national numbers and reflects that African-Americans tend to be low-income and raised in families with low college



Mary Gwen Wheeler, executive director, 55,000 Degrees



James Applegate, VP for program development, Lumina Foundation

achievement.” The Latino population is gaining a foothold in Louisville and is beginning to organize itself. The Latino Business Coalition, for example, has spearheaded efforts to work with colleges to raise graduation rates.

After only two years of operating, “We have elevated the awareness of the importance of college degrees in the community among leadership and parents,” Wheeler said.

Reaching Adults with Some College but No Degree

To reach its goal of helping 55,000 students attain college degrees, the initiative is also targeting adults, particularly the 90,000 working-age adults in Louisville who started college but failed to attain degrees. Wheeler said the adult goal is 15,000 to 20,000. The Lumina Foundation provided \$800,000 to fund HIRE (Higher Income Requires Education), a community-based collaboration to help adults complete their degrees. “Lumina wanted to create a scalable program, serving a large number of students,” Applegate said. He said employee engagement is critical to its success, and that employers would reap many benefits, including having a more educated workforce. Many jobs, including auto mechanics, require advanced computer skills.

Its strategies include: 1) working with employees to establish best practices, 2) encouraging one-on-one counseling with employees to explore postsecondary opportunities, 3) helping postsecondary institutions identify gaps in enabling students to complete degrees.

To be effective, these adult learning programs must be made amenable to an adult’s schedule. “Many adults juggle multiple balls, including work-

ing, family and child care,” said Applegate. Offering courses on site at the workplace can save time and make attaining a degree easier. He acknowledged that it was easier to reach adults in their mid-20s who recently attended college than those who are 40 and left college 20 years ago.

How 55,000 Degrees Plays Out at One Community College

As part of 55,000 Degrees, Jefferson Community and Technical College, a two-year college based in Louisville, Ky., with six campuses in four counties, has pledged to double the number of associate degrees and double the number of transfer students by 2020. After the University of Louisville, Jefferson Community has the second-largest enrollment of students and the largest enrollment of African-Americans in Kentucky. It enrolls 15,000 students a year and in 2010-11 awarded 956 associate degrees and 277 diplomas in areas such as practical nursing and surgical technology and 3,474 certificates in short-term programs. The college is affordable, costing about \$4,000 in tuition for a 30-credit program.

Doubling its graduates in the next eight years “won’t happen if we continue business as usual,” explained Tony Newberry, president of the college. “We have to make significant changes in the way we support our students to graduate.” Newberry said the community college is already taking steps to heighten the number of graduates and reach out to African-Americans and Latinos as well.

Newberry says the college is focusing on completion, where, in the past, community colleges were committed to growth, open access, and raising enrollment numbers. “Previously, we gave less attention to student success and completion,” he acknowledged.

Jefferson Community is one of 160 junior colleges participating in Achieving the Dream: Community Colleges Count, a nonprofit organization funded by the Lumina Foundation. The goal of Achieving the Dream is to remove barriers that prevent access to higher education and target minority and low-income students. As part of its involvement, Jefferson is analyzing data to determine strengths, problem areas and achievement gaps that prevent access. After analyzing the data, it will determine best practices that need to be continued and an approach to solving any gaps. In addition, community programs such as Super Sunday involve mostly African-American churches to promote attending junior college and attaining degrees.

Newberry says that 55,000 Degrees, though not a funding source, has “galvanized” the Louisville community and stimulated outside funding. “It has resonated with the community, foundations and private supporters, who are coming through with significant funds,” he said. For example, the local Gheens Foundation provided a \$436,000 two-year grant to the college to bolster capacity, and the college received funding from the Community Foundation of Louisville and the local Jones Family Charitable foundation. The local rotary club raised \$5 million to establish a scholarship fund targeting students of the four lowest-performing Louisville high schools.

More than three-quarters of Jefferson Community’s students require taking at least one developmental course. To improve its graduation rate, the college overhauled and redeveloped its developmental math program. Its data revealed that most students who passed this course proceeded to do well in other classes and many achieved degrees. But too many students were dropping out of the class. It redeveloped the course, employing an “emporium model,” which emphasizes faculty involving the class, using computers, and moving away from a lecture approach. Newberry says it will take three years to evaluate the program’s effectiveness.

While the college’s Hispanic population is relatively small, Newberry noted that its ESL program, which trains bilingual teachers, has been its fastest-growing program. Many of its students are Latino, and the college is

stepping up its Latino recruitment efforts.

To increase the number of transfer students, Jefferson Community participates in Ultra, standing for U of L transfer, a joint program with nearby University of Louisville. Participating students receive transfer advice from University of Louisville's advisors, which leads to a seamless transition. They also receive a University of Louisville identification card, enabling them to use its facilities and further ease the transition to a larger college.

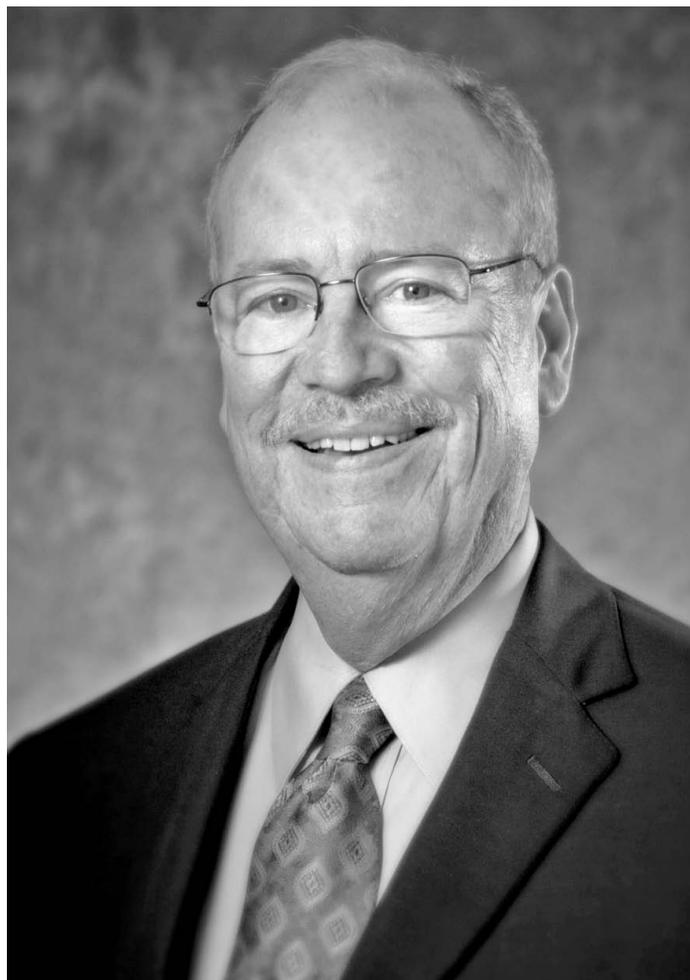
Jefferson Community and the other community and four-year colleges are being asked to increase graduation rates, and yet state funding isn't growing. "The new normal is we expect flat funding, so we must be smarter and more innovative about how we approach challenges," Newberry said. If it increases graduation rates by 5 percent over three years and then 7.5 percent three years after that, it can reach its goals.

Another community college has made a special effort to target Latino students. To achieve its goal of increasing its Latino and minority graduation rates, Bluegrass Community and Technical College established a multi-faceted strategy that includes: 1) bilingual outreach to high schools, 2) Latino Outreach Coordinators offering support once students are enrolled in community college, 3) financial aid training, 4) peer mentoring, 5) special support and advisement to help students transfer to four-year colleges.

K-12 Lays the Foundation for Success

Wheeler says that for more students to obtain college degrees, the K-12 system in Louisville must be strengthened. "Our biggest challenge is closing the achievement gap now that our urban and suburban districts are combined," she said.

What's changed in Louisville, and really throughout the country, is the former belief that some students are college material and others are not. According to Wheeler, "Everyone needs to learn continuously to be successful in our knowledge economy in the 21st century."



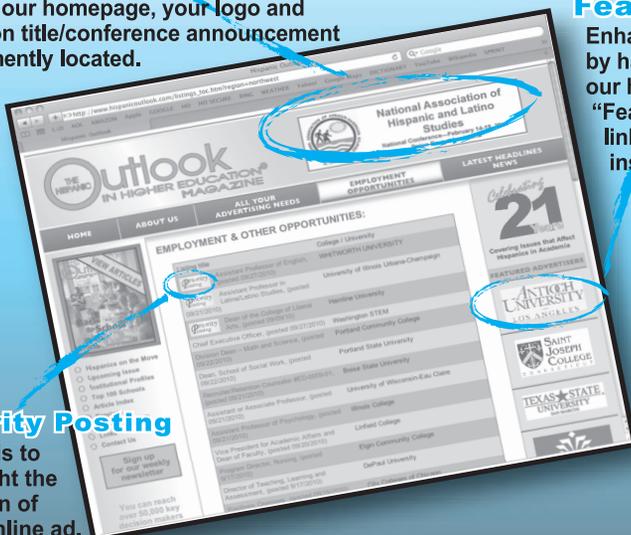
Tony Newberry, president, Jefferson Community and Technical College

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MEMORANDUM

TO: Members, Education Oversight Committee
FROM: Melanie Barton *Melanie Barton*
DATE: July 30, 2012

The following data from national and state assessments document reading performance in South Carolina and from states in the Southern Regional Education Board (SREB) over time.

1. Based on the results of the National Assessment of Educational Progress (NAEP), significant reading deficiencies exist, especially in the early elementary grades in South Carolina. In 2011 at grade 4, the percentage of students performing at or above Basic was 61 percent in South Carolina as compared to 72 percent at grade 8. At grade 8, South Carolina ranked third in the nation in gains made in the percentage of students scoring basic and above in reading in eighth grade between 2009 and 2011.

2. Looking at results from the 2011 administration of the Palmetto Assessment of State Standards (PASS) in reading and research, at the fourth grade level there were 16 schools where over 50% of the students performed at Not Met on PASS reading and research. In 238 schools between 25 and 49% of students in the fourth grade performed at the level of Not Met. At the middle school level, there were 51 schools where over 50% of the students in eighth grade performed at Not Met. In 174 schools between 25 and 49% of students in eighth grade performed at the level of Not Met.

3. Analyzing average ACT scores, average reading scores in South Carolina have steadily increased over time. On the other hand, the average SAT critical reading score for South Carolina students was 494 in 2005 and has since declined to 482 in 2011, a 12 point decline. Over the same period, the nation experienced an 11-point decline in the mean SAT critical reading score.

4. Finally, when looking at NAEP reading scores since 2003, the state of Alabama ranked 4th in the nation in having the largest gains made in the percentage of students scoring basic and above on NAEP. However, Alabama did not see similar gains in 8th grade NAEP scores.

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Melanie D. Barton
EXECUTIVE DIRECTOR

The Nation's Report Card -- NAEP

4th Grade Reading (South Carolina, 1998-2011)

Year	1998	2002	2003	2005	2007	2009	2011
Avg. Scale Score	209	214	215	213	214	216	215
% Basic and above	53%	58%	59%	57%	59%	62%	61%
Achievement Gaps	<i>White/AA: 29 %pts Pay/FR lunch: 29 %pts</i>	<i>White/AA: 26 %pts Pay/FR lunch: 27 %pts</i>	<i>White/AA: 27 %pts Pay/FR lunch: 26 %pts</i>	<i>White/AA: 28 %pts Pay/FR lunch: 28 %pts</i>	<i>White/AA: 25 %pts Pay/FR lunch: 27 %pts</i>	<i>White/AA: 26 %pts Pay/FR lunch: 26 %pts</i>	<i>White/AA: 29 %pts Pay/FR lunch: 31 %pts</i>
Rank among States	28 th of 40 states	31 st of 43 states	36 ^{th*}	41 ^{st*}	42 ^{nd*}	39 ^{th*}	39 th

*Rank is determined in a comparison of average scale scores for all students among all 50 states and the District of Columbia. NAEP reading scale scores range from 0 to 500.

8th Grade Reading (South Carolina, 1998-2011)

Year	1998	2002	2003	2005	2007	2009	2011
Avg. Scale Score	255	258	258	257	257	257	260
% Basic and Above	66%	68%	69%	67%	69%	68%	72%
Achievement Gaps	<i>White/AA: 25 %pts Pay/FR lunch: 26 %pts</i>	<i>White/AA: 25 %pts Pay/FR lunch: 23 %pts</i>	<i>White/AA: 25 %pts Pay/FR lunch: 21 %pts</i>	<i>White/AA: 25 %pts Pay/FR lunch: 22 %pts</i>	<i>White/AA: 26 %pts Pay/FR lunch: 24 %pts</i>	<i>White/AA: 24 %pts Pay/FR lunch: 23 %pts</i>	<i>White/AA: 26 % pts Pay/FR Lunch: 22%</i>
Rank among states	29 th of 37 states	32 nd of 42 states	37 ^{th*}	39 ^{th*}	41 ^{st*}	42 ^{nd*}	38 th

*Rank is determined in a comparison of average scale scores for all students among all 50 states and the District of Columbia. NAEP reading scale scores range from 0 to 500.

2011 PASS Reading and Research

**Number of Schools at Each Grade Level
With Percent of Students Scoring Not Met**

Grade	0 to 24%	25 to 49%	50 to 74%	75 to 100%	TOTAL Schools
3	401	201	9	1	611
4	355	238	16	0	609
5	354	223	15	1	593
6	78	155	29	3	265
7	67	184	39	2	292
8	62	174	50	1	287

ACT

Year	Average Composite Score SC	Average Composite Score, Nation	Average Reading Score SC	Average Reading Score Nation
2011	20.1	21.1	20.3	21.3
2010	20.0	21.0	20.0	21.3
2009	19.8	21.1	19.9	21.4
2008	19.9	21.1	20.0	21.4
2007	19.6	21.1	19.8	21.5
2006	19.5	21.1	19.7	21.4
2005	19.4	20.9	19.6	21.3
2004	19.3	20.9	19.4	21.3
2003	19.2	20.8	19.4	21.2
2002	19.2	20.8	19.3	21.1
2001	19.3	21.0	19.5	21.3
2000	19.3	21.0		21.4
1999	19.1	21.0		21.4

*The composite score is the average of the performance on four ACT Subject tests: English, Reading, Math, and Science. Includes all ACT-tested high school graduates in SC.

SAT Average Composite Scores and Rankings among States

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	951 <i>Verbal</i> : 478 <i>Math</i> : 473	954 <i>Verbal</i> : 479 <i>Math</i> : 475	966 <i>Verbal</i> : 484 <i>Math</i> : 482	974 <i>Verbal</i> : 486 <i>Math</i> : 488	981 <i>Verbal</i> : 488 <i>Math</i> : 493	989 <i>Verbal</i> : 493 <i>Math</i> : 496	986 <i>Verbal</i> : 491 <i>Math</i> : 495	993 <i>Verbal</i> : 494 <i>Math</i> : 499	986 <i>Crit.</i> <i>Read</i> : 486 <i>Math</i> : 500	984 <i>Crit.</i> <i>Read</i> : 488 <i>Math</i> : 496	985 <i>Crit.</i> <i>Read</i> : 488 <i>Math</i> : 497	982 <i>Crit.</i> <i>Read</i> : 486 <i>Math</i> : 496	979 <i>Crit.</i> <i>Read</i> : 484 <i>Math</i> : 495	972 <i>Crit.</i> <i>Read</i> : 482 <i>Math</i> : 490
Rank	NA	NA	NA	50 th	NA	NA	NA	49 th	50 th	48 th	47 th	48 th	48 th	48 th

*The composite score is the sum of the average Verbal and Math Score (1998-2005) and the Critical Reading score average and the Mathematics score average (2006-2011). Includes all SC seniors who took the SAT at any time during their high school years.

NA=not available

2011 SAT scores for the first time reflect summer administration of the test.

SREB States Led the Nation in Education Progress on NAEP

Table 1

SREB State Gains on NAEP for Fourth- and Eighth-Graders Key Categories of NAEP: Reading and Math, Basic and Proficient, 2003-2011						
<i>SREB states ranked first in the nation in gains on NAEP in all key categories.</i>						
State	Subject	Level	Percent Scoring At or Above Level		Increase, 2003-2011	
			2003	2011	State	Nation
Fourth Grade						
Alabama	Reading	Basic	52	67	15	4
Kentucky	Math	Basic	72	85	13	6
	Math	Proficient ¹	22	39	17	9
Maryland	Reading	Proficient	32	43	11	2
	Math	Basic	73	86	13	6
	Math	Proficient ¹	31	48	17	9
Eighth Grade						
Arkansas	Math	Basic ²	58	70	12	5
Maryland	Reading	Basic	71	80	9	3
	Reading	Proficient	31	40	9	2
Texas	Math	Basic ²	69	81	12	5
	Math	Proficient	25	40	15	7

¹ Indicates state tied with Hawaii and Massachusetts in gains.

² Indicates state tied with Hawaii and New Mexico in gains.

Source: National Assessment of Educational Progress.

SREB States Led the Nation in Education Progress on NAEP

Table 2

SREB States Ranked 1st, 2nd or 3rd in the Nation in Gains on NAEP, 2009-2011

SREB states were in the top 3 in every performance category.

State	Subject	Level	Percent Scoring At or Above		State Increase 2009-2011	Rank in Nation
			2009	2011		
Fourth Grade						
Alabama	Reading	Basic	62	67	5	1*
	Math	Basic	70	75	5	2
Kentucky	Math	Basic	81	85	4	3*
Louisiana	Reading	Basic	51	55	4	3*
	Reading	Proficient	18	23	5	2
Maryland	Reading	Basic	70	75	5	1*
	Reading	Proficient	37	43	6	1
	Math	Proficient	44	48	4	2*
Eighth Grade						
Kentucky	Math	Proficient	27	31	4	3*
Maryland	Reading	Proficient	36	40	4	3*
Mississippi	Math	Basic	54	58	4	3*
	Math	Proficient	15	19	4	3*
Oklahoma	Math	Basic	68	72	4	3*
South Carolina	Reading	Basic	68	72	4	3*
Texas	Math	Proficient	36	40	4	3*
Virginia	Reading	Proficient	32	36	4	3*
	Math	Proficient	36	40	4	3*
West Virginia	Math	Basic	61	65	4	3*

* Indicates SREB state tied with other state(s).

Source: National Assessment of Educational Progress.

Reading Achievement Recommendations

Submitted by the:

South Carolina Reading Achievement Systemic
Initiative

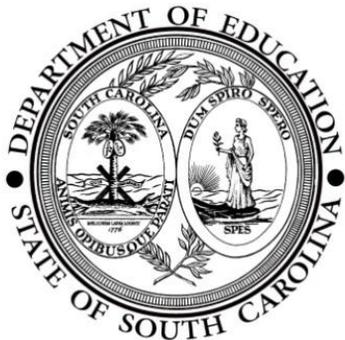


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Appendix 1: Meeting Agendas and Panel Roster

Appendix 2: Panel Presentations and Handouts

- “Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation” (Presented 10/07/2011)
- “Florida’s Education Revolution: Reading for Learning” (Presented 10/07/2011)
- “Challenges and Solutions for Early Reading Proficiency” (Presented 10/07/2011)
- “Research on Improving Reading Achievement” (Presented 11/16/2012)
- “Recommendations for A State-wide Approach to Literacy Instruction and Assessment” (Presented 11/16/2012)

Appendix 3: Panel Members’ Suggested Action Items

- Compiled Ballot Results by Overall Ranking
- Top Three Ranked Priorities By Policy Area
- SC Reading Achievement Systemic Initiative Policy Priorities – Reading Instruction

Appendix 4: Panel Members’ Personal Statements

- Mick Zais, State Superintendent of Education
- D’Etta Brown
- Molly Talbot-Metz
- Audrea Phillips
- Rose Sheheen

Synopsis

The South Carolina Reading Achievement Systemic Initiative was created by Proviso 1A.46 in the 2011-2012 Appropriations Act to provide recommendations to the General Assembly on how to address the pervasive issue of illiteracy among the youth in the State.

Proviso Text

1A.46. (SDE-EIA: SC Reading Achievement Systemic Initiative) From the funds appropriated or authorized for the Department of Education and the Education Oversight Committee, there is created a policy panel to guide the South Carolina Reading Achievement Systemic Initiative. The panel will be composed of twenty-five members, which shall be appointed as follows:

The Governor shall appoint to the panel:

- (1) one business leader;
- (2) one parent;
- (3) one representative of the Board of Trustees of the Office of First Steps to School Readiness;
- (4) one representative of the State Library Board;
- (5) one pediatrician; and
- (6) two representatives of community foundations or literacy organizations.

The State Superintendent of Education shall appoint to the panel:

- (1) one business leader;
- (2) one parent;
- (3) one parent educator;
- (4) one researcher in reading;
- (5) two literacy coaches;
- (6) two district early childhood or academic leaders;
- (7) two principals, one representing elementary schools and one representing middle schools; and

(8) four teachers of students with needs for interventions to promote reading proficiency to include students with learning disabilities, student in poverty and students not mastering concepts.

The Chairman of the Senate Education Committee shall appoint one member of the Senate Education Committee to the panel.

The Chairman of the House Education and Public Works Committee shall appoint one member of the House Education and Public Works Committee to the panel.

The Chairman of the State Board of Education shall appoint one member of the State Board of Education to the panel.

The Chairman of the Education Oversight Committee shall appoint one member of the Education Oversight Committee to the panel.

The panel is directed to define the focus and priorities for state actions to improve the level of reading achievement among the state's young people including building upon the work of LiteracySC and the state literacy team organized to support the Striving Readers Comprehensive Literacy Grant. The panel should address factors contributing to or impeding progress including, but not limited to, the physical health, language development and quality of instruction provided in the state's schools. The panel should examine data, follow progress of the LiteracySC academies and pilots, recommend changes in practice and funding and provide for a longitudinal evaluation and establish a statewide policy for the teaching of reading, including particular attention to the lowest achieving students.

The panel is to be staffed through a collaborative among the Department of Education, SC Kids Count and the Education Oversight Committee. Expenses of the panel are to be shared among the collaborating entities.

The panel shall report to the General Assembly through the House Committee on Education and Public Works and the Senate Education Committee and to the State Board of Education and the Education Oversight Committee by January 15, 2012.

Procedure

The South Carolina Reading Achievement Systemic Initiative met six times between October 2011 and March 2012 to develop its recommendations for the legislature. All meetings were webstreamed live at www.ed.sc.gov/events. For the names of the initiative members and the published meeting agendas, see Appendix 1.

At the first two meetings, initiative members heard presentations from a variety of interested parties. The presenters and their organizations included:

1. Ms. Melanie Barton, South Carolina Education Oversight Committee
2. Mr. Baron Holmes, KidsCount
3. Ms. Charmeka Bosket, South Carolina Department of Education
4. Janice A. Dole, Ph.D., University of Utah

The remaining meetings were spent discussing recommendations to include in the final report and refining the language of the document. Ballots submitted by the panel members can be referenced in Appendix 3. The last meeting of the initiative was held on March 29, 2012. Panel members were invited to submit short personal statements to include with the report submitted to the General Assembly (see Appendix 4).

All meeting agendas were made available to the public before the scheduled meetings at <http://ed.sc.gov/agency/lpa/SouthCarolinaReadingAchievementSystemicInitiative.cfm>. All the materials distributed by the presenters were also posted after each meeting to the website (see Appendix 2). All video webstreamed was archived and is available for public viewing at <http://ed.sc.gov/events>.

Recommendations

Goal: Improve Reading Instruction and Reading Achievement in South Carolina

Recommendation #1: Create family-school-community partnerships which focus on increasing the volume of reading, in school and at home, during the year and, at home, over the summer.

Action Plan:

1. Review and disseminate the literature on engaged reading, high progress literacy classrooms (HPLC), and reading achievement. Recommend expectations for the amount of time that students should read and write at school and outside of school.
2. Assist all school districts in:
 - a. developing and implementing policies aligned with state standards for reading and writing during the school day in all subject areas and at all grade levels.
 - b. educating parents about ways to promote reading at home in order to meet or exceed goals for the amount of time students spend reading outside of school.
 - c. implementing family-school-community solutions to summer reading loss, such as:
 - Summer reading opportunities in which each participating student is provided with 5 or more books the student self-selects to read at home over the summer
 - Partnerships with local libraries to take books into targeted neighborhoods and to work with designated students at the library and other sites.
 - Access for students during the summer to school libraries staffed with knowledgeable personnel.
 - Community-based “libraries” consisting of donated books, open one afternoon a week, staffed with volunteers.
3. Continue the professional development on reading volume offered by SCDE. This focused professional development raises awareness and helps teachers plan, implement, and continuously improve quantity and quality of reading and writing time.
4. If funding is available, support the SCDE in providing resources, links, tools, video, and webinars to guide engaged reading and writing in schools. This should include numerous resources on the web for parents, educators, and literacy leaders.

Recommendation # 2: Promote partnerships of families, communities and schools to address literacy development of young children through all early childhood programs.

Action Plan:

1. Develop a Literacy Plan for *all* young children in South Carolina (SC) based on input from representatives from such agencies and organizations as the public schools, First Steps, SC Department of Social Services (DSS) Child Care Division, Early Head Start, Head Start, community-based programs (Reach Out and Read, Imagination Library, Success By Six, local library programs) and home visitation programs (Parents As Teachers, Nurse Family Partnership, and others). Propose policy that will guide enrollment options (e.g. universal pre-school versus pre-school for particular demographic groups) and guide implementation, support and evaluation of their literacy plan. The plan should address the following objectives:
 - a. Community: Schools must reach out to and enlist community organizations as valued partners in literacy promotion.
 - b. Family: Preschools and kindergartens must engage families as full, active partners in the language and literacy learning.
 - c. Instruction/Curriculum: Early childhood educators must systematically and consistently provide proven-effective literacy learning experiences for every child.
 - d. Assessment: Instruction must be guided by continuous, individualized assessment and progress monitoring of the language and literacy development of each child.
 - e. Reading System Support and Management: Schools, school districts, and the state must monitor, support, and guide highly effective language and literacy experiences.
2. Initiate a collaborative effort for training Early Care and Education workers in promoting the language and literacy of young children. The primary partners should include: the SC Center for Child Care Career Development, SC First Steps, the SCDSS ABC Child Care program, Head Start, the SC Department of Education, university early childhood professors, technical college early learning education instructors and school district early childhood leaders. These guidelines should be used in their collaborative effort:
 - a. Each collaborating partner will develop a plan for significantly strengthening its current workforce training in effective language and literacy learning methods.

- b. Collectively, the collaborating partners will develop a joint plan to coordinate and share training wherever possible.
- c. The plan should give first priority to training focused on the needs of 4 year olds as the group of greatest common interest across the three primary service systems; however, the plan should also address the language and literacy needs of all young children as appropriate.
- d. The plans should address such critical challenges as: determining and focusing on the pre-reading skills to be cultivated, determining the instructional approaches to be adopted, and selecting curriculum models and components which are supportive of language and literacy learning.

Recommendation #3: Assure that all preschool and kindergarten students are taught by teachers well-trained to create literate environments which develop the understandings that reading and writing are meaning-making, rule-governed processes.

Action Plan:

1. Provide for all teachers of preschool and kindergarten students a series of professional development sessions addressing research-validated early literacy practices such as, but not limited to, literacy-rich and print-rich classrooms, developmentally appropriate and intentional literacy instruction, read-alouds, daily schedules that include literacy learning throughout the day, and ample opportunities to build vocabulary and develop phonological awareness. These practices should take into account students' language development, and their literacy skills relative to stages of early reading and writing.

Recommendation #4: Revise certification requirements to assure that all PreK-12 students are served by classroom teachers, reading teachers, special education teachers, reading coaches, and administrators who have the appropriate level of understanding of reading instruction and assessment.

Action Plan:

1. For all pre-service teachers:
 - a. Outline the knowledge, skills and strategies needed to be an effective first-year teacher of readers and writers.

- b. Describe the kinds of pre-service experiences which ensure that first year teachers possess and can use their knowledge, skills and strategies to understand and support each and every child as a reader and writer.
 - c. Review university reading course syllabi in certification programs relative to (a) & (b).
 - d. Make public a list of those teacher training programs that meet criteria (a) & (b).
2. For certified teachers, require advanced course work in literacy for re-certification.
- a. For early childhood (EC) and elementary teachers (EL) (pre-K to 5): Require a South Carolina Literacy Teacher add-on certification. This involves 4 required courses (the fifth is optional), 3 years teaching experience and a passing score on the Praxis. Only institutions whose M.Ed. programs in Reading/ Language and Literacy are accredited by the National Council for Accreditation of Teacher Education (NCATE) and whose course content is consistent with state standards should offer the course work. These courses could be offered at a PD rate. As part of NCATE, the International Reading Association (IRA) specifies the content, skills and strategies that reading teachers must know about and be able to implement and also sets standards for reading assessment and instruction. Effectively delivered IRA-sanctioned course work provides teachers with a strong understanding of the theory, research, and practices that support the teaching of reading and writing. All EC and EL teachers who have been teaching for 1-5 years would be required to obtain the Literacy Teacher add-on certification within ten years. The time frame for EC and EL teachers with 6+ years of experience would be based on an assessment of the capacity of state-approved IHEs in SC to provide the course work. For teachers newly certified in these areas, the course work could begin the summer after graduation and continue through the first two years of teaching. Ideally, within 20 years all SC teachers would have their add-on certification.
 - b. For all Middle and High School teachers (grades 6 to 12): Require 6 credit hours of literacy and content-based professional development tied to social studies, science, math and ELA. These courses would be 2 of the 4 courses required for add-on certification as a Literacy Teacher. This course work would delve deeply into cognitive strategies which readers use to create meaning with texts. Middle school teachers would have the option of counting Literacy as one of their two areas of expertise. Only institutions whose M.Ed. programs in Reading/Language and Literacy are accredited by the National Council for Accreditation of Teacher Education (NCATE) and whose course content is consistent with state standards should offer the course work. These courses could be offered at a PD rate. As

part of NCATE, the International Reading Association (IRA) specifies the content, skills and strategies that reading teachers must know about and be able to implement and also sets standards for reading assessment and instruction. Effectively delivered IRA-sanctioned course work provides teachers with a strong understanding of the theory, research, and practices which support the teaching of reading and writing. ML and HS Teachers who have been teaching for 1-5 years would be required to obtain this add-on certification within ten years. The time frame for ML and HS teachers with 6+ years of experience would be based on an assessment of the capacity of IHEs in SC to provide the course work. For newly certified ML and HS teachers, the course work could begin the summer after graduation and continue through the first two years of teaching. Ideally, within 20 years all SC ML and HS teachers would have these courses.

3. For teachers who provide supplemental support to below-grade- level readers and who are certified pre-K through 5 or Special Education teachers K-12 : Require SC add-on certification as Literacy Teacher. These teachers would have to acquire this certification within 6 years.
4. For teachers who coach other teachers in literacy instruction and assessment: Require SC add-on certification as a Literacy Coach. These teachers would have to acquire this certification within 6 years.
5. For K-8 administrators, including principals, assistant principals, and curriculum coordinators as well as administrators in grades 9-12 and district office administrators with significant policy and practice responsibility for literacy education: Require two foundational courses (reading foundations and reading instruction) and professional development in reading assessment or a state-approved equivalent combination of PD experiences. All current K-8 and relevant HS and district office personnel administrators would be encouraged to complete this course work within 6 years; however only K-5 administrators should be required to complete these courses within 6 years. Electronic access to high quality course instruction should be organized to make participation convenient.

Recommendation #5: Assure that all K-12 students are served by classroom teachers who expertly provide effective, data-driven, whole group, small group or one-on-one reading instruction.

Action Plan:

1. Charge a group of state-department, university and public school professionals with overseeing collaborative, school-based processes for ensuring that all students in all age and grade bands receive the support needed to become engaged, proficient readers and writers. This should include:
 - a. revisiting and revising as needed existing guidelines and recommendations for Tier 1 (classroom) and Tier 2 (supplemental settings).
 - b. creating implementation rubrics for text-based assessment and instruction.
 - c. gathering and making available videos showing effective assessment and engaged reading and writing at all grade bands and levels.
 - d. gathering and making available online tools for administrators to use in observing reading and writing in classrooms at all grades and in all content areas.
 - e. making on-site visits to ensure that effective systems are in place for assessment and instruction (both in-classroom and supplemental).
2. Charge the SCDE (if funded) and local school districts (using professional development monies) with providing professional development to teachers so that they understand how to do text-based, progress-monitoring assessments well and can use the findings to plan effective whole group, differentiated small group, and one-on-one instruction.
3. Require districts to document consistency of their assessment and instruction plans with state rubrics, submitted with either a district strategic plan, district strategic plan update, or accreditation report.
4. If funded, require certified literacy coaches at every public school. In Pre-K to grade 5, there should be one coach for every 25 teachers. In grades 6 to 12, there should be one coach for math and science teachers and one for social studies and English teachers (with a maximum of 25 teachers per coach). Literacy Coaches should be in classrooms four days a week helping Pre K-12 teachers develop, implement, and sustain effective practices and helping them enhance the trajectory of each and every student as a learner. This includes reading, writing, and content area support. Encourage districts to make progress towards this goal by repurposing monies.

Recommendation #6: Increase the quantity and diversity of texts in classrooms.

Action Plan:

1. Provide schools with suggested titles of informational texts that are written on a variety of difficulty levels (a university/SCDE committee could do this without cost)
2. Repurpose monies to provide funding for those books (perhaps using monies for textbook adoptions).
3. At both the state level (if funded) and the local level (using professional development monies), provide workshops for teachers on how to use informational texts across the curriculum. For middle and high school teachers, this would include information on content area literacy comprehension.
4. Require that K-12 teachers increase the amount of instruction students receive on how to read and write informational text.

Recommendation #7: Create a non-governmental reading partnership council to provide advice and support for the development and implementation of research-based literacy efforts across the state.

Action Plan: The goal of this panel would be to help facilitate the achievement of near-universal reading proficiency in South Carolina through the formulation and dissemination of documents addressing critical content, approaches and evaluation criteria, including but not limited to:

1. Working closely with one or more advisory committees comprised of key representatives from such critical stakeholders as teachers, coaches, interventionists, administrators and professors;
2. Developing synthesis documents, grounded in research, data and practical experience, which describe effective reading policies and practices and the training required for teachers to provide effective reading instruction.
3. Collecting and disseminating information about Literacy Teacher course work offered by SC IHEs whose M.Ed. programs in Reading/Language and Literacy have been endorsed, via NCATE, by the International Reading Association.
4. Proposing content for district reading proficiency plans and criteria for state review and approval of the plans. Gathering and disseminating data about the effectiveness of specific reading programs/packages.
5. Developing a plan for supporting all districts' literacy efforts (assessment, instruction and implementation).

Appendix 1

Meeting Agendas and Roster



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

October 12, 2011

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
9:00AM

- I. Welcome
- II. Introduction of Panel Members
- III. Selection of Panel Chair and Vice Chair
- IV. Approval of Agenda
- V. Public Comment Period
- VI. Presentations and Discussion

Ms. Melanie Barton, South Carolina Education Oversight Committee
Mr. Baron Holmes, KidsCount; Office of Research and Statistics
Ms. Charmeka Bosket, South Carolina Department of Education

- VII. Other Business
- VIII. Adjournment

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

November 16, 2011

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
9:00AM

- I. Welcome
- II. Approval of Agenda
- III. Approval of Minutes from October 12, 2011 Meeting
- IV. Public Comment Period
- V. Presentations and Discussion

Janice A. Dole, Ph.D., University of Utah
Mr. Baron Holmes, KidsCount; Office of Research and Statistics – Policy Briefs

- VI. Other Business
- VII. Adjournment

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

December 14, 2011

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
9:00AM

- I. Welcome
- II. Approval of Agenda
- III. Public Comment Period
- IV. Discussion of Panelist Submitted Recommendations
- V. Other Business
- VI. Adjournment

NOTE: After the meeting panelists are invited to stay for a research presentation by a group of pediatricians.

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

January 9, 2012

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
1:00PM

- I. Welcome
- II. Approval of Agenda
- III. Public Comment Period
- IV. Discussion of Panelist Submitted Recommendation Ballots
- V. Discussion and Approval of Recommendations for Report
- VI. Other Business
- VII. Adjournment

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

March 1, 2012

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
1:00PM

- I. Welcome
- II. Approval of Agenda
- III. Public Comment Period
- IV. Discussion and Approval of Panel Report
- V. Other Business
- VI. Adjournment

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

AGENDA

South Carolina Reading Achievement Systemic Initiative

LOCATION & TIME

March 29, 2012

Rutledge Conference Center, Rutledge Building
1429 Senate Street, Columbia, SC 29201
1:00PM

- I. Welcome
- II. Approval of Agenda
- III. Public Comment Period
- IV. Discussion and Approval of Panel Report
- V. Other Business
- VI. Adjournment

The South Carolina Reading Achievement Systemic Initiative is a collaborative between:

South Carolina Department of Education
South Carolina Education Oversight Committee
KidsCount

The collaborative is authorized under the provisions of Proviso 1A.46 of H.3700, the Fiscal Year 2011-2012 Appropriations Act.

South Carolina
Reading Achievement Systemic Initiative

MAIL NAME	APPOINTEE	SLOT	School/Org
TBA	Governor	Business Leader	
Mrs. D'Etta P. Broam	Governor	Parent	
Ms. Leigh Bolick	Governor	First Steps Board	
Mr. Earl Mitchell	Governor	State Library Board	
Dr. Charles Guy Castles III	Governor	Pediatrician	
Mr. William Marcus Brasington, Jr.	Governor	Community Foundation/Literacy Organization	
Ms. Molly C. Talbot-Metz	Governor	Community Foundation/Literacy Organization	
Ms. Pamela Lackey	State Superintendent	Business Leader	AT&T
Dr. Mick Zais	State Superintendent	Parent	SCDE
Ms. Amy Sprague	State Superintendent	Parent Educator	Berkeley County School District
Dr. Kathy Headley	State Superintendent	Reading Researcher	Clemson University
Ms. Mary Elizabeth Thomas	State Superintendent	Literacy Coach	Lexington 4 School District
Ms. Mary Annette Parrott	State Superintendent	Literacy Coach	Sumter School District
Ms. Cynthia Downs	State Superintendent	Early Childhood/Academic Leader	Newberry School District
Dr. Lynn Moody	State Superintendent	Early Childhood/Academic Leader	York 3 School District
Dr. Cherry Daniel	State Superintendent	Elementary Principal	SC Virtual Charter School
Ms. Marisa Vickers	State Superintendent	Middle School Principal	Richland 1 School District
Ms. Audrea Phillips	State Superintendent	Teacher	Horry School District
Ms. Kelli Sanders	State Superintendent	Teacher	Bamberg 1 School District
Ms. Debbie Milner	State Superintendent	Teacher	Spartanburg 7 School District
Ms. Angela Hutto	State Superintendent	Teacher	Hampton 1 School District
The Honorable Michael L. Fair	Senate	Senator	Senate
The Honorable Mark N. Willis	House	Representative	House
Ms. Rose Sheheen	State Board	Board Member	State Board
Ms. Ann Marie Taylor	EOC	Board Member	EOC

Appendix 2

Panel Presentations and Handouts

DOUBLE

JEOPARDY

**HOW THIRD-GRADE
READING SKILLS
AND POVERTY
INFLUENCE HIGH
SCHOOL GRADUATION**

By Donald J. Hernandez
Professor, Department of Sociology
Hunter College and the Graduate Center,
City University of New York and
Senior Advisor, Foundation for Child Development

The Annie E. Casey Foundation

APRIL 2011

ACKNOWLEDGEMENTS

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The Annie E. Casey Foundation

DOUBLE JEOPARDY: HOW THIRD-GRADE READING SKILLS AND POVERTY INFLUENCE HIGH SCHOOL GRADUATION

Educators and researchers have long recognized the importance of mastering reading by the end of third grade. Students who fail to reach this critical milestone often falter in the later grades and drop out before earning a high school diploma. Now, researchers have confirmed this link in the first national study to calculate high school graduation rates for children at different reading skill levels and with different poverty rates. Results of a longitudinal study of nearly 4,000 students find that those who don't read proficiently by third grade are four times more likely to leave school without a diploma than proficient readers. For the worst readers, those couldn't master even the basic skills by third grade, the rate is nearly six times greater. While these struggling readers account for about a third of the students, they represent more than three fifths of those who eventually drop out or fail to graduate on time. What's more, the study shows that poverty has a powerful influence on graduation rates. The combined effect of reading poorly and living in poverty puts these children in double jeopardy.

The study relies on a unique national database of 3,975 students born between 1979 and 1989. The children's parents were surveyed every two years to determine the family's economic status and other factors, while the children's reading progress was tracked using the Peabody Individual Achievement Test (PIAT) Reading Recognition subtest. The database reports whether students have finished high school by age 19, but does not indicate whether they actually dropped out.

For purposes of this study, the researchers divided the children into three reading groups which correspond roughly to the skill levels used in the National Assessment of Educational Progress (NAEP): proficient, basic and below basic. The children were also separated into three income categories: those who have never been poor, those who spent some time in poverty and those who have lived more than half the years surveyed in poverty.

The findings include:

- ❑ One in six children who are not reading proficiently in third grade do not graduate from high school on time, a rate four times greater than that for proficient readers.
- ❑ The rates are highest for the low, below-basic readers: 23 percent of these children drop out or fail to finish high school on time, compared to 9 percent of children with basic reading skills and 4 percent of proficient readers.
- ❑ Overall, 22 percent of children who have lived in poverty do not graduate from high school, compared to 6 percent of those who have never been poor. This

rises to 32 percent for students spending more than half of their childhood in poverty.

- ❑ For children who were poor for at least a year *and* were not reading proficiently in third grade, the proportion that don't finish school rose to 26 percent. That's more than six times the rate for all proficient readers.
- ❑ The rate was highest for poor Black and Hispanic students, at 31 and 33 percent respectively—or about eight times the rate for all proficient readers.
- ❑ Even among poor children who were proficient readers in third grade, 11 percent still didn't finish high school. That compares to 9 percent of subpar third grade readers who have never been poor.
- ❑ Among children who never lived in poverty, all but 2 percent of the best third-grade readers graduated from high school on time.
- ❑ Graduation rates for Black and Hispanic students who were not proficient readers in third grade lagged far behind those for White students with the same reading skills.

BACKGROUND

More than three decades ago research began to suggest that children with low third-grade reading test scores were less likely to graduate from high school than children with higher reading scores.¹ Third grade is an important pivot point in a child's education, the time when students shift from learning to read and begin reading to learn. Interventions for struggling readers after third grade are seldom as effective as those in the early years.² Recognizing the importance of early reading skills, the No Child Left Behind Act has, from the outset, required states to test reading skills annually for all students beginning in third grade, and to report these results for children by poverty status and race-ethnicity, as well as for English Language Learners and for children with disabilities.³ This act asserted "President Bush's unequivocal commitment to ensuring that every child can read by the end of third-grade."⁴ More recently, in March 2010, the Obama Administration released its blueprint for revising the act, known as the Elementary and Secondary Education Act, calling for "Putting Reading First" by significantly increasing the federal investment in scientifically based early reading instruction.⁵ President Obama has also called for restoring the United States to its position as No. 1 in percentage of college graduates. (It is now tied for 9th). Accomplishing that goal will mean ensuring that millions more students graduate from high school.⁶

Meanwhile, the National Assessment of Educational Progress (NAEP), also known as the "The Nation's Report Card," shows for 2009 that only 33 percent of fourth graders read at a

“proficient” level, while the remaining 67 percent do not, and instead read at the “basic” level (34 percent), or below the basic level (33 percent).⁷ “Fourth grade students performing at the Proficient level should be able to integrate and interpret texts and apply their understanding of the text to draw conclusions and make evaluations.”⁸ Thus, two thirds of students did not finish third grade with these essential reading skills, and are reading below grade level. This report presents the first-ever analysis of high school graduation rates separately for children with reading test scores that correspond roughly to the proficiency levels set by NAEP, with additional results for children reading below the proficient level, at either the basic or below basic level of reading test scores.

FINDINGS

ONE IN SIX CHILDREN WHO ARE NOT READING PROFICIENTLY IN THIRD GRADE FAIL TO GRADUATE FROM HIGH SCHOOL ON TIME, FOUR TIMES THE RATE FOR CHILDREN WITH PROFICIENT THIRD-GRADE READING SKILLS

Overall, the research analysis shows that 88 percent of children graduate from high school by age 19, while the remaining 12 percent do not. Graduation rates vary enormously for children with different reading skills in third grade. Among proficient readers, only 4 percent fail to graduate, compared to 16 percent of those who are not reading at grade level at that age. Among those not proficient in reading, 9 percent of those with basic reading skills fail to graduate, and this rises to 23 percent of those with below basic skills (Figure 1, a&b).

Figure 1a: Children Not Graduating from High School by Age 19, in Total, Proficient, and Not Proficient

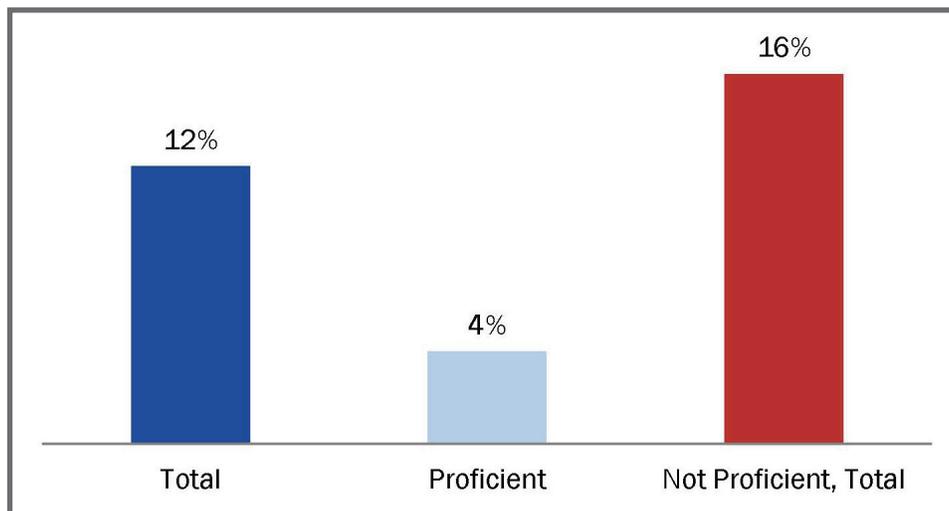
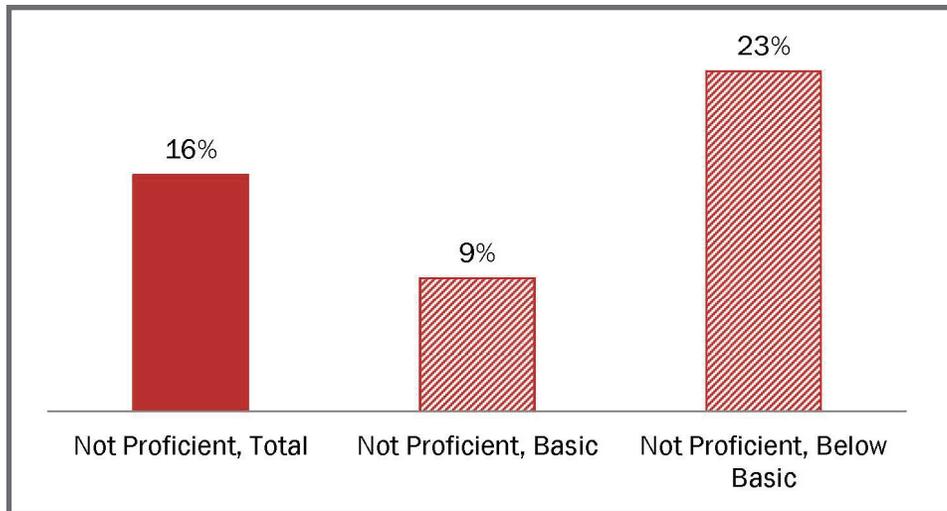
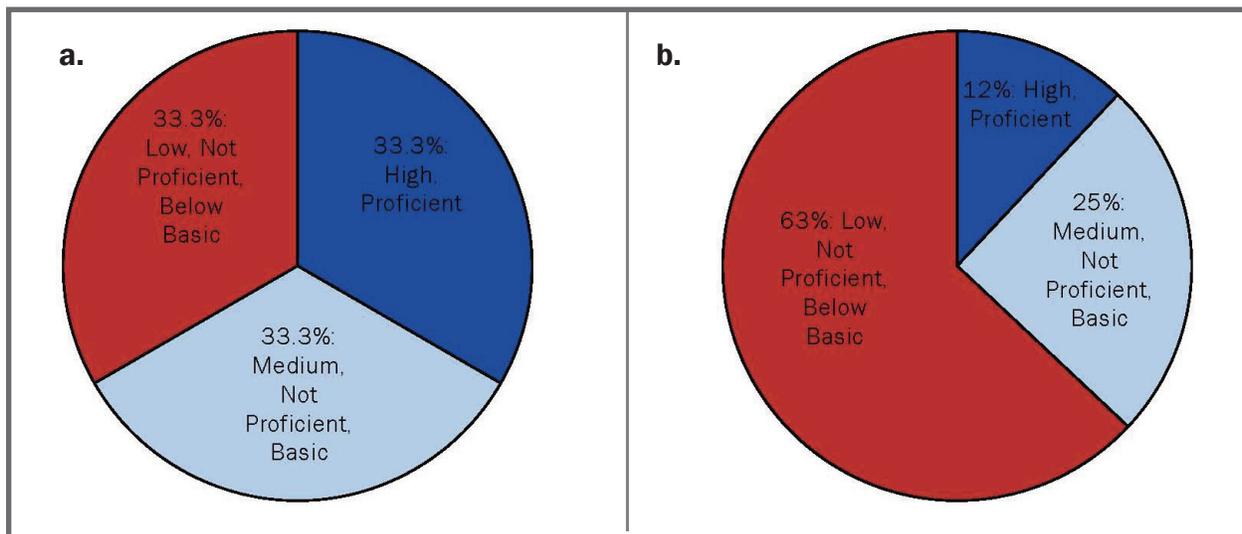


Figure 1b: Further Analysis of Children Not Proficient Who Didn't Graduate from High School By Age 19, Total, Not Proficient Basic and Below Basic



As a result of these enormous differences across groups, children with the lowest reading scores account for a third of students but for more than three-fifths (63 percent) of all children who do not graduate from high school. Third-grade reading matters. (Figure 2, a&b).

Figure 2, a: Third-Grade Reading Test Scores, All Children
b: Children Not Graduating High School by Third-Grade Reading Test Scores, All Children



CHILDREN WHO HAVE LIVED IN POVERTY AND ARE NOT READING PROFICIENTLY IN THIRD GRADE ARE ABOUT THREE TIMES MORE LIKELY TO DROPOUT OR FAIL TO GRADUATE FROM HIGH SCHOOL THAN THOSE WHO HAVE NEVER BEEN POOR

Children whose families live in poverty often lack resources for decent housing, food, clothing, and books, and they often do not have access to high quality child care and early education or to health care. They also are more likely to live in neighborhoods with low-performing schools. Consequently, children in poor families tend to develop weaker academic skills and to achieve less academic success. Many arrive at kindergarten without the language or social skills they need for learning. They miss school frequently because of health or family concerns. They slip behind in the summer with little access to stimulating educational programs or even regular meals.

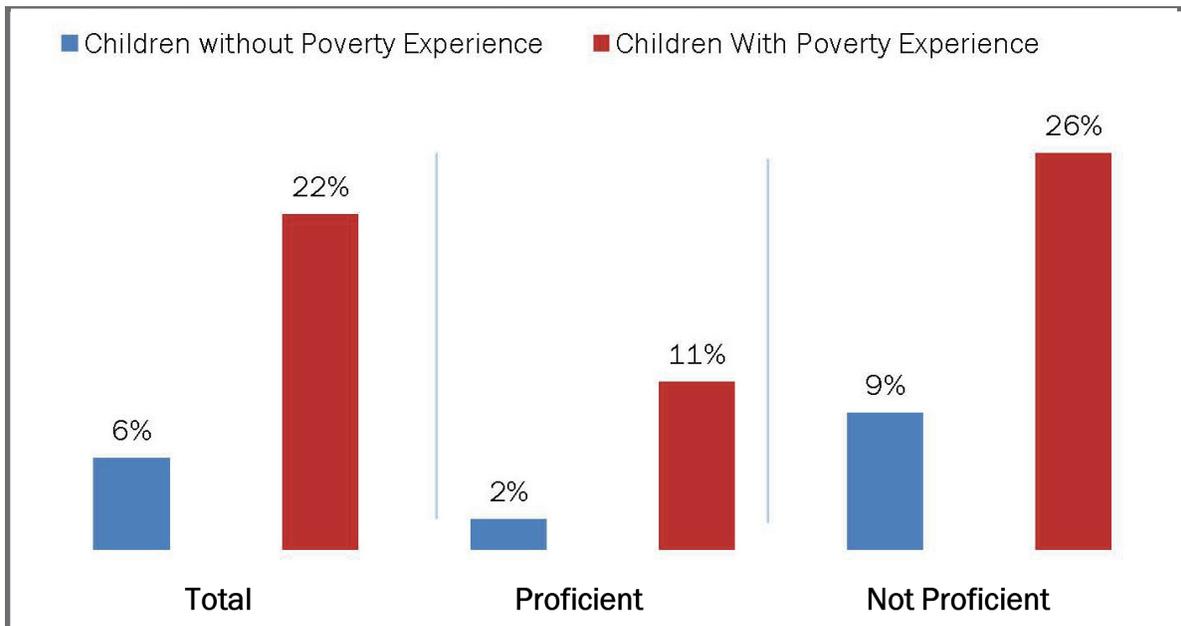
Consequently, the children in poor families are in double jeopardy: They are more likely to have low reading test scores and, at any reading-skill level, they are less likely to graduate from high school.

Using eligibility for the National School Lunch Program to classify children as living in low-income families, results of the NAEP show that nationwide 55 percent of fourth graders in moderate- and high-income families have reading skills below the proficient mark. This jumps to 83 percent for children in low-income families.⁹ New results calculated for this study show that children whose families have incomes below the federal poverty threshold are less likely to finish high school, especially if they have low third-grade reading scores. (The federal poverty threshold in 2010 was \$22,162 for a family of four with two children).¹⁰

For the database used in this study, known as the National Longitudinal Survey of Youth 1979 or NLSY79, children and mothers are interviewed biennially in even-numbered years. Thus, poverty status is measured for each sample child in five of the years between the second and 11th grades (See Appendix I for additional information). Children are characterized in this report as having experience with poverty if, in at least one of these five years, they lived in a family with an income below the federal poverty threshold, and as spending more than half of their childhood in poverty if they lived in poor families for more than half of these years.

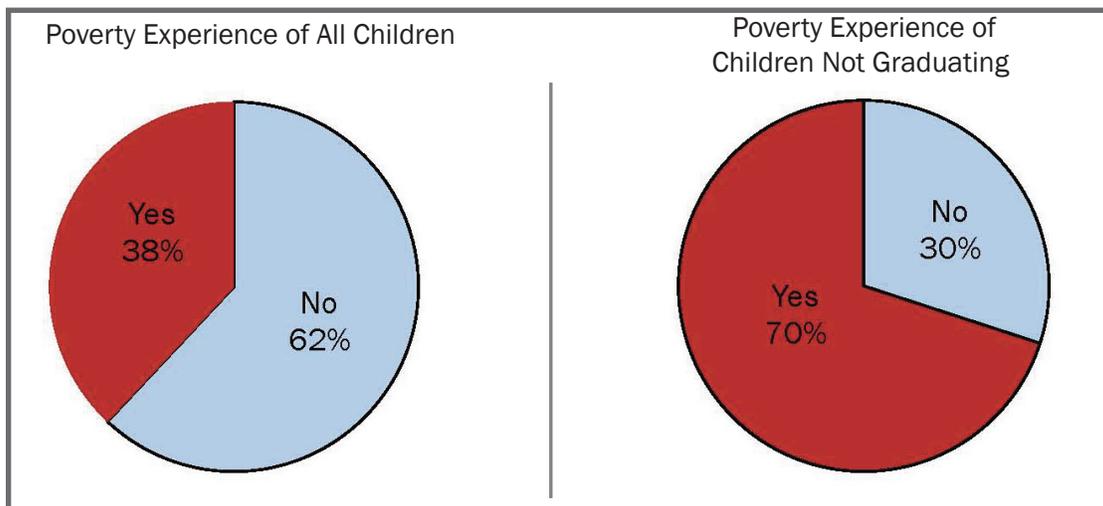
Overall, 22 percent of children with some family poverty experience do not graduate from high school, a figure about three times greater than the 6 percent rate for children with no family poverty experience (Figure 3). This rises to 32 percent for children spending more than half of the survey period in poverty.

Figure 3: Children Not Graduating from High School by Age 19, by Poverty Experience and Reading Proficiency



Among children with two risk factors—poverty and reading skills below the proficient mark—26 percent do not graduate from high school, compared to 9 percent with these subpar reading scores who have never experienced poverty. The graduation rates improve when poor children are reading at a proficient level in third grade. Even so, 11 percent of the top readers who spent at least one year in poverty failed to graduate on time, compared to 2 percent of those who have never been poor. Overall, children who spend a year or more in poverty account for 38 percent of all children, but they account for seven-tenths (70 percent) of all children who do not graduate from high school. Poverty matters (Figure 4).

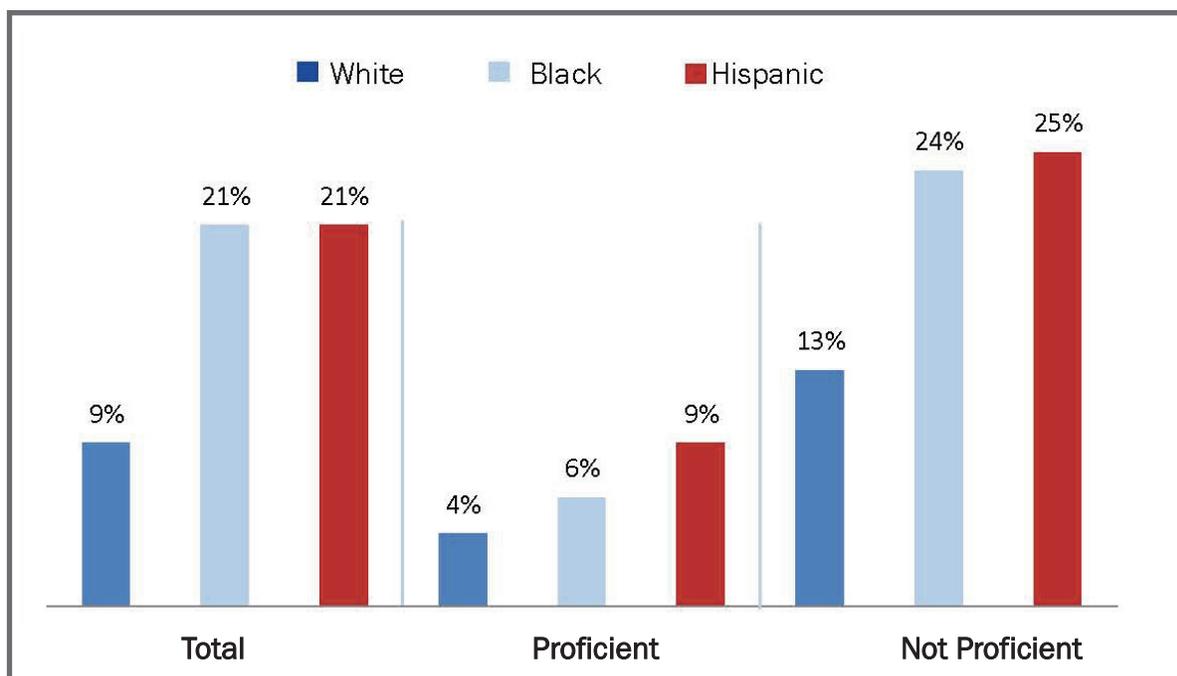
Figure 4: Poverty Experience of Children Not Graduating from High School



BLACK AND HISPANIC CHILDREN WHO ARE NOT READING PROFICIENTLY IN THIRD GRADE ARE ABOUT TWICE AS LIKELY AS SIMILAR WHITE CHILDREN NOT TO GRADUATE FROM HIGH SCHOOL

Black and Hispanic children are not only more likely to live in poverty, they also are more likely to live in neighborhoods with concentrated poverty and low-performing schools. Results from NAEP show that only 42 percent of White students read at the proficient level in fourth grade, and this falls to 16 percent for Black students and 17 percent for Hispanics.¹¹ The NLSY79 database provides racial and ethnic background for students, allowing for a breakdown of test scores on that basis. The study shows that about a quarter of Black and Hispanic students in the survey who are not reading proficiently in third grade don't graduate from high school, compared to 13 percent of other students. (Because there are few Asian families in the longitudinal survey they are combined in a single category largely composed of White students). Thus, Black and Hispanic students who haven't mastered reading in third grade are 11 to 12 percentage points less likely to graduate from high school than White students with similar reading skills. Only about 4 percent of White students who read well in third grade fail to graduate from high school, compared to 6 percent of Black students and 9 percent of Hispanics, differences which are not statistically significant (Figure 5).

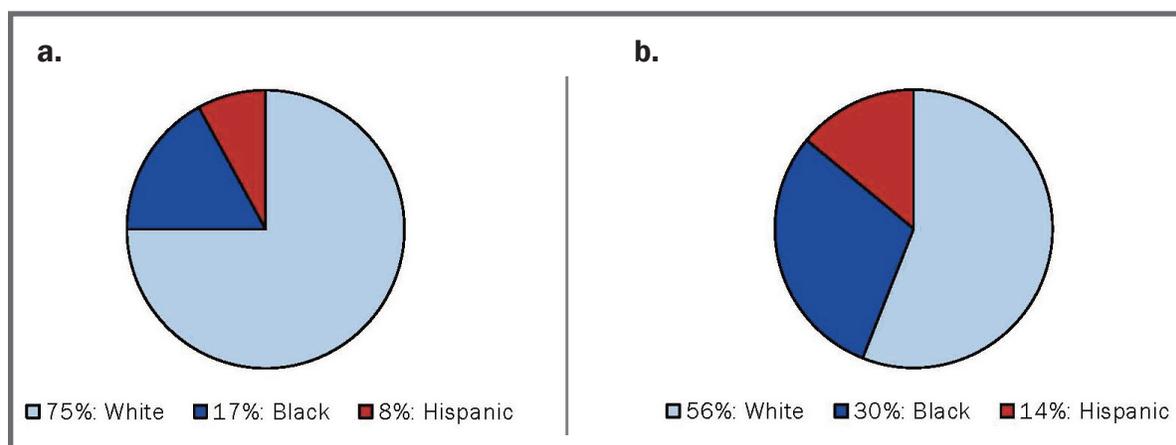
Figure 5: Children Not Graduating by Race-Ethnicity



Among those who spend at least a year in poverty and don't read proficiently, the rates for not graduating from high school rise to 22 percent for White students and to 31 and 33 percent for Black and Hispanic students, respectively (Appendix II Table). Among those who read well and live in poverty a year or more, about 10 to 14 percent of White, Black, and His-

panic students do not graduate from high school; and if they both read well and do not experience poverty, only 2 to 5 percent do not graduate. Although Black and Hispanic students are more likely to be poor readers by third grade and more likely not to graduate from high school, a majority (56 percent) of students in this survey who failed to graduate are White, while 30 percent are Black, and 14 percent are Hispanic (Figure 6).

Figure 6, a: All Children by Race-Ethnicity
b: Children Not Graduating from High School by Race-Ethnicity



POLICY AND PROGRAM STRATEGIES

The findings in this report point toward three distinct environments where new policies and programs could foster children’s school success. The first is schools, which have the immediate responsibility for teaching children to read. Second is the family, because poverty and limits on available resources in the home can undermine children’s capacity and opportunities to learn. Third is federal, state, and local policy, which can profoundly influence the organization and focus of schools and the extent to which children and families live in poverty.

High-quality early education is a cost-effective investment for improving both early and later school success, particularly for students in low-income families and for Black and Hispanic children.¹² Unfortunately, studies show the effects of good PreK programs can “fade out.” But research also shows that gains for students are sustained if high-quality PreK is linked with the elementary grades, to create a common structure and coherent sets of academic and social goals.¹³ The integrated PreK-3rd approach to education, if fully developed and effectively implemented, involves six components: (1) aligned curriculum, standards, and assessment from PreK through third grade; (2) consistent instructional approaches and learning environments; (3) availability of PreK for all children ages 3 and 4, as well as full-day kindergarten for older children; (4) classroom teachers who possess at least a bachelor’s degree and are certified to teach grades PreK-3rd; (5) small class sizes; and (6) partnership between the school and families.¹⁴ A recent study of an integrated PreK-3rd approach imple-

mented in Chicago found improved educational outcomes leading to a long-term societal return of \$8.24 for every \$1 invested in the first four to six years of school, including the PreK years.¹⁵

Of course, both in the early years and later childhood, chronic school absence is associated with lower educational attainments.¹⁶ This is particularly true for low-income children who are more likely to be chronically absent and more likely to lose out on the intensive literacy instruction in the early grades. The negative impact of school absences on literacy learning is 75 percent greater for low-income children than for their more affluent peers.¹⁷ Schools must address this problem, as well as providing effective instruction whenever students are present in the classroom. Similarly, research spanning 100 years has shown that students lose ground during summer, particularly low-income students. They lose an average of more than two months in reading achievement over the summer, slowing their progress toward third-grade reading proficiency.¹⁸ It is also, therefore, important for schools and communities to develop opportunities for summer learning which are aligned with instruction that occurs during the regular school year.

In families, parents are the first teachers, preparing their children to read simply by talking and reading to them frequently. They can also be the first to spot health and developmental problems that may lead to reading difficulties. But parents don't always know what to look for or how to help their children, and access to health care is essential. Poverty is strongly associated with lack of health insurance coverage. For example, 10 percent of people in families with incomes of \$50,000 or more are not covered by health insurance, but this jumps 19 percent for those with family incomes between \$25,000 and \$49,999, and to 29 percent for those with family incomes below \$25,000.¹⁹ Children in poor families also are more likely than their peers to have parents with limited education, because lower education is associated with earning lower incomes.²⁰ These findings suggest that policies and programs which would increase access to health insurance for children and to improved education for parents, particularly in low-income families, could play an important role in fostering children's educational success.

Finally, schools and parents cannot, by themselves, bring about these changes. Federal, state, and local governments will be essential in the development and funding of efforts to expand PreK, to develop integrated PreK-3rd initiatives, to reduce chronic absenteeism, to expand summer learning opportunities, to assure that schools provide high-quality instruction, and to provide access to health insurance and to effective opportunities for parents to increase their educational levels and human capital. The links between parent education, family income and children's educational success further suggest the potential value in pursuing two-generation strategies, which seek to improve results for children by focusing simultaneously on school policies and programs, and on strengthening families through increased parental education and improved employment opportunities that reduce family poverty, as well as increased health insurance coverage for all family members.

FUTURE ANALYSES WILL PROVIDE A DEEPER UNDERSTANDING

This brief presents the preliminary results from the first phase of research into the factors that keep students from finishing high school. Additional analysis will look at the effect that neighborhoods with high concentrations of poverty have on student graduation rates. Beyond that, the next phase of this research will systematically assess the living conditions of children to identify family, school, and neighborhood resources that can foster resilience among children, that is, resources which can make it possible for at-risk children to achieve third-grade reading success, and resources which can make it possible for children with limited third-grade reading skills to catch-up so that they can graduate from high school on time. This research will focus especially on the impact of increased mother's education and family income, access to health insurance, access to pre-kindergarten and high-quality schools, and improved neighborhood safety. I plan to expand the research to understand the role of specific family processes that link family, school, and neighborhood resources to third-grade reading success and to high school graduation.

APPENDIX I

TECHNICAL NOTES

The results for on-time high school graduation (by age 19) presented in this report are calculated from the National Longitudinal Survey of Youth 1979 (NLSY79) and the associated data for children of mothers in the sample. The NLSY79 is the only data source capable of providing such estimates, because it is the only nationally representative study that has assessed student reading in third grade, and then subsequently has followed the same children into their young adult years.

More specifically, this study calculates high school graduation rates for children born between 1979 and 1989 to mothers who were in the age range of 22 to 32 years. The mothers in the sample were originally selected to be nationally representative of all women born in the years 1957 to 1964, and who were residents in the U.S. in 1978. They were first interviewed at ages 14 to 22 in 1979.²¹ Insofar as the baby-boom generation was born in the years 1946 to 1964, the high school graduation rates reported here are for children who are old enough (age 19 or more) to have graduated from high school on time, and who have mothers born in the last half of the baby boom.

The NLSY79 was conducted by the Bureau of Labor Statistics in the U.S. Department of Labor. The sample size for analyses in this report was 3,975 children. Reading assessments were conducted as early as 1986, and data used in this report were collected as recently as 2008. Reading skill is measured in this study using the Peabody Individual Achievement Test (PIAT) Reading Recognition subtest. This survey interviews children and their mothers biennially in even-numbered years. For half the sample, data were collected for children as of

third, fifth, seventh, ninth, and 11th grades. For the other half of the sample, data were collected for children as of the second, fourth, sixth, eighth, and 10th grades.

For reading test scores, results were used for third grade if available, otherwise test scores were calculated as the average of second-grade and fourth-grade scores if both were available, otherwise the second-grade assessment was used if available. This study calculates the proportion of years a child experiences family poverty as the number of “interview years” the child lived in a poor family divided by the number of interview years available for the child between second grade and eleventh grade.

This study calculates high school graduation rates for children in the top, middle, and bottom thirds of the PIAT reading score distribution. These subpopulations were selected to correspond roughly to children classified in NAEP as reading at a proficient, basic, or below basic level. In the years between 1992 and 2009, the proportion scoring at or above proficient on NAEP was in the narrow range of 29 to 33 percent, while the remaining 67 to 71 percent scored below proficient at either the basic or below basic level. The proportion scoring in the middle (basic) category, was 18 to 26 percent in the years up to 2000, and in the higher range of 26 to 34 percent through 2009, while the proportion with test scores in the lowest (below basic) category was 38 to 41 percent up to 2000, and in the range of 33 to 27 percent in the years that followed.²²

APPENDIX II

Percent Failing to Graduate from High School by Age 19, for Children by Third-Grade Reading Test Scores, by Race-Ethnicity, and by Poverty Experience					
			Reading Scores Below Proficiency		
	All Children	Proficient	Total	Basic	Below Basic
Total	12	4	16	9	23
White	9	4	13	7	19
Black	21	6	24	15	30
Hispanic	21	9	25	12	33
Have Not Experienced Poverty					
Total	6	2	9	5	14
White	5	2	7	4	12
Black	10	3	12	6	18
Hispanic	12	5	15	5	24
Have Experienced Poverty					
Total	22	11	26	18	31
White	19	11	22	15	27
Black	28	10	31	22	35
Hispanic	30	14	33	20	40

ENDNOTES

- ¹ Lloyd, D.N. (1978). Prediction of School Failure from Third-Grade Data. *Educational and Psychological Measurement*, 38, 1193-2000.
- ² Reported in Annie E. Casey Foundation (2010), "EARLY WARNING! Why Reading by the End of Third-grade Matters" A KIDS COUNT Special Report from the Annie E. Casey Foundation. Baltimore, MD. Annie E. Casey Foundation.
- ³ Archived: Executive Summary of the No Child Left Behind Act of 2001, retrieved March 15, 2011, from <http://www2.ed.gov/nclb/overview/intro/execsumm.html>
- ⁴ Archived: Executive Summary of the No Child Left Behind Act of 2001, retrieved March 15, 2011, from <http://www2.ed.gov/policy/elsec/leg/blueprint/index.html>
- ⁵ Archived: Executive Summary of the No Child Left Behind Act of 2001, retrieved March 15, 2011, from <http://www2.ed.gov/nclb/overview/intro/execsumm.html>
- ⁶ Reported in America's Promise Alliance (2010), *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic*, Washington D.C. America's Promise Alliance.
- ⁷ Reported in Annie E. Casey Foundation (2010), "EARLY WARNING! Why Reading by the End of Third-grade Matters" A KIDS COUNT Special Report from the Annie E. Casey Foundation. Baltimore, MD. Annie E. Casey Foundation.
- ⁸ The NAEP Reading Achievement Levels by Grade. Retrieved March 15, 2011 from <http://nces.ed.gov/nation-reportcard/reading/achieveall.asp#2009ald>
- ⁹ Reported in Annie E. Casey Foundation (2010), "EARLY WARNING! Why Reading by the End of Third-grade Matters" A KIDS COUNT Special Report from the Annie E. Casey Foundation. Baltimore, MD. Annie E. Casey Foundation.
- ¹⁰ U.S. Census Bureau, 2011, Retrieved March 26, 2011 from <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>
- ¹¹ Reported in Annie E. Casey Foundation (2010), "EARLY WARNING! Why Reading by the End of Third-grade Matters" A KIDS COUNT Special Report from the Annie E. Casey Foundation. Baltimore, MD. Annie E. Casey Foundation.
- ¹² Haskins, Ron and Cecilia Rouse. 2005. "Closing Achievement Gaps." *The Future of Children, Policy Brief, Spring 2005*. Princeton, N.J.: Princeton-Brookings; Heckman, James J. and Dimitriy V. Masterov. 2007. "The Productivity Argument for Investing in Young Children." Retrieved January 23, 2009, from http://jenni.uchicago.edu/human-inequality/papers/Heckman_final_all_wp_2007-03-22c_jsb.pdf; Lynch, Robert G. 2004. *Exceptional Returns: Economic, Fiscal and Social Benefits of Investment in Early Childhood Development*, Washington, D.C.: Economic Policy Institute.
- ¹³ Reynolds, J.J., Temple, J.A., Robertson, D.L. & Mann, E.A., (2001) Long-term Effects of an Early Childhood Intervention on Educational Achievement and Juvenile Arrest: A 15-year Follow Up of Low-income Children in Public Schools. *Journal of the American Medical Association*, 285(18), 2339-2346; U.S. Department of Health and Human Services (Dec. 2003). *State-funded Prekindergarten Programs: What the Evidence Shows*. Washington, D.C.: U.S. Department of Health and Human Services.
- ¹⁴ Grantmakers for Education. Making the Most of Our Investments: How PK-3 Alignment Can Close the Achievement Gap from the Start. Retrieved March 28, 2011 from <http://www.fcd-us.org/sites/default/files/MakingTheMostOfPK3Investments.pdf>
- ¹⁵ Reynolds, A.J., Temple, J.A., White, B.A.B., & Ou, S. (January/February 2011) Age 26 Cost-benefit Analysis of the Child-parent Center Early Education Program. *Child Development* 82(1): 379-404
- ¹⁶ Chang, H.N. & Romero, M. (September 2008). *Present, Engaged, and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades*. New York, NY: National Center for Children in Poverty

¹⁷ Ready, Douglas D., *Socioeconomic Disadvantage, School Attendance, and Early Cognitive Development, The Differential Effects of School Exposure*, Sociology of Education, October 2010

¹⁸ The Campaign for Third Grade Reading. Retrieved March 28, 2011 from <http://www.gradelevelreading.net/policypractice/summer-learning-loss/>

¹⁹ DaNavas-Walt, C., Proctor, B.D., & Smith, J.C. (September 2010). *Income, Poverty, and Health insurance Coverage: 2009*. Current Population Reports, Consumer Income, P60-238. Washington, DC: US Census Bureau.

²⁰ Crissey, S.R. (January 2009). *Educational Attainment in the United States*, Current Population Reports, P20-560. Washington, DC: US Census Bureau, Detailed Tables, Appendix B. Retrieved March 28, 2011 from <http://www.census.gov/hhes/socdemo/education/data/cps/2007/tables.html>

²¹ National Longitudinal Surveys, The NLSY79, Retrieved March 12, 2011 from <http://www.bls.gov/nls/nlsy79.htm>

²² National Assessment of Educational Progress, Retrieved March 27, 2011 from http://nationsreportcard.gov/reading_2009/nat_g4.asp?tab_id=tab2&subtab_id=Tab_1#tabsContainer



Florida's Education Revolution

Reading for Learning

FREQUENTLY ASKED QUESTIONS

What challenges did Florida face implementing the third grade promotion policy?

A major challenge when implementing the third grade promotion policy was clear communication on the specifics of the policy and effectively communicating that the policy was an opportunity for a struggling reader to get the assistance he or she needed to become proficient reader.

Providing and defining good cause exemption options to the policy was also challenging. Providing an open hearing and laying out the good cause exemptions clearly is critical to the acceptance of the policy. In addition, having clear expectations on the student portfolio of work option is critical.

Establishing a strong professional development program and reading coaches to mentor teachers to teach reading was also important to the policy's success. Florida provided resources, such as parent workshops, that included student activities and support to parents about how they can support reading at home in the evenings. The strategy of working with parents showed that the state was committed to do something for their children to help them become successful, not just working with teachers and relying on the education system, but also the parents themselves, to change the culture to ensure student success.

Is retention "cruel to children"?

The status-quo is cruel to children. Educators who retain children and teach them how to read are doing them an enormous favor. The RAND Corporation's study of the New York City retention policy found positive psychological benefits for retained students.

How does Florida measure early reading proficiency?

Florida provides several options to measure early reading proficiency. The Early Reading Diagnostic Assessment K-3 (ERDA) and the Diagnostic Assessments of Reading K-12 (DAR) are available through the Florida Department of Education's Office of Assessment and School Performance free of charge for the school district's lowest-performing 15 percent of all K-12 students. Developmental screeners, like Early Childhood Observation (ECHO) (colors and shapes), Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and now the Florida Assessment of Instruction in Reading (FAIR) provide schools' options for assessing early

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literacy. These assessments focus on phonemic awareness, phonics, fluency, vocabulary, and comprehension and identify areas in which the student is struggling. For a comprehensive list of reviewed assessments that meet psychometric standards, visit www.fcrr.org.

How much does a literacy-based promotion policy in third grade cost?

Implementing a literacy-based promotion policy in third grade will not incur additional costs on the state. The federal government requires all states to have a statewide standards-based assessment in third grade. Educators use this assessment to determine if students have acquired the necessary reading skills to advance to 4th grade. However, states should consider investing or leveraging existing resources to provide reading coaches who can assist teachers to learn the new science of teaching reading.

How do elementary schools deal with the extra students from a facility standpoint?

There are no extra students. The retention policy results in greater numbers of 3rd graders, but smaller numbers of 4th graders. Policy implementation sometimes involved changing a teacher assignment from 4th grade to 3rd grade.

What was the fiscal impact of this policy in Florida?

The amount of funding spent on ensuring kids know how to read, even if it takes them an extra year, is by far made up for in less costs remediating them for the next nine years in the K-12 system, if we are lucky, or as dropouts. Primary grades are the least expensive options to remediate students and the most realistic time to make it happen. An ounce of prevention is worth a pound of cure.

Any cost incurred with a test-based promotion policy should be regarded as an investment in child literacy, not a by-product of retention. Retention has been tried in other states before as a policy to address illiteracy and failed, as have efforts to fund literacy efforts without test-based assurance of its effectiveness. It was the unique combination of retention coupled with effective interventions that define Florida's policy and ensured its success. The key to the financial viability of this policy is making better use of existing local, state and federal funds. With a national average level of spending of \$10,000 per child per year, a typical American student has had \$40,000 invested by taxpayers by the time they reach the end of the 3rd grade. Taxpayers provide that money to *educate* rather than merely babysit the child. A child's future hangs precariously in the balance during the early grades, and we must fiercely pursue the maximum bang for every buck invested whether or not you decide to dedicate additional state funds for literacy interventions.

What about studies that show in other states that retention "does not work"?

Florida's model is very different. Researchers have subjected the Florida policy to three rigorous statistical evaluations and found both times that the policy helped retained students to gain literacy skills. As noted, educators and lawmakers have tried and failed with retention policies around the country previously. Florida's was different in that it targeted K-3, and that it only

used objective data as the basis for retention. The Sunshine state also had an appropriate balance of good cause exemptions only students who could benefit found themselves included in the policy.

Retention itself is not the goal here, it's remediation and intervention coupled with the test-based promotion that makes it a successful combination. In addition to Florida data demonstrating increases in proficiency on the statewide-standardized assessment and the National Assessment for Educational Progress (NAEP), several research studies (listed in detail in the following question's answer) provide evidence that Florida's policy is working.

A third grade promotion policy may help temporarily, but where is the long-term evidence? Does retention cause students to drop out?

The first class of retained students in Florida has not yet graduated high school. Evidence of the policy's impact on high school graduation and dropout rates will first be available in 2013 for third graders retained for the first time under the policy in 2003.

Reading proficiency in Florida, at every grade level and all subgroups (white, black, Hispanic, students with disabilities, etc.) has steadily been increasing over the last decade. Florida's graduation rates have been consistently increasing and they are at the highest rate ever. Likewise, Florida's dropout rates have been consistently decreasing and are at the lowest rate ever.

Research conducted on Florida's retention policy by the Manhattan Institute in three separate studies has shown there are statistically significant positive effects of the policy over time. Their currently published findings studied the program for the first three years of implementation and the Manhattan Institute has already secured data and begun work on a longer-term study of the policy with results anticipated next year.

Why can't we just fund literacy efforts without a retention policy?

A literacy program or policy is not enough because it does not provide the necessary pressure for the adults in the system to help kids that are not proficient. A literacy policy needs to be student-focused with specific help for students that are not proficient, like non-promotion to the next higher grade, coupled with literacy strategies. Florida did not just retain students for the sake of retention -- the state implemented improved professional development for teachers and principals in the research on reading and put reading coaches in place, among a number of other interventions to truly change what was happening in the public schools. Policymakers need a test-based promotion policy like Florida has to ensure teachers and students have the accountability for learning and mastery that children need to succeed.

Could a third grade progression policy jeopardize federal funds?

Not if districts observe the strict rules around supplanting (where the state is currently funding an initiative then federal funding comes into the state). For example, Florida's policy requires that students retained at 3rd grade receive supplementary learning experiences such as a summer

reading camp. Districts will have to think creatively about their funding sources for some activities, but it is not an insurmountable dilemma and has not resulted in Florida losing any federal funds.

Does the Florida policy retain students for demonstrating deficiencies in all of the subjects or only in reading?

The Florida policy bases promotion and retention decisions solely on reading. In Florida, as is typical in most states, performance on the reading statewide assessment is highly correlated with performance on the math assessment. Also, reading is the foundational skill students need to be able to learn.

Do the interventions associated with this policy require new funding sources or can we provide them with reallocations of existing dollars?

Both. A large portion of funding in Florida, previous to this policy, was typically used for summer school and post-failure remediation. Lawmakers reallocated these funds and allowed them to be used for “preventative care.” Florida lawmakers also focused the federal Title I and Title II funds on ensuring students can read. In addition, the timing of the implementation coincided relatively well with the infusion of Reading First funds from USDE, which was used to hire reading coaches to mentor teachers.

Does the state mandate which instructional and support services are to be utilized as interventions?

No, the state does not mandate specific services, but, the services selected by the district must be consistent with scientifically based reading research. The Florida Center for Reading Research (FCRR) www.fcrr.org has extraordinary information about the materials that educators use to provide these services. Additionally, Florida has a statewide textbook adoption cycle that requires districts to select scientifically-based reading research (SBRR) materials consistent with research and Florida’s literacy-based promotion policy.

What is the timeline for notifying students of retention?

The statewide assessment is administered in April; results are back to the school and parents before the end of the school year in May. Students cannot retake the statewide assessment to meet the third grade promotion policy. Instead, students may demonstrate proficiency on an approved alternate measure like SAT10, through a student portfolio or, the following year as a third grader if retained.

If a student moves into the school district from out-of-state at the beginning of 4th grade (or any grade after 3rd), must that student meet the third grade promotion requirements?

No. In addition, the third grade promotion policy does not apply to students not enrolled in public school for third grade.

How does the state ensure consistency in student portfolios to demonstrate a consistent standard across districts?

The state has a framework for what needs to be included in a student portfolio and it is comprehensive, as outlined below. Having a consistent policy statewide has alleviated the concern about students leaving one district for another because the portfolio is rumored to be easier.

Portfolio requirements:

- Be selected by the student's teacher;
- Be an accurate picture of the student's ability and only include student work that has been independently produced in the classroom;
- Be inclusive of evidence that demonstrates the grade 3 Reading FCAT have been met. This includes multiple choice items and passages that are approximately 60 percent literary text and 40 percent information text that are between 100-700 words with an average of 350 words; Such evidence could include chapter or unit tests from the district's/school's adopted core reading curriculum that are aligned with the Sunshine State Standards or teacher-prepared assessments that are aligned with the Sunshine State Standards;
- Be an organized collection of evidence of the student's mastery of the Sunshine State Standard Benchmarks for Language Arts that are assessed by the grade 3 Reading FCAT. For each benchmark, there must be at least five examples of mastery as demonstrated by a grade of "C" or above; and
- Be signed by the teacher and the principal as an accurate assessment of the required reading skills.

In small, rural schools where there may only be one third grade teacher, what happens to retained students?

In cases where there is only one third-grade classroom, it is imperative that teachers collaborate and use school support to provide a strategy to ensure these students receive intensive interventions and appropriate remediation. The state also makes online options available to students.

Is there a specific curriculum for the retained students?

Retention alone will not solve the problem of teaching students to read; these students will require differentiated curriculum and instruction. Florida knows that doing the same thing for another year will not produce different results. This is why Florida and the U.S. Department of Education provided funding for Scientifically-Based Reading Research (SBRR), so we know what is effective to help struggling readers. Educators must provide retained students with additional intensive instructional time using SBRR, materials and strategies, please visit www.fcrr.org for all the information. Districts are required to use SBRR materials with retained third grade students.

CHALLENGES AND SOLUTIONS FOR EARLY READING PROFICIENCY

1. According to the National Assessment of Educational Progress, reading proficiency hasn't improved much nationwide over the past 20 years. But in South Carolina evidence of improvement has been somewhat more encouraging over the past decade:

Years	1992	1994	1998	2000	2002	2003	2005	2007	2009
4th grade % Below Basic									
SC	47	52	47	na	42	41	43	41	38
US	38	40	40	41	36	37	36	33	33
4th Grade % Proficiency									
SC	22	20	22	na	21	26	26	26	28
US	29	30	29	29	31	31	31	33	33
4th Grade Scale Scores									
SC	210	203	209	na	214	215	213	214	216
US	217	214	215	213	219	218	219	221	221

2. SC has ranked in the bottom 10 states on 4th grade reading: **On the NAEP reading test in 2009, SC was tied for 39th with Alabama and Arkansas in the 4th grade and was 42nd in the 8th grade.** The lowest scoring states are Louisiana, Mississippi, California, New Mexico, and Nevada. These states are similar to South Carolina in their high rates of poverty, low literacy, and minority populations.
3. Data from state tests for the percent deficient and for not proficient vary but **generally show too many deficient readers and too few proficient:** State test data over the past 30 years provide an ambiguous picture. Test scores in the first year of testing have always been discouraging but then become much better after several years of instructional alignment and practice in taking the test.
 - **First year state testing results have generally shown over 30% of students below standards:** in grade 3 for BSAP 33% and PACT 35%; for SCRA 30% in kindergarten and 33% in 1st grade; 22% on 3rd grade PASS were below standards (Not Met) in ELA and 31% in Writing. **Overall it seems reasonable to conclude: at least 25% of students and more likely over 30% are seriously deficient in reading by the end of grade 3. These state test results for early reading deficiency are significantly lower than the 38% Below Basic on 4th grade NAEP in 2009 and the 41-43% Below Basic in the 4 NAEP testing administrations from 2002 to 2008.**
 - **It appears that approximately 60-70% of students in SC are not proficient in reading by grade 4.** State tests have shown 72% not proficient in the 1st year of PACT testing and 43% in its last year. On PASS ELA in its first year, 54% were below Exemplary on ELA and 60% on Writing. NAEP data found 74% not proficient in 4 testing administrations for 2002-2008 and 72% in 2009.

- **If state testing results are used to adjust the findings of NAEP (38% Below Basic, 34% Basic, and 28% Proficient), then a plausible though generous interpretation would be one-third of SC students at each level: Below Basic, Basic, and Proficient. Since the national goal is for all students to achieve proficiency, one-third of students in SC have attained this standard; one-third are close enough with significant support to reach the standard; and one-third have little prospect of ever becoming proficient, unless they are given substantial effective help starting no later than their initial enrolment in school and preferably earlier.**

4. Five achievement gaps reveal troubling disparities in reading proficiency among students in SC: race (minority vs. white), income (poor vs. non-poor), gender (boys vs girls), English language proficiency (non-English vs. English speakers), and state reading competitiveness (SC vs US).

- **Achievement gaps for race and income are a persistent dilemma in SC. Twice as many African American and poor children score below basic than do whites and children who are not poor. Adding to the challenge is the fact that SC has a much higher proportion of African American and poor children than the national average.** The differences are large: for example, on NAEP 56% of African American children were Below Basic in 2009 as compared with 26% for whites; 51% of poor children were Below Basic as compared with 23% of children who were not poor. A smaller gender gap shows lower reading proficiency of boys than girls on all tests (e.g., 40% vs 36% Below Basic on NAEP Reading). Data is not available specifically for the previously small but rapidly growing number of immigrant English language learners in SC, but the gap for Hispanics on the 4th grade NAEP in 2009 was 47% Below Basic for Hispanic children as compared with 26% for non-Hispanic white children.

5. While some students come to school already reading or with knowledge and skills enabling them to become proficient readers quickly, many other children are quite unexposed to and unskilled in foundational literacy knowledge, skills, and interest. On the SC Readiness Assessment, teachers rated as not consistently ready one-quarter of kindergarten and 1st grade students in reading and writing and one-third in their communication skills. The Stanford Reading First test in the fall of 1st grade determined that in high-poverty schools only 20% of students have reading skills at grade level while 54% need substantial intervention.

SCRA 2008	Reading (% not consistently ready)	Writing (% not consistently ready)	Communication (% not consistently ready)
Kindergarten	24%	20%	32%
1st grade	25%	28%	33%

Stanford Reading First 2004-2008	At Grade Level	Needs Substantial Intervention
1st grade	20%	54%
2nd grade	36%	31%
3rd grade	26%	47%

6. Children who are slow in becoming capable readers either or both:

- **reached school far behind in language and literacy skills (family literacy deficits).** High-risk children constituting one-quarter of all 4-year-olds were found by the DIAL screening assessment to have low language skills as compared with national norms: 19% below 95% of all students nationally; 30% below 90% nationally; and 50% below 75% nationally.
- The Stanford Reading First test found that the Speaking Vocabulary of 41% of students entering 1st grade in high poverty schools needs substantial intervention, while only 37% have Speaking Vocabulary at grade level of national norms.

DIAL Language at entry to 4K preschool (SC children scored at national percentiles):	
At or below 5 th percentile	19%
At or below 10 th percentile	30%
At or below 25 th percentile	50%

Stanford Reading First Speaking Vocabulary in Fall of 1st grade (at risk schools 2004-2008):	
At grade level	37%
Needs additional intervention	22%
Needs substantial intervention	41%

- **exhibited serious phonological or other reading difficulties: The Stanford Reading First test found that one-third of children entering 1st grade in high poverty schools need substantial intervention for phonemic awareness and phonics.**

Stanford Reading First Phonemic Awareness (at risk schools in Fall of 2004-2008):			
	1 st grade	2 nd grade	3 rd grade
At grade level	56%	65%	78%
Needs additional intervention	11%	21%	15%
Needs substantial intervention	33%	14%	6%

Stanford Reading First Phonics (at risk schools in Fall of 2004-2008):			
	1 st grade	2 nd grade	3 rd grade
At grade level	28%	9%	8%
Needs additional intervention	42%	35%	26%
Needs substantial intervention	30%	56%	66%

7. **Effectiveness of reading and literacy instruction varies widely across school districts, schools, and classrooms but could be improved substantially.** In an evaluation of schools participating in South Carolina Reading First (SCRF), schools with high levels of implementation of the effective reading practices promoted in SCRF had significantly higher standardized test scores on Stanford Reading First than schools with lower levels of implementation of these reading practices.
8. **Progress has been constrained by lack of a formal plan and funding for a statewide reading initiative that reaches all schools. Although South Carolina has never adopted a formal plan, the SC Reading Initiative has developed processes and practices for enhancing reading instruction in classrooms across the state, though far from universally. Using funding averaging \$15 million per year, SCRI has worked with more than 5,200 teachers and many other educators to build their knowledge and skills for effective reading instruction.**

Solutions

- **Formulation of state policy for early reading proficiency, including but not limited to the components listed below.**
 - **Policy Prescribes, Practices Produce (If you don't know where you're going, any road will take you there):** Over three decades of activist state education policy, reading has never been a major and consistent focus. Despite the Basic Skills Act of 1979 and the SC Reading Initiative of 1999, reading has not been promoted through high profile policy and practice guidance from elected officials backed by evaluation and oversight. **Solution:** SC educators and elected officials must create a comprehensive plan for reading instruction. The plan should be enacted through legislation and supported by funding sufficient to promote universal early reading proficiency.
- **Literacy development through Early Care and Education programs:**
 - **Early Care and Too Little Education:** Many children attend child care while their parents are at work. Across South Carolina and the nation, most young children in child care attend programs with rather large group size and high child to teacher ratios. These programs are unable to do much to stimulate oral language and print awareness skills. Many child care workers lack training in early literacy and too quickly take any training with them to better-paying jobs outside child care. **Solutions:** Child care workers must receive high quality literacy training starting soon after being hired and continuing throughout their employment.
- **Family literacy: both parenting education and cultural promotion (comparable to health promotion of exercise and nutrition).**
 - **Families Grow Language (Literacy Begins at Home):** Children in literate families acquire from their parents strong oral language and motivation for reading. Children growing up in homes not providing daily experiences of rich, interactive dialogue and exposure to print reach school considerably behind classmates entering with critical language skills and print awareness. **Solution:** Family literacy programs are needed to encourage and instruct low literacy families to adopt effective practices of interactive dialogue and shared reading, starting as soon after birth as possible. All of the families whose children are anticipated to perform below reading standards in grades K-3 (approximately

30%) need family literacy services, with half of them requiring intensive guidance and support.

- **Schools Grow Readers:** Building upon the oral language and print awareness which children bring from home, schools must provide learning experiences that produce proficient readers. Since too many young learners are not achieving proficiency in reading and writing, schools must transform their literacy instruction starting in preschool and kindergarten to increase early reading proficiency dramatically. **School solutions are presented below:**
- **Pre-school and kindergarten: building the foundation for reading through oral language and print-literacy skills.**
Little Learners Love Literacy: For too many years, preschool and kindergarten too narrowly followed the mantra: “*play is a child’s work.*” Though this mantra is correct about process, it was sometimes interpreted to exclude pre-academic content critical to later success. Children ages 4 & 5 must build their oral language, awareness of print, love of literature, and facility with the sounds in words. **Solution:** Preschool and kindergarten must fill each day with rich experiences in language and literature. Teachers must be trained to infuse language and literature into developmentally appropriate individual and group activities throughout the school day.
- **Grades 1-3: quality reading instruction differentiated for each learner’s needs:**
Struggling Readers Take It Personally. Reading difficulties begin early, so children’s perceptions of themselves as readers and learners can be damaged if they fail to experience success in learning to read. Each child is different and requires personalized kinds and amounts of support at different points in the journey to reading proficiency. **Solution:** In order for each child to attain reading proficiency, all of our schools must deliver consistently effective, customized instruction differentiated to meet the needs of individual children. Differentiated instruction should be organized through a tiered delivery model based on principles and practices of Response to Intervention (RTI). RTI is tiered instructional model with increasingly more intensive and more customized instruction in each successive tier. Tier 1 focuses on instructional improvement for all students; Tier 2 provides small group and individualized intervention services for struggling readers; and Tier 3 offers the most intensive services for the severely struggling readers, often through individualized assistance. Special Education services are provided only when students do not respond to these intensive interventions.
 - **Quality classroom instruction** assures small group and individualized attention for readers who need additional help, delivered by teachers well-trained in reading and literacy. For reading instruction and for every content area, teachers provide all students with books they can read. They employ effective instructional practices such as: (a) determining the strengths and instructional needs of each child; (b) utilizing flexible grouping based on ongoing assessment of learning; (c) continually monitoring progress and adjusting instruction appropriately; (d) expecting large amounts of reading and writing, especially in the content areas; (e) ensuring that all children have ample time for independent reading of books they can easily manage; and (f) providing direct instruction in reading strategies emphasizing problem-solving, understanding, and organizing information.

- **Effective intervention programs for struggling readers delivered by highly qualified reading teachers** provide additional, more intensive help for children in small group and one-on-one settings. Intervention models such as Reading Recovery using effective practices validated by research should serve struggling readers in grade 1 with extended service in the summers before and after grade 1. All intervention services should be taught by the most knowledgeable reading professional available and should be customized to the needs of the reader.
- **Strengthened Special Education, Title I and Act 135 funding for literacy interventions.** For decades Title I, Special Education (now IDEA), and Act 135 (previously the EIA Remedial and Compensatory Program) have provided the largest funding and instructional support for poor and disabled children, many of whom are struggling readers. The effectiveness of these efforts to promote reading proficiency is hindered by the limited reading expertise of many teachers employed with these funds as well as by a lack of cooperation and coordination with the classroom and with other interventions across the school. **Solution:** Title I, Act 135, and IDEA literacy efforts must become central partners in supporting evidence-based literacy interventions delivered by highly-trained teachers. Priority in using the 15% of IDEA funding set aside for Early Intervention Services must be given to support provided by our most effective literacy teachers. When children require long-term assistance, special education services must assure high quality reading instruction for students with disabilities, especially those with speech and language impairment and learning disabilities.

■ **Teacher training and coaching through professional literacy learning communities:**

Teaching Struggling Readers is Brain Surgery (Teachers Must be Taught Too):

Reading and writing instruction is very complicated work requiring extensive knowledge and skills. Most new teachers with a BA enter the classroom with only two courses in reading. Much more preparation is essential. **Solution:** Adequate preparation in reading and writing requires training equivalent to a MA in reading with at least half of the training received through practicum coaching while teaching. Substantial improvement is needed in:

- the quality and number of required university reading courses
- practicum experience in pre-service training
- coaching for teachers in the schools
- collaborative literacy learning among teachers of reading

■ **Evaluation-driven accountability monitoring for early reading proficiency and for content-area reading proficiency:**

Fixing What's Broken (If you don't know what's broken, you can't fix it): While the majority of children progress steadily to reading proficiency with little or no intervention assistance, roughly one-third test below basic in grade 3 and half of these students are severely below grade level. Because there is no statewide plan for monitoring the literacy progress of young children, too many struggling readers are not identified for

early intervention in pre-school and kindergarten as intended by the General Assembly in funding pre-school and full-day kindergarten. **Solution:** The legislature should require universal screening and literacy progress monitoring for all students in grades Pre K through three. These assessments should determine what children already know about written language and what they have not yet learned. The screening and progress monitoring will provide to the state, districts, and schools the information required to identify the students needing additional support and to improve and intensify literacy instruction to ensure reading proficiency by the end of third grade.

- **Assessment of literacy skills at entry to 4K and 5K.** The SCDE should develop or adopt statewide a universal screening instrument and more specialized diagnostic instruments to identify children at risk of reading failure.
 - **Monitor children's progress and difficulties in reading through grade 3 or until attainment of proficiency.** The SCDE should adopt and use a battery of validated formative and diagnostic assessments in reading, writing, and oral language. These assessments should be used to diagnose individual child needs, prescribe services, and monitor the effectiveness of interventions in order to adjust instruction for individual children until attainment of proficiency.
 - **Adopt a collaborative, team problem-solving approach to accelerate literacy learning for students below grade level.** Individual reading proficiency plans designed to accelerate reading progress should be developed collaboratively by school teams together with students' families for every student below grade level. These plans should be actively supported and reviewed until reading proficiency is attained.
- **Legislative oversight through its Education Committees and the EOC:**
Trust but Verify (Out of Sight is Out of Mind): Oversight by elected officials for reading and literacy has been quite limited in the past. Because no major initiatives for reading have been enacted, legislative oversight has been minimal. Other states such as Alabama have created high profile reading initiatives which are monitored for effectiveness by the Legislature, Governor, and Board of Education. **Solution:** The General Assembly through its Education Committees and the Education Oversight Committee should provide strong and persistent monitoring for early proficiency in reading and literacy. Annual reading proficiency reports from the State Department of Education should be published and then reviewed by the EOC to recommend improvements so that educators and elected officials can respond with needed remedies.

Conclusion: there are at least 10 solutions that should receive policy and practice attention for increasing early reading proficiency:

1. Development of a state plan and an oversight process for assuring reading proficiency
2. Parenting education and family literacy services targeted to the lowest literacy families
3. Training for child care teachers in practical ways to promote literacy development
4. Substantially enhanced teacher training for effective reading instruction
5. Strengthened classroom reading instruction in 4K preschool through grade 3
6. Assessment of individual children's reading proficiency in 4K through grade 3
7. Individual reading proficiency plans for all struggling readers
8. Effective intervention provided to each seriously struggling reader
9. Improved reading instruction through Special Education, Title 1, and Students at Risk funding and programs
10. Funding sufficient to support a statewide system achieving universal reading proficiency

For access to data and information on the reading tests cited in this report, see:

- **NAEP:** <http://nces.ed.gov/nationsreportcard>
- **Stanford Reading First:** <http://www.ed.sc.edu/scepc/Projects.asp>
- **PACT and PASS:** <http://ed.sc.gov/topics/assessment/scores>

Contact Us with Your Comments:

This report on early reading proficiency has been prepared with funding from the Annie E. Casey Foundation. It is the first of a series of reports on the critical Challenges and Solutions for early reading proficiency. This report attempts to summarize data on reading proficiency in SC and to offer a framework of Challenges and Solutions for discussion by all persons sharing the conviction that early reading proficiency is critical for academic achievement. Reading is such a complex phenomenon that neither this present document nor the others that follow will ever capture all the perspectives needed for guiding reading proficiency policy and practice. **We strongly urge you to send your comments, criticisms, and suggestions to us at:**

baron.holmes@ors.sc.gov Your involvement will enable us to incorporate your knowledge and advice into the consensus-building that the Early Reading Proficiency Project is seeking to nurture. Please become an active partner in our efforts.

Research on Improving Reading Achievement

Janice A. Dole
Utah Center for Reading and Literacy, Director
University of Utah

Overview

- 1) The Research—WWC Practice Guides
 - Preschool language and literacy*
 - Improving Reading Comprehension in the Kindergarten through Third-Grade*
 - Improving Adolescent Literacy: Effective Classrooms and Intervention Practices*
- 2) The Common Core State Standards (CCSS)
 - What is in the WWC and what to add

What Can Research Tell Us?

- “Research can prove anything!”
 - THAT IS TRUE!!!
- BUT:
- A body of research usually tells the right story.
 - 1 study vs. many studies together

The What Works Clearinghouse

- The WWC
 - a branch of the United States Department of Education (USDE) and the Institute of Education Sciences (IES)
 - think the **Food and Drug Administration**
 - think the **large-scale medical studies**
 - Examines all the research available and picks out the best research evidence we have
 - Uses gold-standard criteria to rule out less than rigorous studies

The WWC Practice Guides

- The WWC writes Practice Guides for teachers, administrators
 - Reviews sometimes over 800 studies on a specific topic
 - Screens the studies based on scientific criteria
 - Accepts only the most rigorous studies
 - Reviews those studies to come up with recommendations for schools and teachers

Practice Guides for Reading, K-12

- Preschool Language and Literacy*
 - 3-5 year olds
- Improving Reading Comprehension in the Kindergarten through Third-Grade*
 - Grades K-3
- Improving Adolescent Literacy: Effective Classrooms and Intervention Practices*
 - Grades 4-12

WWC Recommendations

- Recommendations are rated based on the strength of the research evidence
 - Strong**—substantially strong scientific evidence
 - Moderate**—moderate amount of scientific evidence
 - Minimal or Low**—expert opinion is strong, but insufficient scientific evidence (not enough research has been done)

Preschool Language and Literacy

- Recommendation 1: Teach phonological awareness**—Strong
 - Sentences are made up of words
 - Words are made up of syllables
 - Syllables are made up of individual sounds
 - Example: “Canyourun?”
- This is taught orally, without letters
- Use games to teach

Preschool Language and Literacy

- Recommendation 2: Use interactive reading alouds**—Strong
 - Read-alouds should be an experience where children **talk** about what they are listening to and teachers ask questions throughout the reading and children talk and respond. (CCSS)
 - Adults help children with oral language as they read through a story. (CCSS)

Improving K-3 Reading

- Recommendation 1: Teach Comprehension Strategies**—Strong
 - Comprehension strategies are routines and procedures you use to understand what you read.
 - EXAMPLES: summarizing, visualizing, rereading, predicting

Improving K-3 Reading

- Recommendation 2: Engage students with text**—Moderate
 - Motivate students to read a text
 - Discuss background knowledge
 - Have them predict what the text will be about
 - Engage students in interesting discussions about the text. (CCSS)
 - Prepare good questions for discussions.
 - Ask higher-level thinking questions.

Improving K-3 Reading

- Recommendation 3: Focus on Text Structure**—Moderate (CCSS)
 - Teach students the difference between **narrative texts** (stories) and **informational texts** (nonfiction newspaper articles, magazine articles, schedules, directions, etc.)
 - Read both kinds of texts

Improving Adolescent Literacy

Recommendation 1: Vocabulary Instruction (CCSS)—Strong

- Vocabulary instruction is NOT looking words up in the dictionary and writing sentences with the words
- Vocabulary instruction is engaging students in getting excited about and learning the meanings of new words

Improving Adolescent Literacy

Recommendation 2: Teach Comprehension Strategies—Strong

- Same recommendation as for K-3
- Comprehension strategies are routines and procedures we use to understand what we read
- EXAMPLES: summarizing, reading across two texts and synthesizing information (CCSS)

Improving Adolescent Literacy

Recommendation 3: Engaging Text Discussions—Moderate (CCSS)

- Discussions are NOT the same as lectures
- Discussions are student-centered and not teacher-centered
- Discussions as students to think about higher-level reasoning questions

Improving Adolescent Literacy

Recommendation 4: Interventions for Struggling Readers—Strong

- 1-1 or 1-3 tutoring with struggling readers with a qualified specialist—reading specialist, special education teacher
- Increase intensity—from 1-8 to 1-3
- Increase amount of time—2-3 times per week vs. 4-5 times per week

Improving Adolescent Literacy

Recommendation 5: Engagement and Motivation to Read—Low

- Connect to students' interests and lives, pop culture, current events in the world
- Encourage students to evaluate their level of effort and reflect on how well they did
- Encourage students to set their own learning goals

Common Core State Standards (CCSS)

The CCSS focus on:

- 1) **KEY DETAILS**—use details and information to support answers from the text
- 2) **CENTRAL IDEAS**—Summarize central ideas
- 3) **WORD MEANINGS**—Determine connotations, denotations, multiple meanings, word structure
- 4) **REASONING and EVIDENCE**—Apply reasoning and textual evidence to justify points

Recommendations

- Change happens at the school level
- Importance of principals cannot be overestimated
- For all policymakers, tension between **pressure** and **support** to schools
- Professional development is critical for change to happen
- Improved coordinations with preservice institutions is critical

Recommendations

School Leaders:

- Establish a reading/language arts block of time
- Use a core reading program in low-performing schools
- Conduct "walk-throughs" to observe how teachers teach and spend their time
- Conduct professional development to ensure that teachers know about and use WWC recommendations

Recommendations

- Establish a literacy leader in the school
- Establish a collaborative, collegial group of teachers who hold a school-level view as well as a class-level view
- Use data to inform decision-making and instruction
 - Hold meetings specifically to discuss struggling readers

Recommendations

Policy Makers

- Hold all accountable for student performance
 - Examine data to make decisions
- Encourage re-allocation of resources to improve reading achievement
- Focus on the goal of reading achievement
- Do not change focus every year
- Discuss with principals barriers to reform and plan how to remediate these barriers

Recommendations

- **State Education Agencies**
 - Use of regional labs for support and assistance and guidance to the research-base
 - Sustained professional development for districts, schools
 - Allocate resources to remove barriers to change
 - Use of experts to assist districts and schools

THANK YOU!

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South Carolina Reading Achievement Systemic Initiative Panel Meeting

November 16, 2011

Recommendations for A State-wide Approach to Literacy Instruction and Assessment

Presenter Contact Information

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Problems

- Many students do not learn to read and write proficiently
- Each year they fall farther and farther behind
- Too many fall so far behind they qualify for special education
- A high percentage of students who drop out do so because they cannot read grade level texts

State Data

- 20% below grade level at 3rd grade
- 22% below grade level at 4th grade
- 32% below grade level at 8th grade
- 7 - 8 % of all students are labeled Learning Disabled because they are struggling readers

Challenges for Students

- Reading with understanding
- Reading for pleasure
- Efficacy (believing they can succeed and so being willing to try)
- Access to books at home, in community and at school
- Time to read in school
- Problem-solving skills and strategies for words, sentences, passages
- Adequate background knowledge and vocabulary (oral and/or sight)
- Home language vs. academic language

Challenges for Teachers

- Understanding reading and writing processes
- Understanding the critical importance of reading and writing volume at school
- Understanding the critical importance of making certain that all students are reading books they can read and want to read
- Knowing how to accelerate the progress of struggling readers and writers
- Knowing how to teach different readers and writers differently
- Knowing how to diagnose and address specific needs of students

Challenges for School and District Leaders

- Understanding reading and writing processes
- Understanding the critical importance of reading and writing volume at school
- Need to focus on reading proficiency to raise test scores
- Need for effective, **text-based** interventions for struggling readers at all levels taught by teachers with special skill in teaching reading
- Flexibility without accountability:
 - Money spent on no-yield, low-yield solutions and negative-yield "silver bullet" solutions
 - Mandated programs and initiatives
 - Emphasis on raising test scores rather than increasing reading proficiency

Challenges District and State Leaders

Need for

- Effective, comprehensive, **text-based assessment systems** that
 - Identify struggling readers
 - Inform instruction to increase effectiveness
 - Track the progress of students
- Effective comprehensive **system of interventions** for students at all levels
- **Knowledgeable teachers and interventionists** who know how to accelerate progress so that students can read at grade level

Challenges for State Leaders

- Extensive and **high quality education** for teachers of reading
- **Reading policy** based on research and best practice
- Support for **every teacher as a teacher of reading**
- Emphasis on increasing reading proficiency (which will raise test scores)

Research and Evidence-based Recommendations for South Carolina Schools

Local Needs, Local Solutions

Research- and Evidence-based Recommendations

- Improve classroom and supplemental reading and writing instruction and assessment.
- Expand the knowledge base of pre- and in-service teachers.
- Expand the knowledge base of principals about how to support readers and writers and teachers of readers and writers.
- Increase the time students read and write in school and outside of school

Research- and Evidence-based Recommendations

- Increase number of appropriate texts in classrooms.
- Create community partnerships to promote a culture of literacy in South Carolina.
- Develop state-wide system to monitor and ensure effective implementation of research-based solutions including evaluations of outcomes.

Recommendation 1: Improve Classroom and Supplemental Reading and Writing Instruction through Response to Intervention (RTI) Framework

What is RTI?

- Comprehensive
- On-going
- **Tiered***
- Assessment & support system
- Designed to accelerate students to grade level performance and beyond

Tiers of Support

Tier One: Enhanced classroom instruction, support, and intervention

Tiers Two, Three and Beyond: Supplemental Instruction

Highest Tier: Other support services

Improving Instruction

- Fully utilize RTI guidelines developed by the International Reading Association (IRA)
- Fully implement state guidelines for identifying students in need of extra assistance
- Develop comprehensive state assessment system to guide and monitor progress
- Continue to expand understandings about tiered instruction and supplemental support for readers/writers below grade level

Part 1: Utilize IRA Guidelines for RTI in Literacy

1. Optimize instruction for every student at all levels.
2. Differentiate instruction based on instructionally relevant data, unconstrained by packaged programs.

“No single approach. . . can address the broad and varied goals and needs of all students.”

Guidelines (con't)

3. Use assessment tools which can inform instruction meaningfully.
4. Ensure that reading/literacy specialists provide the needed leadership.
5. Implement a comprehensive, systematic approach to assessment and instruction

Guidelines (con't)

6. Ensure that "all students have . . . instruction from well-prepared teachers who keep up to date and supplemental instruction from professionals specifically prepared to teach language and literacy."

Part 2: State Guidelines to Identify Struggling and Reluctant Readers/Writers

- Continue to provide support for districts to understand measures and processes for identifying students at risk
- Continue to provide support for use of these
- Continue to provide ongoing training and support

Part 3: Develop Comprehensive State-wide Dual- Purpose Assessment System

- To guide instruction and progress of individual students
- To monitor instruction and progress of individual students

Panel of literacy and intervention experts to review and select formative and diagnostic assessments and processes

- Develop guidelines and support documents for use of these materials
- Provide training and support: train the trainer
- Enhance training and support via workshops, web, video

Part 4: Develop Coherent System of Tiered Instruction and Support to Ensure That Students Reading Below Grade Level Get the Help They Need

Coherent System of Tiered Instruction and Support (con't)

- Provide ongoing support in how to teach struggling and reluctant readers/writers.
- Develop proficiency standards for literacy interventionists.
- Establish standards for service.
- Develop phase-in plan.
- Ensure service to all students.
- Expand RTI Demonstration Sites

"A Rising Tide Lifts all Boats."

Recommendation 2: Expand the Knowledge Base of Teachers

Goal: Increase knowledge and ability of SC teachers to teach reading and writing to all students

- In-service teachers
- Newly certified teachers
- Pre-service teachers

Pre-service Teachers

- Outline knowledge, skills and strategies
- Develop description of experiences to provide pre-service teachers with the knowledge needed to provide effective literacy instruction in their first year of teaching
- Review syllabi in certification programs statewide
- Offer state-endorsement of and support for programs that meet heightened criteria

Newly Certified Teachers

- Offer Literacy Teacher courses (“boot-camp”) beginning the summer after graduation and continuing through first 2 years of teaching
- Provide on-site mentoring by a Literacy Coach

In-Service Teachers

- Expand continuing education through professional development and workshops
- Require Literacy Teacher courses
- Require that all pre-K through 3rd grade teachers have Literacy Teacher endorsement for recertification
- Provide state certified Literacy Coaches to support teachers in schools

Recommendation 3:
Expand the Knowledge Base of Principals
and Instructional Leaders: Increase
Understanding of How to Support Readers
and Writers

- Provide mandatory state-wide series of workshops
- Provide on-site visits to audit literacy practices and offer suggestions for moving classrooms toward High Progress Literacy Classrooms (HPLC).
- Provide virtual support via website, seminars, workshops, and webinars

Recommendation 4:
Increase the Time Students Read
and Write
At School

Promote the importance of engaged reading and writing at school

- Expand current on-site High Progress Literacy Classrooms (HPLC) workshops
- Develop interactive online workshops and seminars
- Develop state literacy website to feature transformative practices characteristic of HPLC's
- Establish public information campaign

Set state expectations for reading and writing text at school

- Set statewide expectations based on the HPLC research
- Provide professional development
- Provide tools to help teachers meet standards
- Reconvene panel to review progress and recommend improvements

Increase knowledge about how to accelerate reading progress for struggling and reluctant readers/writers

- Provide on-site workshops
- Develop interactive online workshops and seminars
- Develop state literacy website which features transformative practices characteristic of HPLC

**Recommendation 4:
Increase the Time Students Read
and Write
Outside School**

Promote the importance of increasing amount of reading and writing

- Raise awareness among parents, caregivers and community members

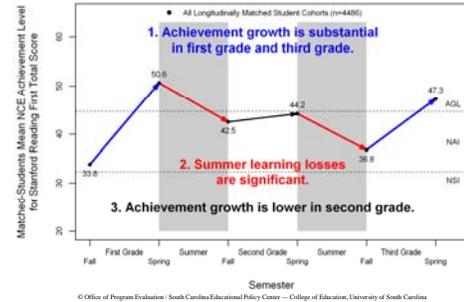
Educate parents, care-givers, and the community to engage students productively in reading and writing outside of school

- Offer workshop on how to read and write with students
- Develop online, interactive workshops
- Develop state website on supporting engaged reading and writing outside school
- Implement public information campaign

Increase out-of-school reading and alleviate summer reading loss

- Set clear time and volume goals for out-of-school reading
 - During academic year
 - During the summer
- Implement evidence-based programs to develop the habit of reading out of school
 - During academic year
 - During the summer

SC Reading First Summer Reading Loss 1st – 3rd Grades



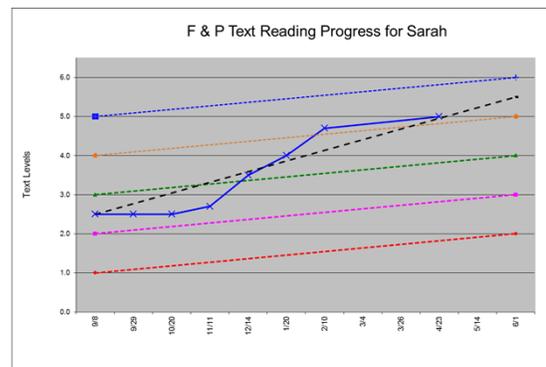
Increase access to books and reading materials outside of school

- Provide funding for books to take home to read
- Open school libraries in summer
- Promote book exchanges and school bookstores
- Partner with community libraries to bring books into high-need areas
- Foster local and state-wide partnerships to underwrite the cost of providing reading materials for out-of-school reading

Recommendation 5 Increase Texts in Classrooms: Appropriate levels, genres, and content areas

- Set state expectations for classroom libraries
- Develop book lists by grade and content for basic classroom libraries
- Provide funding based on need and awarded after teachers attend HPLC workshops
- Establish community and business partnerships to help build classroom libraries

Mutual causation demands that we focus on both teaching kids how to read more and read better



**Recommendation 6:
Develop Community Partnerships to
Create a Culture of Literacy in South
Carolina**

- Convene a Literacy Summit to establish a consortium to coordinate literacy efforts in SC
- Develop a state-wide plan for activities of consortium
- Develop state partnerships to support efforts to transform literacy in South Carolina

**Recommendation 7:
Develop a State-wide System to
Monitor and Ensure Effective
Implementation of Research-
based Solutions**

**Part 1: Ensure valid and reliable
processes are being used
to improve instruction**

Valid and reliable processes

- Identify students needing supplemental instruction
- Monitor individual student progress rates
- Facilitate data-based decision making
- Ensure accommodations for all students are appropriately assessed

Part 2: Monitor implementation

- Step 1: Provide statewide monitoring of implementation of key elements
- Step 2: Present yearly report to the public
- Step 3: Use data to guide revisions of SC Engage! and of ongoing monitoring system

Appendix 3

Panel Members' Suggested Action Items

SC Reading Achievement Systemic Initiative
Rank Order by Ranking Number – All Policy Areas

1. Develop a statewide comprehensive plan for how to address reading achievement in South Carolina. The plan must include a variety of different sectors, including the public schools, First Steps, SC DSS Child Care Division, Early Head Start, Head Start, community-based programs (Reach Out and Read, Imagination Library, Success By Six, local library programs, after-school tutoring and homework assistance programs, and others), and home visitation programs (Parents As Teachers, Nurse Family Partnership, and others). The Panel received excellent information from the What Works Clearinghouse about effective strategies that must be implemented in a coordinated and consistent way across all entities serving children. This is not an issue that can be solved by our K-12 school system alone. **Policy Area: Family and Community Engagement**

Rating (1-10): 1.15 Ranking (1-5): 1.64

2. Develop a statewide text-based assessment system to monitor student progress trajectories, facilitate data-based decision-making, and to inform changes to instruction to get better results. **Policy Area: State Education Agency Operations**

Rating (1-10): 2.07 Ranking (1-7): 2.06

3. On a big picture scale, we need to effect change on the culture. Reading needs to be important to families and communities. Partnerships with businesses to promote reading, provide more reading material, establish volunteers who read with children to reinforce the importance of reading. Books need to be birthday presents, and trips to the bookstore and library desired with great anticipation. Parents should model the process daily. It is not so important what you read as much as you are reading, regularly and often. Set goals for reading at home and in the community. **Policy Area: Family and Community Engagement**

Rating (1-10): 1.25 Ranking (1-5): 2.47

4. Literacy Coaches be placed at every public school. In Pre-K to grade 5, there should be one coach for every 25 teachers. In grades 6 to 12, there should be one coach for every math and science and one for social studies and English teacher (with a maximum of 25 teacher per coach). Literacy Coaches be in classrooms four days a week helping Pre K-12 teachers develop implement, and sustain effective practices and help them enhance the trajectory of each and every student as a learner. This includes reading, writing and content area support. **Policy Area: Professional Development**

Rating (1-10): 2.50 Ranking (1-7): 2.93

5. Endorsement requirements for literacy coaches (information/expectations from South Carolina Reading Initiative already exist) ensuring that knowledgeable, trained people are available to provide individualized professional development for teachers. **Policy Area: Teacher and Other Educator Preparation**

Rating (1-10): 2.78 Ranking (1-7): 2.93

6. Instruction must be guided by continuing, individualized assessment and progress monitoring of the language and literacy development of each child in preschool and kindergarten. **Policy Area: School District Operations**

Rating (1-10): 1.84 Ranking (1-10): 3.00

7. Schools, school districts, and the state must develop monitoring, support, and explicit guidance for highly effective language and literacy programming in the classrooms of young children in preschool and kindergarten. **Policy Area: State Education Agency Operations**

Rating (1-10): 2.15 Ranking (1-7): 3.06

8. Recruit community partners to provide books for children and to sponsor language and literacy celebrations at school or in the community during which the books will be given to the children and their parents. **Policy Area: Family and Community Engagement**

Rating (1-10): 2.08 Ranking (1-5): 3.11

9. Literacy Coaches provide professional development to sustain and support teachers and administrators. That PD will be cohesive and coherent and reflect the school's/district's comprehensive literacy plan. The coach provides engagements which vary in the degree of time and effort required by teachers (multiple days of professional development on a given topic; after school book clubs, year-long study groups; graduate level course work; on-going action research projects). Literacy Coaches, via professional development and in-classroom support, help teachers learn and use effective tools for assessing reader strengths and needs and help teachers use that knowledge both to inform practice and to document student growth. **Policy Area: Professional Development**

Rating (1-10): 2.40 Ranking (1-7): 3.11

10. Engage preschool programs in the statewide plan. The Panel recognizes that the issue of reading achievement does not begin when a child begins kindergarten. To adequately address reading achievement in SC, preschool programs must be seen as part of the solution. Once again, the What Works Clearinghouse provided information to the Panel about the proven-effective strategies to improve literacy skills among children in preschool. These should be incorporated into existing professional development opportunities, such as teacher training days for public preschool programs and the SC Child Care Career Development for private child care providers. **Policy Area: Birth to Five Policy**

Rating (1-10): 2.15 Ranking (1-8): 3.12

11. For certified teachers, require graduate course work for re-certification. For all early childhood and elementary teachers (pre-K to 5), K-12 reading specialists and special education teachers who work with students labeled Learning Disabled require participation in on-site courses that lead to South Carolina Literacy Teacher certification. This course work – in reading, reading assessment and content area literacy - provides teachers with strong understanding of the theory, research, and practices that support the teaching of reading and writing. (For newly certified teachers, these courses would begin the summer after graduation and continue through the first two years of teaching). **Policy Area: Teacher and Other Educator Preparation**

Rating (1-10): 2.35 Ranking (1-7): 3.17

12. For pre-service teachers, authorize a panel to outline the knowledge, skills and strategies needed to be an effective first-year teacher of readers and writers. Describe the kinds of pre-service experiences which support the acquisition and effective use of this information. Review syllabi in certification programs. Offer state-endorsement of and support for programs that meet criteria. **Policy Area: Teacher and Other Educator Preparation**

Rating (1-10): 3.46 Ranking (1-7): 3.18

13. Provide a series of professional development sessions for all teachers of 4K and 5K students to include topics on research-validated early literacy practices; such as, but not limited to the following: Literacy-rich and print-rich classrooms and how to assess with the Early Literacy and Language, Classroom Observation (ELLCO) tool, Intentional teaching of literacy that is developmentally appropriate, Selections of children's books, Read-alouds, Daily schedules that include literacy learning throughout the day, Building vocabulary, Phonological awareness, Teacher interactions, Stages of early writing and other related topics, Assessment of language and literacy skills. **Policy Area: Professional Development**

Rating (1-10): 2.46 Ranking (1-7): 3.27

14. Children need small group instruction to address individual needs. The differentiation piece is critical as “one size does not fit all.” **Policy Area: Reading Instruction**

Rating (1-10): 1.31 Ranking (1-17): 3.70

15. Implementing reading coaches and interventionists for the lowest learners in the early years (1st, 2nd grade) is critical. **Policy Area: School District Operations**

Rating (1-10): 2.15 Ranking (1-10): 3.87

16. Literacy proficiency assessment, monitoring, and evaluation system (for assessment of readers below proficiency; monitoring of progress for individual children, classes, schools/centers, districts, and the state). **Policy Area: State Education Agency Operations**

Rating (1-10): 2.53 Ranking (1-7): 4.06

17. Too many students entering 5K in SC fall far behind the readiness mark. Literacy instruction must be heightened in 4K to include oral language development, concepts about print, letter knowledge, and the exploration of a variety of reading materials. Similar accountability measures should be created statewide for all 4K programs. **Policy Area: Birth to Five Policy**

Rating (1-10): 2.38 Ranking (1-8): 4.18

18. State funded universal pre-kindergarten half-day program for all four year olds. **Policy Area: Birth to Five Policy**

Rating (1-10): 3.69 Ranking (1-8): 4.18

19. Assessment to identify students with the most serious reading proficiency deficits requiring individual language and literacy plans (in 4K) and individual reading plans (5K) for those students predicted to be below 3rd grade reading proficiency and especially far below proficiency. **Policy Area: School District Operations**

Rating (1-10): 1.69 Ranking (1-10): 4.25

20. Increase the amount of text reading and writing South Carolina students engage in at school and at home. To accomplish this, we must raise awareness, set goals, audit present policies and practices, increase the amount of time for reading and writing, instruction, increase the number of texts in classrooms and provide on-going professional development and support. **Policy Area: Reading Instruction**

Rating (1-10): 2.31 Ranking (1-17): 5.11

21. Significantly increase the amount and diversity of texts (reading levels and genres) within classroom libraries in all disciplines. Funds to replenish reading materials should be considered as well. **Policy Area: Reading Instruction**

Rating (1-10): 2.56 Ranking (1-17): 6.05

SC Reading Achievement Systemic Initiative
Top Three Ranked Priorities – Grouped by Policy Area

Policy Priorities - State Education Agency Operations

1. Develop a statewide text-based assessment system to monitor student progress trajectories, facilitate data-based decision-making, and to inform changes to instruction to get better results.

Rating (1-10): 2.07

Ranking (1-7): 2.06

2. Schools, school districts, and the state must develop monitoring, support, and explicit guidance for highly effective language and literacy programming in the classrooms of young children in preschool and kindergarten.

Rating (1-10): 2.15

Ranking (1-7): 3.06

3. Literacy proficiency assessment, monitoring, and evaluation system (for assessment of readers below proficiency; monitoring of progress for individual children, classes, schools/centers, districts, and the state).

Rating (1-10): 2.53

Ranking (1-7): 4.06

Policy Priorities – School District Operations

1. Instruction must be guided by continuing, individualized assessment and progress monitoring of the language and literacy development of each child in preschool and kindergarten.

Rating (1-10): 1.84

Ranking (1-10): 3.00

2. Implementing reading coaches and interventionists for the lowest learners in the early years (1st, 2nd grade) is critical.

Rating (1-10): 2.15

Ranking (1-10): 3.87

3. Assessment to identify students with the most serious reading proficiency deficits requiring individual language and literacy plans (in 4K) and individual reading plans (5K) for those students predicted to be below 3rd grade reading proficiency and especially far below proficiency.

Rating (1-10): 1.69

Ranking (1-10): 4.25

Policy Priorities - Family and Community Engagement

1. Develop a statewide comprehensive plan for how to address reading achievement in South Carolina. The plan must include a variety of different sectors, including the public schools, First Steps, SC DSS Child Care Division, Early Head Start, Head Start, community-based programs (Reach Out and Read, Imagination Library, Success By Six, local library programs, after-school tutoring and homework assistance programs, and others), and home visitation programs (Parents As Teachers, Nurse Family Partnership, and others). The Panel received excellent information from the What Works Clearinghouse about effective strategies that must be implemented in a coordinated and consistent way across all entities serving children. This is not an issue that can be solved by our K-12 school system alone.

Rating (1-10): 1.15

Ranking (1-5): 1.64

2. On a big picture scale, we need to effect change on the culture. Reading needs to be important to families and communities. Partnerships with businesses to promote reading, provide more reading material, establish volunteers who read with children to reinforce the importance of reading. Books need to be birthday presents, and trips to the bookstore and library desired with great anticipation. Parents should model the process daily. It is not so important what you read as much as you are reading, regularly and often. Set goals for reading at home and in the community.

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3. Recruit community partners to provide books for children and to sponsor language and literacy celebrations at school or in the community during which the books will be given to the children and their parents.

Rating (1-10): 2.08

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Policy Priorities - Birth to Five Policy

1. Engage preschool programs in the statewide plan. The Panel recognizes that the issue of reading achievement does not begin when a child begins kindergarten. To adequately address reading achievement in SC, preschool programs must be seen as part of the solution. Once again, the What Works Clearinghouse provided information to the Panel about the proven-effective strategies to improve literacy skills among children in preschool. These should be incorporated into existing professional development opportunities, such as teacher training days for public preschool programs and the SC Child Care Career Development for private child care providers.

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2. Too many students entering 5K in SC fall far behind the readiness mark. Literacy instruction must be heightened in 4K to include oral language development, concepts about print, letter knowledge, and the exploration of a variety of reading materials. Similar accountability measures should be created statewide for all 4K programs.

Rating (1-10): 2.38

Ranking (1-8): 4.18

3. State funded universal pre-kindergarten half-day program for all four year olds.

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Ranking (1-8): 4.18

Policy Priorities - Professional Development

1. Literacy Coaches be placed at every public school. In Pre-K to grade 5, there should be one coach for every 25 teachers. In grades 6 to 12, there should be one coach for every math and science and one for social studies and English teacher (with a maximum of 25 teacher per coach). Literacy Coaches be in classrooms four days a week helping Pre K-12 teachers develop implement, and sustain effective practices and help them enhance the trajectory of each and every student as a learner. This includes reading, writing and content area support.

Rating (1-10): 2.50

Ranking (1-7): 2.93

2. Literacy Coaches provide professional development to sustain and support teachers and administrators. That PD will be cohesive and coherent and reflect the school's/district's comprehensive literacy plan. The coach provides engagements which vary in the degree of time and effort required by teachers (multiple days of professional development on a given topic; after school book clubs, year-long study groups; graduate level course work; on-going action research projects). Literacy Coaches, via professional development and in-classroom support, help teachers learn and use effective tools for assessing reader strengths and needs and help teachers use that knowledge both to inform practice and to document student growth.

Rating (1-10): 2.40

Ranking (1-7): 3.11

3. Provide a series of professional development sessions for all teachers of 4K and 5K students to include topics on research-validated early literacy practices; such as, but not limited to the following: Literacy-rich and print-rich classrooms and how to assess with the Early Literacy and Language, Classroom Observation (ELLCO) tool, Intentional teaching of literacy that is developmentally appropriate, Selections of children's books, Read-alouds, Daily schedules that include literacy learning throughout the day, Building vocabulary, Phonological awareness, Teacher interactions, Stages of early writing and other related topics, Assessment of language and literacy skills.

Rating (1-10): 2.46

Ranking (1-7): 3.27

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1. Endorsement requirements for literacy coaches (information/expectations from South Carolina Reading Initiative already exist) ensuring that knowledgeable, trained people are available to provide individualized professional development for teachers.

Rating (1-10): 2.78

Ranking (1-7): 2.93

2. For certified teachers, require graduate course work for re-certification. For all early childhood and elementary teachers (pre-K to 5), K-12 reading specialists and special education teachers who work with students labeled Learning Disabled require participation in on-site courses that lead to South Carolina Literacy Teacher certification. This course work – in reading, reading assessment and content area literacy - provides teachers with strong understanding of the theory, research, and practices that support the teaching of reading and writing. (For newly certified teachers, these courses would begin the summer after graduation and continue through the first two years of teaching).

Rating (1-10): 2.35

Ranking (1-7): 3.17

3. For pre-service teachers, authorize a panel to outline the knowledge, skills and strategies needed to be an effective first-year teacher of readers and writers. Describe the kinds of pre-service experiences which support the acquisition and effective use of this information. Review syllabi in certification programs. Offer state-endorsement of and support for programs that meet criteria.

Rating (1-10): 3.46

Ranking (1-7): 3.18

Policy Priorities – Reading Instruction

1. Children need small group instruction to address individual needs. The differentiation piece is critical as “one size does not fit all.”

Rating (1-10): 1.31

Ranking (1-17): 3.70

2. Increase the amount of text reading and writing South Carolina students engage in at school and at home. To accomplish this, we must raise awareness, set goals, audit present policies and practices, increase the amount of time for reading and writing, instruction, increase the number of texts in classrooms and provide on-going professional development and support.

Rating (1-10): 2.31

Ranking (1-17): 5.11

3. Significantly increase the amount and diversity of texts (reading levels and genres) within classroom libraries in all disciplines. Funds to replenish reading materials should be considered as well.

Rating (1-10): 2.56

Ranking (1-17): 6.05

SC Reading Achievement Systemic Initiative
Policy Priorities – Reading Instruction

Directions: “1” is the highest priority rating or priority ranking

1. *****SECOND***** Increase the amount of text reading and writing South Carolina students engage in at school and at home. To accomplish this, we must raise awareness, set goals, audit present policies and practices, increase the amount of time for reading and writing, instruction, increase the number of texts in classrooms and provide on-going professional development and support.

Rating (1-10): 2.31 **Ranking (1-17): 5.11**

2. Alleviate summer reading loss by increasing the amount of reading and writing of text outside of school. To accomplish this, students need books in their hands that they can read and want to read over the summer and summer reading must become a state-wide concern and expectation.

Rating (1-10): 2.12 **Ranking (1-17): 6.64**

3. Provide longer blocks of uninterrupted instructional time.

Rating (1-10): 3.06 **Ranking (1-17): 7.73**

4. Increase the amount of time for engaged reading and writing within the time allocated to reading and writing instruction.

Rating (1-10): 2.06 **Ranking (1-17): 7.00**

5. *****THIRD***** Significantly increase the amount and diversity of texts (reading levels and genres) within classroom libraries in all disciplines. Funds to replenish reading materials should be considered as well.

Rating (1-10): 2.56 **Ranking (1-17): 6.05**

6. *****FIRST***** Children need small group instruction to address individual needs. The differentiation piece is critical as “one size does not fit all.”

Rating (1-10): 1.31 **Ranking (1-17): 3.70**

7. Implementation of Common Core Standards to focus on literacy instruction across all content areas (science and social studies have to become an extension of ELA class).

Rating (1-10): 4.18 **Ranking (1-17): 10.82**

8. Middle and high schools should be provided with the specialized personnel, time, and resources to conduct efficient screening to identify students’ reading needs.

Rating (1-10): 2.87 **Ranking (1-17): 8.82**

9. Improve classroom and supplemental literacy instruction, assessment and support by implementing statewide the federal Response to Intervention (RTI) initiative.

Rating (1-10): 3.60 **Ranking (1-17): 8.52**

(TURN PAGE OVER)

10. Review and select model curricula, instructional strategies, assessment methods, and model CIA plans by engaging reading experts (university professors, reading coaches and specialists, classroom teachers, school and district literacy leaders, and national experts available to provide guidance and consultation).

Rating (1-10): 3.93

Ranking (1-17): 11.50

11. Organize a process for submission of effective-practice CIA Literacy Plans by each school and district for review and approval by state reading/literacy experts under the supervision of the SCDE.

Rating (1-10): 4.20

Ranking (1-17): 12.62

12. Implement a monitoring and evaluation system for oversight and guidance of the literacy instructional process to promote implementation of effective literacy strategies.

Rating (1-10): 3.21

Ranking (1-17): 9.12

13. Determine and focus on the pre-reading skills to be cultivated. (NELP list a good start)

Rating (1-10): 2.86

Ranking (1-17): 10.37

14. Plan ways to address each pre-reading competency/skill. (NELP list a good start. Align grades 1-3 and to MS/HS)

Rating (1-10): 3.14

Ranking (1-17): 11.29

15. Select curriculum models and their components supportive of priority language and literacy approaches. Determine the instructional approaches to be emphasized: examples include read-aloud, adult-child dialogue, daily message, singing, rhymes, letter writing, etc.

Rating (1-10): 3.26

Ranking (1-17): 11.37

16. Enlist older students to serve as reading buddies to read and write with 4&5K students.

Rating (1-10): 4.53

Ranking (1-17): 13.18

17. Plan how to implement strong literacy instruction in the all settings serving 4K students: Head Start, public schools, and child care centers. Plan to implement intentional literacy programs to meet the needs of all levels of 4K and 5K students, both those from low income and low literacy homes and also from higher literacy backgrounds.

Rating (1-10): 2.33

Ranking (1-17): 7.58

SC Reading Achievement Systemic Initiative
Policy Priorities - Teacher and Other Educator Preparation

Directions: “1” is the highest priority rating or priority ranking

1. Increase the number of reading courses required to become a certified teacher in South Carolina.

Rating (1-10): 4.50

Ranking (1-7): 4.93

2. *****THIRD*****For pre-service teachers, authorize a panel to outline the knowledge, skills and strategies needed to be an effective first-year teacher of readers and writers. Describe the kinds of pre-service experiences which support the acquisition and effective use of this information. Review syllabi in certification programs. Offer state-endorsement of and support for programs that meet criteria.

Rating (1-10): 3.46

Ranking (1-7): 3.18

3. All K-12 principals and superintendents complete the graduate courses in literacy taken by their teachers. Principals and coaches develop a collaborative plan for assessing and meeting needs of teachers.

Rating (1-10): 2.57

Ranking (1-7): 3.35

4. *****FIRST*****Endorsement requirements for literacy coaches (information/expectations from South Carolina Reading Initiative already exist) ensuring that knowledgeable, trained people are available to provide individualized professional development for teachers.

Rating (1-10): 2.78

Ranking (1-7): 2.93

5. *****SECOND*****For certified teachers, require graduate course work for re-certification. For all early childhood and elementary teachers (pre-K to 5), K-12 reading specialists and special education teachers who work with students labeled Learning Disabled require participation in on-site courses that lead to South Carolina Literacy Teacher certification. This course work – in reading, reading assessment and content area literacy – provides teachers with strong understanding of the theory, research, and practices that support the teaching of reading and writing. (For newly certified teachers, these courses would begin the summer after graduation and continue through the first two years of teaching).

Rating (1-10): 2.35

Ranking (1-7): 3.17

6. Convene a working group from local universities and technical colleges which provide pre-service courses for early childhood teachers to review and strengthen the coursework requirements for teaching early literacy.

Rating (1-10): 4.21

Ranking (1-7): 4.47

(TURN OVER)

7. Increase admission standards to teacher preparation programs (GPA, SAT, ACT, Praxis).

Rating (1-10): 5.76

Ranking (1-7): 6.23

SC Reading Achievement Systemic Initiative
Policy Priorities - Professional Development

Directions: "1" is the highest priority rating or priority ranking

1. Professional development in direct and explicit instruction of comprehension strategies will assist all teachers, including ELA and content area teachers in learning how to teach reading and writing strategies.

Rating (1-10): 2.06

Ranking (1-7): 3.94

2. Pass legislation to calculate professional development in hours, not days.

Rating (1-10): 4.80

Ranking (1-7): 5.47

3. *****FIRST*** Literacy Coaches be placed at every public school. In Pre-K to grade 5, there should be one coach for every 25 teachers. In grades 6 to 12, there should be one coach for every math and science and one for social studies and English teacher (with a maximum of 25 teacher per coach). Literacy Coaches be in classrooms four days a week helping Pre K-12 teachers develop implement, and sustain effective practices and help them enhance the trajectory of each and every student as a learner. This includes reading, writing and content area support.**

Rating (1-10): 2.50

Ranking (1-7): 2.93

4. *****SECOND*** Literacy Coaches provide professional development to sustain and support teachers and administrators. That PD will be cohesive and coherent and reflect the school's/district's comprehensive literacy plan. The coach provides engagements which vary in the degree of time and effort required by teachers (multiple days of professional development on a given topic; after school book clubs, year-long study groups; graduate level course work; on-going action research projects). Literacy Coaches, via professional development and in-classroom support, help teachers learn and use effective tools for assessing reader strengths and needs and help teachers use that knowledge both to inform practice and to document student growth.**

Rating (1-10): 2.40

Ranking (1-7): 3.11

5. The state of South Carolina and its schools must organize research-validated and practice-based language and literacy training for teachers and other staff working with young children, starting with pre-service preparation and continuing through careers of practice.

Rating (1-10): 2.33

Ranking (1-7): 3.94

6. *****THIRD*** Provide a series of professional development sessions for all teachers of 4K and 5K students to include topics on research-validated early literacy practices; such as, but not limited to the following: Literacy-rich and print-rich classrooms and how to assess with the Early Literacy and Language, Classroom Observation (ELLCO) tool, Intentional teaching of literacy that is developmentally appropriate, Selections of children's books, Read-alouds, Daily schedules that include literacy learning throughout the day, Building vocabulary, Phonological awareness, Teacher interactions, Stages of early writing and other related topics, Assessment of language and literacy skills.**

Rating (1-10): 2.46

Ranking (1-7): 3.27

7. Convene partner agencies to recruit a cohort of professional development trainers and pool resources to have them trained by national and state experts. (Start with the Center for Child Care Career Development list of Certified Trainers many who would be qualified to become one of the Early Literacy Trainers).

Rating (1-10): 3.86

Ranking (1-7): 4.94

SC Reading Achievement Systemic Initiative
Policy Priorities - Family and Community Engagement

Directions: “1” is the highest priority rating or priority ranking

1. *****SECOND***** On a big picture scale, we need to effect change on the culture. Reading needs to be important to families and communities. Partnerships with businesses to promote reading, provide more reading material, establish volunteers who read with children to reinforce the importance of reading. Books need to be birthday presents, and trips to the bookstore and library desired with great anticipation. Parents should model the process daily. It is not so important what you read as much as you are reading, regularly and often. Set goals for reading at home and in the community.

Rating (1-10): 1.25

Ranking (1-5): 2.47

2. Recruit family and community literacy volunteers to read with individual children, engage them in enriched dialogue, and exchange writing. (letters, cards, art with writing, etc)

Rating (1-10): 2.50

Ranking (1-5): 4.17

3. *****FIRST***** Develop a statewide comprehensive plan for how to address reading achievement in South Carolina. The plan must include a variety of different sectors, including the public schools, First Steps, SC DSS Child Care Division, Early Head Start, Head Start, community-based programs (Reach Out and Read, Imagination Library, Success By Six, local library programs, after-school tutoring and homework assistance programs, and others), and home visitation programs (Parents As Teachers, Nurse Family Partnership, and others). The Panel received excellent information from the What Works Clearinghouse about effective strategies that must be implemented in a coordinated and consistent way across all entities serving children. This is not an issue that can be solved by our K-12 school system alone.

Rating (1-10): 1.15

Ranking (1-5): 1.64

4. *****THIRD***** Recruit community partners to provide books for children and to sponsor language and literacy celebrations at school or in the community during which the books will be given to the children and their parents.

Rating (1-10): 2.08

Ranking (1-5): 3.11

5. Develop summer community reading programs with reading buddies (including email) and monthly summer literacy events at school or in community centers as shared reading and writing experiences.

Rating (1-10): 2.00

Ranking (1-5): 3.58

SC Reading Achievement Systemic Initiative
Policy Priorities - Birth to Five Policy

Directions: "1" is the highest priority rating or priority ranking

1. Something needs to be done to train childcare workers and parents of children ages birth to three.
Rating (1-10): 1.92 **Ranking (1-8): 5.31**
2. Establish recommendations for early childhood which focus on readiness based on the research gathered for this panel (Holmes presentation from 11/16/11). Share these recommendations with pediatricians and childcare facilities.
Rating (1-10): 3.08 **Ranking (1-8): 4.43**
3. ABC program require and support assessment/screening of the language and literacy of ABC voucher recipients who are identified by childcare staff as being deficient in language.
Rating (1-10): 1.91 **Ranking (1-8): 5.50**
4. Prioritize home visitation and family literacy services (including group meetings) to work with families of children assessed for 4K enrollment with the poorest language scores, starting in the summer before 4K entry and lasting through the summer before 5K (varying the number of visits according to the severity of language deficits).
Rating (1-10): 2.15 **Ranking (1-8): 4.56**
5. Develop a plan with partners, (First Steps, Head Start, Child Care Licensing, SCDE and others) to provide onsite technical support and resources (fidelity checklists) for administrators and teachers of 4K and 5K for guidance as teachers implement intentional literacy practices of exemplary or high-progress classrooms.
Rating (1-10): 2.23 **Ranking (1-8): 4.50**
6. *****THIRD*****State funded universal pre-kindergarten half-day program for all four year olds.
Rating (1-10): 3.69 **Ranking (1-8): 4.18**
7. *****FIRST*****Engage preschool programs in the statewide plan. The Panel recognizes that the issue of reading achievement does not begin when a child begins kindergarten. To adequately address reading achievement in SC, preschool programs must be seen as part of the solution. Once again, the What Works Clearinghouse provided information to the Panel about the proven-effective strategies to improve literacy skills among children in preschool. These should be incorporated into existing professional development opportunities, such as teacher training days for public preschool programs and the SC Child Care Career Development for private child care providers.
Rating (1-10): 2.15 **Ranking (1-8): 3.12**
8. *****SECOND*****Too many students entering 5K in SC fall far behind the readiness mark. Literacy instruction must be heightened in 4K to include oral language development, concepts about print, letter knowledge, and the exploration of a variety of reading materials. Similar accountability measures should be created statewide for all 4K programs.
Rating (1-10): 2.38 **Ranking (1-8): 4.18**

SC Reading Achievement Systemic Initiative
Policy Priorities - State Education Agency Operations

Directions: “1” is the highest priority rating or priority ranking

1. Develop a Dual-Purpose Statewide System to Monitor Student Progress and Ensure Effective Implementation of Research-based Solutions.

Rating (1-10): 2.07 Ranking (1-7): 4.18

2. *****THIRD***** Literacy proficiency assessment, monitoring, and evaluation system (for assessment of readers below proficiency; monitoring of progress for individual children, classes, schools/centers, districts, and the state).

Rating (1-10): 2.53 Ranking (1-7): 4.06

3. *****FIRST***** Develop a statewide text-based assessment system to monitor student progress trajectories, facilitate data-based decision-making, and to inform changes to instruction to get better results.

Rating (1-10): 2.07 Ranking (1-7): 2.06

4. Pass legislation, similar to Florida’s law, that no student shall be promoted to fourth grade unless they demonstrate the “Met” proficiency level on PASS.

Rating (1-10): 5.69 Ranking (1-7): 5.25

5. *****SECOND***** Schools, school districts, and the state must develop monitoring, support, and explicit guidance for highly effective language and literacy programming in the classrooms of young children in preschool and kindergarten.

Rating (1-10): 2.15 Ranking (1-7): 3.06

6. Approval of effective practice CIA Literacy Plans for each school and district by state reading/literacy experts under supervision by the SCDE.

Rating (1-10): 3.23 Ranking (1-7): 5.18

7. Funding for PD, books, coaches, etc. in schools and districts with approved CIA Literacy Plans.

Rating (1-10): 3.53 Ranking (1-7): 4.25

SC Reading Achievement Systemic Initiative
Policy Priorities – School District Operations

Directions: “1” is the highest priority rating or priority ranking

1. Establish recommendations for schools based on the High Progress Literacy Classrooms (number of books in classroom library- including variety of levels, time spent on actual reading and writing, etc).

Rating (1-10): 2.61 _____ Ranking (1-10): 4.37 _____
2. Reallocate funds in order to support the purchase of diverse texts, including print, electronic and visual media in all content areas.

Rating (1-10): 3.15 _____ Ranking (1-10): 4.81 _____
3. *****FIRST***Instruction must be guided by continuing, individualized assessment and progress monitoring of the language and literacy development of each child in preschool and kindergarten.**

Rating (1-10): 1.84 _____ **Ranking (1-10): 3.00** _____
4. *****THIRD***Assessment to identify students with the most serious reading proficiency deficits requiring individual language and literacy plans (in 4K) and individual reading plans (5K) for those students predicted to be below 3rd grade reading proficiency and especially far below proficiency.**

Rating (1-10): 1.69 _____ **Ranking (1-10): 4.25** _____
5. Individual Language and Literacy Reading Plan for each child not on track to reading proficiency, emphasizing family language and literacy activities. Inform parents/family that they are expected to participate in developing the individual literacy/reading plans and commit as part of the plan to engage in reading, writing, and other literacy experiences with their young children. Periodic (perhaps quarterly) language and literacy progress reports with suggestions for what parents can do.

Rating (1-10): 2.07 _____ Ranking (1-10): 4.75 _____
6. *****SECOND***Implementing reading coaches and interventionists for the lowest learners in the early years (1st, 2nd grade) is critical.**

Rating (1-10): 2.15 _____ **Ranking (1-10): 3.87** _____
7. Encourage parents to select an alternate language and literacy sponsor for their child if the parents cannot fulfill the role sufficiently.

Rating (1-10): 5.50 _____ Ranking (1-10): 8.66 _____
8. Permit school districts to apply for a waiver for extended learning time for reading instruction.

Rating (1-10): 3.15 _____ Ranking (1-10): 5.73 _____

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9. Permit school district reading interventionists to practice in any grade level by removing the certification distinction between early childhood, elementary, middle grades, and high school.

Rating (1-10): 6.69

Ranking (1-10): 7.13

10. Permit school districts to apply for a waiver to design a school day in elementary schools without mandatory seat time or instructional requirements. Waiver proposal must include benchmarks for all students in the area of reading.

Rating (1-10): 6.61

Ranking (1-10): 7.92

Appendix 4

Panel Members' Personal Statements



STATE OF SOUTH CAROLINA
DEPARTMENT OF EDUCATION

Mick Zais
Superintendent

1429 Senate Street
Columbia, South Carolina 29201

April 2, 2012

Subject: South Carolina Reading Achievement Systemic Initiative

The purpose of this letter to express my personal thoughts on the issue of reading proficiency and the discussions that were held during the meetings of the South Carolina Reading Achievement Systemic Initiative.

I appreciated the time and effort put forth by the panel members. Some of the recommendations put forth in the report I support, such as initiatives to reduce summer reading loss. However, I believe some of the recommendations became a wish-list with significant financial requirements the state budget is unlikely to fund given other competing demands for revenue, such as health care, higher education, and social services.

There are some policy initiatives that could be implemented without necessitating new revenues. Institutions of higher education must take dramatic steps to transform their teacher preparation programs. Colleges and universities should incorporate reading coursework and practicums as degree requirement substitutes for other required courses. If to ensure every teacher is prepared to teach reading there must be courses removed from the degree program because they are less important than reading, so be it. Higher education must be a willing partner in this effort to transform their programs; only time will tell if they will come to the table.

In conclusion, the underlying premise of many of the recommendations is a top-down approach from the state level. My approach is the opposite: I want state government to remove as many barriers to innovation as possible. Flexibility and decentralization have proven to yield better outcomes at less expense in the private sector economy. If education is the state's top priority, and it should be, policy makers shouldn't be asking themselves, "If we only had one more program we could fix education." The question we should ask ourselves is, "What laws and regulations stifle innovation and how quickly can repeal them?"

Sincerely,

A handwritten signature in black ink that reads "Mick Zais".

Mick Zais, Ph.D.
State Superintendent of Education

To improve reading achievement, we need to create a LOVE OF READING in the hearts of our children. In my experience as a parent of four children and an educator for 20 years, I feel the answer begins with reading with youngsters at a very young age. In her book *Read to Your Bunny*, Rosemary Wells shares, "Read to your bunny and your bunny will read to you!"

The most impact we can effect inexpensively is to encourage every family to read together every day. It is not so important what you read as much as you are reading, regularly and often. Books, magazines, comics need to be in every room of the house. Books need to be birthday presents, and trips to the bookstore and library desired with great anticipation. Children need access to books they choose and books that are of interest to them. Adults need to model reading. Children need to know they value reading. Children need time to enjoy, learn and practice reading. The more opportunities we can provide for younger readers, the better.

So we need to effect change on the culture . . . not only does reading need to be important to families but an emphasis in communities as well. Partnerships with businesses to promote reading, provide more reading material, establish volunteers who read with children to reinforce the importance of reading. Babies need to come home from the hospital with books and take them home during regularly scheduled wellness visits too.

While the above seems dreamy, the idea to collaborate with existing programs, like "Literacy 2030," is realistic and achievable. Reading builds relationships and relationships to build reading seem the perfect place to start. Let's take these small steps to begin the journey to create more South Carolina READERS!

D'Etta Brown
3/29/12



MOLLY TALBOT-METZ
DIRECTOR OF PROGRAMS

March 5, 2012

To Whom It May Concern:

I enjoyed serving on the SC Reading Achievement Systemic Initiative Panel, and I appreciate the opportunity to submit the following statement to be included in the Appendix to the Final Report.

Data shared with the Panel was compelling: only **26% of SC 3rd graders scored "At Grade Level"** on the Stanford Reading First test and **47% were in "Need of Substantial Intervention"** and **20% of 1st graders scored "At Grade Level,"** while **54% were in "Need of Substantial Intervention."**

The need for a systemic approach to reading achievement is clear. The key word is systemic – reading achievement is not an issue that can be solved by our K-12 school system alone. The challenge of reading achievement does not begin when a child enters kindergarten; therefore, programs that reach children before they begin school are critical to the solution.

Furthermore, the **best solution** to our challenge **is to invest in high quality early childhood programs that build literacy skills among children birth to age 5.** While some interventions targeting struggling readers in elementary and middle school will be necessary, the State's investment in building literacy skills **BEFORE** a child is struggling will have the greatest returns. The social, emotional, and functional competencies that develop in the first years of life affect a child's later success in school and in life.

The Mary Black Foundation, a private grantmaking organization, is committed to improving early childhood development, and early literacy, in Spartanburg County. The Foundation invests in efforts that will create positive learning environments and foster early literacy skills, such as **home visitation** for adolescent mothers, evidence-based **parenting** programs, a **quality** rating and improvement system for **child development programs, full-day 4K** targeting at-risk children, and more.

Respectfully Submitted,

A handwritten signature in black ink that reads 'Molly Talbot-Metz'.

Molly Talbot-Metz

Audrea Phillips

Professional Development/Professional Contexts

Classroom teachers need contexts in which they can use their knowledge gained from professional developments. Within our state, there are very knowledgeable teachers working in districts which mandate a scripted basal reading program informed by a daily pacing calendar. There is no research base for these programs - nothing to suggest that their use helps students progress as readers. Teachers need to be positioned to be able to use their knowledge to help the child, unconstrained by a scripted program.

State-wide, we need to think about **who each of us would want teaching our struggling reader, help every teacher develop the knowledge needed to help each and every child and provide contexts in which knowledgeable teachers are empowered to make appropriate instructional decisions.**

Text-based Assessments

Districts use a wide variety of reading programs, including scripted basal series, and purchase assessments that correlate with these programs. There are shortcomings of these assessments. Far too often, state standards get set aside and the focus is on raising test scores.

Many of the progress monitoring assessments currently being used, for example, time children on how fast they can read word lists in one minute and read lists of nonsense words. This does not help them learn to be strategic readers who think deeply about text. When these types of non-text based assessments are being used to drive our reading instruction, then it is no wonder the children in South Carolina are not performing as proficient readers should.

Districts need to use the best assessments possible to provide teachers with comprehensive knowledge about students as readers. Assessments that require us to teach ineffective practices such as having children read lists of nonsense words increases the number of nonproficient readers. We need text-based assessments aligned with our ELA standards.

The human brain is a wonderful creation! It is designed to change and adapt to experience. The youngest children learn the most complex intellectual activities. Try learning Chinese or Arabic as an adult! The majority of evidence shared with the South Carolina Reading Systemic Initiative emphasized the critical ages of birth to five for academic success. By kindergarten, 18 months separates the readiness to read skills between lowest socioeconomic status (SES) children and their more affluent peers. Letter recognition between the two groups is 39% to 51%. The difference between the groups in accumulated experiences with words is 13 million vs. 45 million. That is more than a 30 million word gap. Investment in the earliest years rather than interventions in later years, is just good sense. All children deserve access to a quality pre-school four year old program as part of the public school system. Yearly, thousands of children troop into their local public school to be tested to see if they can qualify for pre-K. The lucky few, who are sometimes coached not to remember critical information in order to gain placement, are admitted to an enriching readiness experience. The rest are left to find something or nothing else. South Carolina needs to make the investment in universal pre-K, allowing all of its youngest citizens access!

Sincerely,

/s/ Rose S. Sheheen

Rose S. Sheheen

Member, State School Board

Fifth Judicial Circuit

System Components for Promoting Reading Proficiency (with varying applications for EC, K-3, 4-5, MS, HS, CATE)

- 1. Desired outcomes (reading proficiency skills)**
- 2. Educator training and PD**
- 3. Administrator training and PD**
- 4. Reading instruction**
- 5. Assessment**
- 6. Volume of reading**
- 7. Writing**
- 8. Early childhood literacy development**
- 9. Content area reading**
- 10. Support for struggling learners**
- 11. Family support of reading**
- 12. District leadership/promotion of reading proficiency**
- 13. State level planning, support, monitoring, facilitation**
- 14. Political support and statutory guidance**
- 15. Catalysts and consequences**

Graduation in the United States

GRADUATION RATES RISING

Nationwide, 73.4 percent of all public school students graduated from high school with a regular diploma in the class of 2009, marking the second straight year of gains following a period of modest declines. The national graduation rate rose by 1.7 percentage points above the rate for the class of 2008, with rates also increasing in three-quarters of the states. This continued climb in the graduation rate is driven largely by strong gains among Latinos and moderate improvements for African-American and white students, which offset small decreases for other groups.

Over the past decade, graduation rates improved by 7.3 percentage points, with all racial and ethnic groups posting solid improvements since the late 1990s. The largest increases were found among African-American and Latino students, whose graduation rates have risen by nearly 10 points over this period. Although all groups are improving, significant racial disparities persist nationwide, with a 27-percentage-point gap dividing Asian-American and Native American students, the groups with the highest and lowest graduation rates, respectively.

10-YEAR GRADUATION TREND (ALL STUDENTS)

GRADUATION RATES FOR STUDENT SUBGROUPS, CLASS OF 2009

	CLASS OF 2009	CLASS OF 1999	CHANGE 1999 to 2009 (PERCENTAGE POINT)	MALE	FEMALE	AMERICAN INDIAN	ASIAN	HISPANIC	BLACK	WHITE
ALABAMA	69.2%	56.7%	+12.5	64.6%	73.8%	77.0%	76.1%	56.8%	59.8%	74.7%
ALASKA	69.3	63.7	+5.6	67.7	72.8	53.0	‡	63.9	64.0	73.7
ARIZONA	72.3	48.2	+24.1	68.8	75.5	59.9	84.1	64.0	70.6	78.3
ARKANSAS	70.6	70.5	+0.1	67.8	73.7	36.0	‡	65.4	59.7	72.7
CALIFORNIA	71.3	68.7	+2.5	67.2	75.0	40.3	77.4	63.0	50.8	75.4
COLORADO	76.4	67.5	+8.9	72.3	79.6	52.1	87.1	58.7	62.5	82.0
CONNECTICUT	76.0	75.1	+0.9	70.4	75.6	55.7	78.8	54.3	61.5	78.8
DELAWARE	67.9	57.7	+10.2	61.6	74.5	44.4	76.4	59.3	58.7	73.9
DISTRICT OF COLUMBIA	52.4	65.7	-13.3	‡	‡	‡	‡	‡	‡	‡
FLORIDA	70.4	52.5	+17.9	66.8	75.9	‡	86.6	72.6	62.0	73.1
GEORGIA	62.7	51.5	+11.2	61.2	72.2	‡	86.6	57.1	55.3	72.6
HAWAII	69.2	59.5	+9.6	66.6	72.0	55.5	70.5	61.5	62.8	66.7
IDAHO	72.1	76.5	-4.4	73.0	75.6	44.3	73.7	63.5	44.2	75.7
ILLINOIS	71.2	72.4	-1.2	64.1	63.1	62.0	84.2	61.5	51.3	78.7
INDIANA	75.8	71.1	+4.7	71.7	78.8	32.3	79.1	62.0	59.5	77.9
IOWA	80.5	78.9	+1.7	77.8	81.2	22.6	62.2	53.4	45.9	81.8
KANSAS	78.4	73.5	+5.0	76.1	81.8	‡	69.8	60.3	60.1	80.5
KENTUCKY	70.5	62.3	+8.2	66.3	74.0	21.9	75.5	58.5	53.6	72.5
LOUISIANA	64.0	59.1	+4.9	57.9	70.2	56.9	85.5	68.0	56.0	69.7
MAINE	72.3	68.9	+3.4	68.5	74.8	‡	‡	‡	‡	72.3
MARYLAND	77.9	71.8	+6.1	73.6	82.5	‡	95.0	70.3	67.0	85.5
MASSACHUSETTS	79.1	73.9	+5.3	75.3	82.2	‡	86.3	55.5	64.0	84.9
MICHIGAN	74.1	68.7	+5.4	70.4	79.4	48.1	75.7	43.6	‡	79.8
MINNESOTA	82.6	79.4	+3.1	80.1	82.4	‡	75.5	‡	‡	85.4
MISSISSIPPI	62.2	58.4	+3.8	57.1	68.3	35.8	73.6	51.6	58.1	67.1
MISSOURI	79.3	72.1	+7.3	76.5	81.4	67.5	84.4	68.7	61.0	82.6
MONTANA	77.4	75.7	+1.7	74.2	78.6	53.0	56.9	49.2	57.3	79.8
NEBRASKA	76.6	77.6	-1.0	72.3	79.1	31.4	‡	57.4	42.3	81.7
NEVADA	59.2	69.0	-9.8	55.7	62.2	44.6	74.9	53.3	48.9	60.4
NEW HAMPSHIRE	79.1	72.7	+6.5	75.7	81.2	‡	‡	‡	‡	79.2
NEW JERSEY	87.4	76.3	+11.0	85.3	87.2	33.2	88.3	74.1	74.4	90.1
NEW MEXICO	59.4	58.1	+1.3	55.3	64.2	48.0	72.2	62.3	35.8	55.9
NEW YORK	78.4	58.5	+19.9	71.9	82.8	52.5	82.0	57.9	57.6	84.7
NORTH CAROLINA	68.0	58.7	+9.3	61.9	72.0	56.8	79.5	54.1	56.0	74.9
NORTH DAKOTA	85.9	82.9	+3.1	82.3	87.7	57.5	‡	‡	‡	87.9
OHIO	76.4	69.0	+7.4	76.1	80.6	‡	‡	50.5	51.3	83.2
OKLAHOMA	73.6	70.4	+3.2	71.4	76.5	65.8	85.1	67.8	62.4	75.7
OREGON	73.1	64.0	+9.1	69.9	76.0	‡	72.0	‡	54.4	73.7
PENNSYLVANIA	80.5	75.3	+5.1	78.2	82.5	43.8	88.1	58.7	59.0	85.2
RHODE ISLAND	75.3	70.8	+4.5	70.8	78.6	‡	69.1	59.4	61.9	79.6
SOUTH CAROLINA	61.7	47.1	+14.6	55.9	67.9	33.3	77.0	53.8	53.6	67.3
SOUTH DAKOTA	69.5	74.6	-5.0	65.5	70.9	26.6	66.8	43.8	65.9	75.6
TENNESSEE	75.8	62.1	+13.7	71.7	79.6	53.3	85.9	64.3	68.0	78.6
TEXAS	71.5	60.2	+11.3	68.9	74.3	‡	90.1	64.4	64.4	79.6
UTAH	78.4	75.7	+2.7	64.3	70.2	59.0	65.4	51.7	54.2	69.2
VERMONT	77.4	76.9	+0.5	78.2	82.3	‡	‡	‡	‡	‡
VIRGINIA	76.0	73.9	+2.1	71.9	80.5	‡	89.0	65.5	64.8	81.5
WASHINGTON	68.1	68.6	-0.5	65.2	72.4	39.7	78.4	56.0	49.4	71.4
WEST VIRGINIA	71.5	71.2	+0.4	67.8	75.1	50.7	72.3	47.3	65.2	71.4
WISCONSIN	83.8	76.4	+7.4	80.8	85.2	54.2	82.3	64.2	50.4	88.3
WYOMING	73.9	73.4	+0.5	69.9	76.5	30.9	50.2	‡	33.2	75.1
U.S.	73.4%	66.0%	+7.3	69.6%	76.4%	53.1%	80.5%	63.0%	58.7%	78.8%

† Value not calculated because necessary data field(s) not reported in the U.S. Department of Education's Common Core of Data and not available from state education agency.
‡ Value not reported because of insufficient data for reliable estimate.

EDUCATION OVERSIGHT COMMITTEE

Objectives for 2011-2012

1. Continue the implementation of the Education Accountability Act of 1998, *as amended*, and fulfill other responsibilities assigned by the General Assembly including those within the Teacher Quality Act, the Parental Involvement in Their Children's Education Act, the Education and Economic Development Act and those made by special requests, including:
 - a. Monitoring the development of assessments and related resources linked to the Core Curriculum and communicating alignment with SC aspirations and instruction;
 - b. Monitoring instructional and assessment technology needs to facilitate on-line administration of the Common Core assessments;
 - c. Increasing the impact of the accountability system on decisions which impact state, school and student performance;
 - d. Ensuring the system is effective for the young people currently enrolled and for those young people to come;
 - e. Evaluating the progress of all schools including separate reporting for public charter schools and schools in technical assistance;
 - f. Reporting on growth in achievement across three years of PASS data for the four core academic subjects;
 - g. Reviewing the calculation of the improvement ratings; and
 - h. Supporting and promoting the statement of purpose adopted by the State Board of Education to encourage innovative practices in South Carolina public schools and other initiatives that encourage innovation and creativity.
2. Measure progress toward the 2020 vision for statewide educational performance including:
 - a. Ensuring that no student is enrolled in a school rated At Risk
 - b. Working with stakeholder groups including higher education to understand state aspirations and the tasks necessary to achieve those;
 - c. Adjusting or expanding reporting methods and content to increase sensitivity to growth in performance; and increased knowledge of the performance of students disaggregated by student instructional needs (i.e., EFA and EIA program codes) for the four core academic subjects;
 - d. Recommending actions for policy, practice and funding to accomplish the 2020 vision; and
 - e. Promoting more open dialogue about the gains, challenges and strategies to accomplish the 2020 vision.
3. Increase the level of student reading proficiency by:
 - a. Examining the performance of students, individual and in groups, to understand how and where emphasis is needed in policy and practice;
 - b. Linking student performance to instructional strategies and policies and promoting those which are most effective;
 - c. Engaging the higher education community and other stakeholder groups in discussions of reading achievement to promote changes in teacher preparation and pre-kindergarten through grade twelve policies and practices; and
 - d. Working with the South Carolina Reading Achievement Systemic Initiative to promote a comprehensive reading policy.
4. Develop a long-term strategy for increasing the utility of technology, including:
 - a. Identifying the availability and distribution of virtual courses in public schools;
 - b. Identifying lead districts and examining how technology in instruction has been supported, utilized and with what impact on student achievement;

- c. Identifying cutting-edge strategies for use of technology to address traditional education functions; and
- d. Promoting a statewide commitment for world-class technology in our schools.

- 5. Examine the performance of students to achieve at the highest level including:
 - a. Building a longitudinal PASS data base for the four core academic subjects; and
 - b. Determining opportunities for high ability students to access the gifted and talented programs and advanced college preparatory work generally and in low-performing schools.

- 6. Fulfill responsibilities outlined in the General Appropriations Act.

New Provisos in the 2012-13 General Appropriation Act

Pertaining to Duties and Functions of the EOC

Proviso 1A.57. (SDE-EIA: PowerSchool Dropout Recovery Data) With the funds appropriated to the Department of Education for PowerSchool and data collection, the department will begin in the current fiscal year to collect data from schools and school districts on the number of students who had previously dropped out of school and who reenrolled in a public school or adult education to pursue a high school diploma. The Education Oversight Committee working with the Department of Education will determine how to calculate a dropout recovery rate that will be reflected on the annual school and district report cards. The Department of Education shall report to the Senate Education Committee and the House Education and Public Works Committee on the implementation of a dropout recovery rate.

Proviso 70.32. (LEG: EOC Efficiency Review) Funds appropriated to the Education Oversight Committee for the School District Efficiency Review Pilot Program shall be used to review certain school districts' central operations with a focus on non-instructional expenditures so as to identify opportunities to improve operational efficiencies and reduce costs for the district. The Education Oversight Committee shall make the school districts aware of the pilot program, and accept applications to participate in the program. In the current fiscal year, the Education Oversight Committee shall select at least three applicant school districts to participate. The Education Oversight Committee may contract with an independent entity to perform the review. The review shall include, but not be limited to, examinations of (i) overhead, (ii) human resources, (iii) procurement, (iv) facilities use and management, (v) financial management, (vi) transportation, (vii) technology planning, and (viii) energy management. The review shall not address the effectiveness of the educational services being delivered by the district. The review shall be completed no later than June 30, 2013. Upon completion, the Education Oversight Committee shall submit a report to the Chairman of the Senate Finance Committee, Chairman of the Senate Education Committee, Chairman of the House Ways and Means Committee, Chairman of the House Education and Public Works Committee, and the Governor detailing the findings of the review including the estimated savings that could be achieved, the manner in which the savings could be achieved, and the districts' plan for implementation of the recommendations. Unexpended funds appropriated for this purpose may be carried forward from the prior fiscal year into the current fiscal year and expended for the same purpose.

Note: \$300,000 in non-recurring funds also appropriated for this function.

2012 Legislative Summary

Investments in Education Accountability and Improvement

With improved revenue collections in the current fiscal year and increased revenue projections for FY2012-13, the General Assembly appropriated additional revenues to accomplish the following:

- **Education Finance Act (EFA)** – The EFA is funded with a base student cost of \$2,012, a \$141 above the current year’s base student cost of \$1,880. The Index of Taxpaying Ability continues to impute the value for owner-occupied residential property qualifying for the special four percent assessment ratios for Tier 1, 2 and Tier 3(A).
- **South Carolina Public Charter School District (SCPCSD)** – The General Assembly appropriated \$30.3 million, an increase of \$5.0 million in general fund revenues to the SCPCSD. In addition to existing state funds, pupils enrolled in virtual charter schools sponsored by the SCPCSD will receive an additional \$1,700 per weighted pupil and pupils enrolled in brick and mortar charter schools, an additional \$3,250 per weighted pupil.
- **Technical Assistance and Aid to Districts** – The General Assembly appropriated \$5,250,000 for technical assistance.
- **IDEA** – The General Assembly appropriated up to \$30.5 million of EIA revenues to meet the maintenance of effort requirements under the federal law, Individuals with Disabilities Education Act (IDEA) and \$36.2 million to supplement a loss of federal funding from the Individuals with Disabilities Education Act (IDEA) expected on October 1, 2012.
- **Child Development Education Pilot Program (CDEPP)** – Recurring EIA monies continue to fund CDEPP at the prior year’s level. The South Carolina State Department of Education (SCSDE) is appropriated \$17,300,000 in EIA funds and the Office of First Steps to School Readiness, \$2,484,628 in general funds, for the program. CDEPP provides full-day education services in public schools or private centers for four-year-olds who are eligible for the free or reduced price federal lunch program and/or Medicaid and who reside in the plaintiff districts of the Abbeville equity lawsuit.
- **Teacher Salaries** – The 2008-09 statewide minimum teacher salary schedule, which had been in place for the past three fiscal years without any changes, will be increased by 2 percent in 2012-13. Districts will also be required to give teachers at least a one-step increase for years of experience. The General Assembly appropriated \$48.7 million in EIA revenues to cover the state share of the 2 percent increase. The projected Southeastern average teacher salary for FY2012-13 is projected to be \$49,319. The actual SC average teacher salary in 2010-11 was \$47,050. In the event that a midyear reduction in state funding to school districts occurs, districts may implement employee furloughs.
- **New Initiatives** – As recommended by the EOC, the General Assembly funded the following initiatives using EIA revenues: (1) Teach For America at \$2.0 million; and (2) STEM (science, technical, engineering and mathematics) at \$1,750,000.
- **Lottery and unclaimed prize revenues** – Funding for Reading, Math, Science and Social Studies Program is \$29,491,798 for grades K-5, the same level as in the current fiscal year. For grades 6-8, the level of funding also remains at \$2.0 million. Lottery revenues of \$12.2 million are also allocated for school bus purchases.

EDUCATION ACCOUNTABILITY ACT APPROPRIATIONS SINCE FY09*

EAA ITEM	FY09	FY10	FY11	FY12	FY13
Technical Assistance	76,380,078	60,430,445	57,430,445	6,000,000	5,250,000
External Review Teams	1,292,108	1,019,880			
Assessment	22,290,943	22,152,624	21,665,119	21,665,119	24,761,400
Formative Assessment	4,950,000	3,472,470	3,096,281	3,096,281	
Summer School/Comp Remediation	29,514,247				
Summer School Transportation	4,000,000				
Alternative Schools	11,008,140				
Principals Executive Institute	853,592				
Professional Development on Standards	6,592,390	6,515,911	6,515,911	6,515,911	5,515,911
Palmetto Gold and Silver Awards **	2,825,310	2,230,061	2,230,061	2,230,061	
Report Card Printing & Development	915,205	722,385	722,385	722,385	
Data Collection	1,543,043	1,217,947	1,217,947		
Unique Student Identifier	1,250,708	987,203	987,203		
Power Schools/Data Collection				5,000,000	5,000,000
Education Oversight Committee (EOC)	1,658,805	1,016,289	1,016,289	1,193,242	1,193,242
EOC Public Relations	213,398	168,438	168,438		
SCDE Personal Service	1,821,889	1,236,436	1,236,436	1,236,436	1,236,436
SCDE Other Operating	1,638,815	1,174,752	1,174,752	1,174,752	1,174,752
Students at Risk of School Failure		136,163,204	136,163,204	136,163,204	136,163,204
TOTAL EAA:	\$168,748,671	\$238,508,045	\$233,624,471	\$184,997,391	\$180,294,945
OTHER SUPPORTING PROGRAMS:					
Reduce Class Size	33,006,617				
EOC Family involvement	42,679	33,781	33,781		
K-5 Reading, Math, Science & Social Studies	47,614,527	47,614,527	47,614,527	29,491,798	29,491,798
6-8 Reading, Math, Science and Social Studies	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
High School Reading	1,000,000	911,400	729,340	729,340	
Young Adult Education (30% of Adult Education)	4,706,832	4,018,351	4,072,121	4,072,121	4,072,121
Act 135 Academic Assistance	113,423,554				
Reading		6,542,052	6,542,052	6,542,052	6,542,052
Aid to Districts				68,250,835	37,736,600
TOTAL OTHER:	\$201,794,209	\$61,120,111	\$60,991,821	\$111,086,146	79,842,571
GRAND TOTAL:	\$370,542,880	\$299,628,156	\$294,616,292	\$296,083,537	\$260,137,516

* Includes all recurring and nonrecurring General Fund, EIA, and lottery revenues but excludes federal funds for testing. Line items in italics denote the suspension of the entire program or a portion of the program for other purposes (writing assessment suspended in grades 3, 4, 6 and 7; suspension of report card printing; etc.). Over time, several line items have been consolidated. Appropriations for Act 135, Summer School, Reduce Class Size, Alternative Schools, and Parenting/Family Literacy were consolidated and reallocated to Students at Risk of School Failure. Appropriations for Young Adult and Adult Education were consolidated. All line item appropriations for the EOC were consolidated, and appropriations for data collection and unique student identifier were consolidated into PowerSchool.

** For FY10, FY11 and FY12, the funds appropriated for the program were either suspended or reallocated.

Often, policymakers are asked about teacher salary and EFA base student cost funding. Below are some charts to give you a historical perspective

Fiscal Year	South Carolina	Southeast	Difference
2004-05	\$42,189	\$41,464	\$725
2005-06	\$43,011	\$42,863	\$148
2006-07	\$44,336	\$44,544	(\$208)
2007-08	\$45,758	\$46,393	(\$635)
2008-09	\$47,421	\$47,445	(\$24)
2009-10	\$47,508	\$47,553	(\$45)
2010-11	\$47,050	\$47,692	(\$642)
2011-12	\$47,050	\$48,337	
2012-13		\$49,337	

Southeast includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia.

Salaries in blue are estimates.

Fiscal Year	Expenditures	Projected BSC	BSC Per Appropriation Act
2004-05	\$1,027,089,281	\$2,234	\$1,852
2005-06	\$1,078,998,156	\$2,290	\$2,290
2006-07	\$1,367,973,500	\$2,367	\$2,367
2007-08	\$1,426,544,209	\$2,476	\$2,476
2008-09	\$1,506,691,472	\$2,578	\$2,578
2009-10 *	\$1,339,202,159	\$2,687	\$2,334
2010-11 *	\$1,088,894,001	\$2,720	\$1,930
2011-12 **	\$1,004,394,001	\$2,790	\$1,788
2012-13 ***	\$1,109,394,001	\$2,790	\$2,012

Source: "Historical Analyses," Office of State Budget, Last Updated October 2011.

<http://www.budget.sc.gov/webfiles/OSB/historical/FY_2011_Historical_Analyses_for_webpage.pdf>.

*Base Student Cost includes federal funds authorized through the American Recovery and Reinvestment Act (ARRA) of 2009. Without ARRA funding, base student cost is \$2,034 in FY2009-10 and \$1,630 in 2010-11.

**Base Student Cost does not include \$56,174,107 in non-recurring funds. Total funding is a base student cost of approximately \$1,880.

*** EFA expenditures for 2012-13 reflect appropriations.

Other Legislation Impacting School Finance and Accountability

Act 148 (H4595, R167) – This law amends proviso 1A.54. of the current year’s appropriation act, to reduce the amount of funds that must be expended for the maintenance of effort for the Individuals with Disabilities Education Act (IDEA) from \$45.5 to \$33.5 million. The reduction reflects the appropriated Education Finance Act (EFA) base student cost and the 45-day average daily membership for students with disabilities. The balance of the funds may be expended by districts for other educational purposes.

Act 164 (H3241, R188) – This law amends the state’s charter school legislation to:

- Expand charter school options to include single-gender public charter schools and public charter schools sponsored by institutions of higher education;
- Provide that a charter school is eligible for federally sponsored, state-sponsored or district-sponsored interscholastic leagues, competitions, awards, scholarships, grants, and recognition programs for students, educators, administrators, staff, and schools to the same extent as all other public schools;
- Permit public charter school students to participate in extracurricular activities, including athletics, at their resident public school if that activity or athletic team is not offered by the public charter school they attend. A “resident public school” is the public school the student would attend if they were not enrolled in their public charter school;
- Amend the composition of the Charter School Advisory Committee to include a public charter school principal and a public charter school board member;
- Require the Charter School Advisory Committee to notify the county legislative delegation in which a proposed public charter school is to be located upon receipt of a public charter school application;
- Prohibit unlawful reprisal against an employee of a school district who is directly or indirectly involved in an application to establish a public charter school;
- Require school districts to release funds for public charter schools in a timely manner, and provides that failure to do so may result in a fine levied on the school district in an amount equivalent to the withheld funds; and
- Create the Charter School Facility Revolving Loan Program.

Act 170 (H4690, R194) – Known as the “Jason Flatt Act,” this law requires that beginning with the 2013-14 school year, the Department of Education will require two hours of training in youth suicide awareness and prevention as a requirement for the renewal of credentials for individuals employed in a middle or high school.

Act 203 (S149, R212) – Known as the “Equal Access to Interscholastic Activities Act,” this law gives any student enrolled in one of the Governor’s Schools or taught at home the opportunity to participate in interscholastic activities at the school which correlates with the attendance boundaries for the student. The student must maintain the same responsibilities and standards of behavior and performance as any other student participating on the team or squad. These are the same privileges given to students in charter schools by Act 164.

Act 231 (H3028, R283) – The act increases the induction period for teachers from one to up to three-years. Districts have the flexibility at the end of each year of the three-year induction period to employ the teacher under another induction contract, to offer an annual contract, or to terminate employment.

H4632 (R168) – Effective July 1, 2012, the three school districts of Marion County will merge into a single school district, the Marion County School District. The existing boards of trustees will continue to serve until June 30, 2014 at which time they will be dissolved.

H4904 (R240) – This joint resolution allows the South Carolina Department of Education not to provide printed copies of the 2012 district and school report cards. Instead districts or schools are required to email parents a link to the report cards if the school maintains parent email addresses. The district or school must notify parents about the report cards through its newsletter or other regular communication channels. If the parent requests a printed copy of the report card, the district or school must provide a printed copy at no cost to the parent.

H4905 (R165) – The joint resolution allows school districts the ability to delay the issuance of teacher contracts for the 2012-13 school year from April 15 to May 15 and to negotiate salaries below the school district salary schedule for retired teachers who are not Teacher and Employee Retention Incentive (TERI) participants.

EOC WORK IN PROGRESS

Copies of previous work can be obtained from www.eoc.sc.gov

Standards and Accountability:

Cyclical Review of the Science Standards June 2012

Recommendations for modifying the 2007 South Carolina Science Academic Standards were approved by the EOC and forwarded to the State Board of Education. These recommendations were compiled under the advisement of three review teams: a national experts team of individuals from institutions of higher education both in and outside South Carolina; a parent, business and community leaders' team drawn from various geographical areas in South Carolina; and a team of educators of students with disabilities and students with limited English proficiency, also from various geographical areas in South Carolina.

Family Friendly Standards August 2012

The publication that describes the standards in terms that parents can easily understand have been updated for school year 2012-13 and reflect the recently adopted social studies standards.

Cyclical Review of Accountability System August 2012 – June 2013

The EOC will work with the State Board and a broad-passed group of stakeholders to review the accountability system and make recommendations to accelerate improvement in student and school performance while looking at alternative and innovative ways to transform assessment and delivery of public education to increase student achievement.

Evaluation:

Annual Review of EIA-Funded Programs and Initiative Fall of 2012

EOC will make recommendations for Fiscal Year 2013-14 to Governor and General Assembly.

Reading December 2012

The EOC will consider the recommendations of the South Carolina Reading Achievement Systemic Initiative along with input from others and determine priorities in policies and programs to improve reading achievement.

Annual Evaluation of SC Teacher Loan Program April 2013

The EOC will report on the progress, challenges, and impact of the SC Teacher Loan Program on recruiting teachers into the teaching profession.

Efficiency Review June 2013

Per a proviso in the budget, the EOC will contract with an independent entity or entities to perform a review of the non-instructional expenditures of at least three school districts to identify opportunities to improve operational efficiencies and reduce costs. The initial results will be provided to the General Assembly.

Public Reporting and Engagement:

Public Awareness Campaign August 2012

The campaign will focus on raising awareness of the public of the need for post-secondary education and on improving reading/literacy in the state. A statewide media campaign using Ad Council advertisements and a high school student contest aimed at instructional technology will begin in the fall of 2012. In addition the EOC will provide information to educators on ways to improve reading/literacy achievement and to engage communities in improving literacy.

Where Are We Now Report February 2013

In September of 2009 the EOC adopted a 2020 Vision Statement for South Carolina. Annually, the EOC documents progress of the state toward obtaining the Vision.

Annual Report of Parent Survey April 2013

The EOC will report on the results of the 2012 administration of the annual Parent Survey.

2011 Annual District and School Ratings

Districts: Between 2010 and 2011, 26 school districts improved their absolute rating while 9 districts had declines in their absolute ratings. The number of At-Risk districts increased from 6 to 9.

ABSOLUTE Ratings for School Districts Number and %

Absolute Rating	2009	2010	2011
<i>Excellent</i>	1 (1.2%)	6 (7.0%)	11 (12.8%)
<i>Good</i>	0	12 (14.0)	22 (25.6%)
<i>Average</i>	24 (28.2%)	48 (55.9%)	35 (40.7%)
<i>Below Average</i>	39 (45.9%)	14 (16.3%)	9 (10.5%)
<i>At-Risk</i>	21 (24.7%)	6 (7.0%)	9 (10.5%)

Schools: Between 2010 and 2011 226 or 19% of all public schools improved their absolute rating while 74 or 6% had declines.

“Consistently Excellent” – 160 school report cards had an absolute rating of Excellent for the past three years.

“Consistently Improving” – 32 school report cards improved the absolute rating from 2009 to 2010 and again from 2010 to 2011

“Persistently Underperforming” – 37 school report cards had an absolute rating of At-Risk all three years.

2011 Absolute Rating	Schools (% of Schools)	Students (% Enrolled by Schools by Rating)	Average Poverty Index
<i>Excellent</i>	242 (21%)	25.2%	50.6%
<i>Good</i>	209 (18%)	21.1%	64.7%
<i>Average</i>	509 (44%)	41.4%	79.4%
<i>Below Average</i>	137 (12%)	8.6%	91.9%
<i>At-Risk</i>	69 (6%)	3.8%	94.8%

This table does not include ratings for career and technology centers.

Graduation Rates

South Carolina On-Time Graduation Rate

2009	2010	2011
73.7	72.1	73.7

Preparing for the Future Today

EOC's 2020 VISION

By 2020 all students will graduate with the knowledge and skills necessary to compete successfully in the global economy, participate in a democratic society and contribute positively as members of families and communities.

Reading Proficiency:

95% of students scoring on grade level at grades 3 and 8 and scoring Basic and above on NAEP at grades 4 and 8, eliminating the achievement gaps.

High School Graduation

88.3% of students will graduate on-time (NGA/USED) and 95 % of young people 21 and over will earn a diploma, GED or SBE-approved occupational certificate for students with severe disabilities. Achievement gaps will be eliminated.

Preparedness for Post-High School Success

85% of graduates will perform at levels for admission to postsecondary education and/or be employed. A measure of workforce readiness will be developed. Achievement gaps will be eliminated

Schools At Risk

There will be no school in this category.

2020 Vision Benchmarks

Green denotes achievement in 2011 that met the benchmarks for 2011.

Target	2009 Actual Performance	2010 Actual Performance	2011 Actual Performance	2011	2014	2017	Vision 2020
PASS, Reading, grade 3	78	80.7	80.0	81	85.5	90	95
Target: African American	67.1	70.9	68.4	72.1	79.6	87.1	95
Hispanic	67.8	74.5	73.6	72.1	79.6	87.1	95
White	86.5	87.9	87.9	87.9	90.3	92.7	95
Non-Subsidized	89.8	91.1	91.0	90.8	92.3	93.8	95
Subsidized Meals	69	73.6	72.4	73.6	80.6	87.6	95
With disabilities	48.4	50.2	45.9	56.8	69.5	82.2	95
Without disabilities	81.8	85.4	85.1	84.2	87.8	91	95
PASS, Reading, grade 8	67.5	63.7	67.8	73.5	80.7	87.9	95
Target: African American	53.8	47.2	51.9	61.2	72.3	83.4	95
Hispanic	60.6	58.1	64.8	66.8	76.1	85.4	95
White	79	74.5	77.8	81.8	86.2	90.4	95
Non-Subsidized	81.9	78.6	81.8	84.3	87.9	91.5	95
Subsidized Meals	56.7	50.7	55.5	63.7	74.2	84.7	95
With disabilities	25.3	19.9	22.8	37.9	56.8	75.7	95
Without disabilities	74.8	69.7	73.7	78.4	83.8	89.2	95

Target	2009 Actual Performance	2010 Actual Performance	2011 Actual Performance	2011	2014	2017	Vision 2020
NAEP, Reading, grade 4	62	No new data	61	68	77	86	95
Target: African American	53		44	60.4	71.8	83.2	95
Hispanic	49		57	57.4	70	82.6	95
White	74		73	78	84	90	95
Non-Subsidized	77		79	80.2	85	89.8	95
Subsidized Meals	49		48	57.4	70	82.6	95
With disabilities	34		19	45	60.5	75	95
Without disabilities	65		67	70.4	78.5	86.6	95
NAEP, Reading, grade 8	69		72	73.8	81	88.2	95
Target: African American	52		56	60	72	84	95
Hispanic	70		69	74.6	81.5	88.4	95
White	79		82	82	86.5	91	95
Non-Subsidized	81		83	83.6	87.5	91.4	95
Subsidized Meals	56		61	63	73.5	84	95
With disabilities	34		30	45	61.6	78.2	95
Without disabilities	71		75	75.4	82	88.6	95
On-time Graduation	73.7	72.1	73.6	76.1	80.3	84.5	88.3
Target: African American	69.1	68.0	69.7	72.5	77.6	82.7	88.3
Hispanic	68.3	62.6	68.5	71.9	77.3	82.7	88.3
White	77.1	75.5	76.8	79.1	82.1	85.7	88.3
Non-Subsidized	80.2	78.1	79.4	81.6	83.7	85.8	88.3
Subsidized Meals	65.2	64.9	67.0	69.4	75.7	82	88.3
With disabilities	42.9	45.1	38.4	51.1	63.4	75.7	88.3
Without disabilities	77.3	74.7	77.2	79.3	82.3	85.3	88.3
Preparedness for Postsecondary Success (High school completers enrolled in two or four-year colleges and technical schools)	2008 data 67.1%	2009 data 65.8%	2010 data 65.9%				
Schools Rated at Risk	83	69	69				0