CYCLICAL REVIEW OF THE STATE ACCOUNTABILTY SYSTEM



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Executive Summary

Pursuant to Section 59-18-910, the Education Oversight Committee (EOC) is hereby providing to the General Assembly "a report on the findings and recommended actions to improve the accountability system and to accelerate improvements in student and school performance."

Findings:

A. The earnings gap of college versus high school graduates has risen steadily for almost three decades. Gains in educational attainment have not kept pace with rising educational returns. If per capita personal income in South Carolina was at the national average, our citizens would have \$19 billion additional personal income. Few areas the General Assembly can address will increase the prosperity of South Carolinians more than improving public education.

B. By the year 2020, 65 percent of the 55 million job openings in the United States will require a postsecondary degree or credential beyond a high school diploma with the fastest growing occupation being STEM and healthcare professions and support that will require postsecondary education. In South Carolina, 62 percent of the 771,000 job openings will require postsecondary degree or credentials. However, currently, 22 percent all students who enter the ninth grade do not graduate from high school. The percentage of adults in South Carolina with at least an associate's degree is only 34 percent. Furthermore, 41 percent of high school graduates require remediation at the state's two-year institutions.

C. While South Carolina has witnessed sustained improvement in student performance since passage of the Education Accountability Act, too many students are still ill-served by the current public education system and the rate of improvement must accelerate. A strong and growing consensus has formed among parents, educators, business leaders and community advocates that public education must be transformed to meet the needs of individual students.

D. South Carolina's current state accountability system is a "performance based accountability system for public education which focuses on improving teaching and learning so that students are equipped with a strong academic foundation." To date, the strong academic foundation focuses entirely on student mastery of state standards through summative and end-of-course assessments and high school graduation rates. Today, however, a high school diploma is necessary but no longer sufficient to prepare our students for the next step in their lives. And, the academic performance of students in public schools and school districts in South Carolina is measured and reported by two accountability systems that give conflicting messages to parents, educators and communities.

Recommended Actions:

A. The General Assembly should adopt the following as South Carolina public education's mission.

All students graduating from public high schools in South Carolina should have the **knowledge, skills, and opportunity** to be college ready, career ready, and life ready for success in the global, digital and knowledge-based world of the 21st century. All graduates should qualify for and succeed in entry-level, credit bearing college courses without the need for remedial coursework, in postsecondary job training, or significant on-the-job training.

B. South Carolina must set goals to measure and improve college, career, and citizenship readiness. Such goals would communicate the vision to the public, demonstrate the importance, and inspire transformative changes in the delivery of education. These goals would be set collaboratively with early childhood education, public education, postsecondary education, parents, and business. Annually, the EOC would monitor the state's progress toward these goals.

C. To encourage progress towards these goals, the EOC recommends amending the current state accountability system to measure the postsecondary success of public school graduates. Year-end summative assessments and high school graduation rates are necessary but no longer sufficient. The accountability system would be a balanced system of multiple measures that give comprehensive, valid, and vital data to ensure that every student is prepared for the 21st century. Multiple measures would include extended performance tasks that rely upon the professional judgment of teachers to evaluate student mastery and critical thinking skills.

D. In addition to public reporting, accountability requires that standards for the core content areas be aligned to the mission and goals, and assessments accurately measure the standards.

E. To accelerate improvement, professional educators must be empowered to deliver new forms of radically, personalized, technology-embedded, education. The accountability system must be flexible enough to allow and even support schools and districts to be incubators of change and innovation.

F. South Carolina must evaluate and amend existing policies to remove barriers to transformation. For example, are there barriers that restrict the number of high school students who take dual enrollment classes? How can South Carolina prepare, recruit, retain and empower highly qualified teachers to lead the transformation, especially in historically low-achieving schools?

Cyclical Review of the State Accountability System

Section 59-18-910 of the Education Accountability Act (EAA) requires the Education Oversight Committee (EOC) in collaboration with the State Board of Education and a broad-based group of stakeholders in 2013 to conduct a comprehensive cyclical review of the state's accountability system for public education.

SECTION 59-18-910. 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.

In December of 2012 the EOC contracted with the Educational Policy Improvement Center (EPIC) to assist the EOC in facilitating the findings and recommendations of the cyclical review. According to EPIC, South Carolina's cyclical review process "is situated within a contemporary policy context that carries deeper and more fundamental questions for a revision of the state accountability system:

- A changing economy is demanding new skills of current and future workers;
- South Carolina ranks 37th among the states in adults with post-secondary credentials;
- Fifteen years into the accountability era, a cohort of chronically low-performing schools has shown little improvement under the current set of measures and stakes;
- A wave of local innovation aided in part by technology advances is shifting the delivery unit of learning from seat-time to competencies; and
- States across the country are leveraging lessons learned from the early era of accountability to engage in wholesale redesigns for 'next generation' accountability systems." ¹

Engagement of Stakeholders

Beginning in January of 2013 members and staff of the EOC identified thirty-five (35) individuals to serve on a panel to review the accountability system. (Appendix A) Nominations were taken from the committee, from the Speaker of the House, and from the President Pro

¹ Collins, Sarah K. et. al. from the Educational Policy Improvement Center. *South Carolina Accountability Review & Revision: An Analytical Framework*. Provided to the South Carolina Education Oversight Committee on August 8, 2013.

Tempore of the Senate. The panel met in Columbia on the following dates and gathered information on the following:

- February 13, 2013 The panel received an overview of the current accountability system from EOC staff, an update on the innovation initiative efforts led by New Carolina from Dr. Gerrita Postlewait, and a presentation by State Superintendent of Education Dr. Mick Zais on his recommendations for amending the accountability system.
- April 8, 2013 Dr. David Conley, Founder and Chief Executive Officer of the Educational Policy Improvement Center (EPIC) at the University of Oregon, discussed the post-recession job growth, projections of the workforce needs of 2020, and the four keys to college and career readiness.
- June 10, 2013 Dr. Conley and his team from EPIC presented results of three regional stakeholder meetings and an accountability framework.
- September 16, 2013 Cyclical review panel and EOC met in a joint meeting to discuss the framework and related accountability issues.

Three regional stakeholder meetings were also held in Charleston, Columbia, and Greenville in April of 2013. Approximately 57 individuals attended the meetings with half of the members of the cyclical review panel in attendance along with representatives of the State Board of Education, business and industry, public education, higher education, parents, and community. EPIC staff led the four-hour meetings, which focused on:

- Establishing the definition of and purpose of the state's accountability system;
- Reviewing the accountability systems of four peer states, Florida, Georgia, Kentucky and New Hampshire. EPIC staff selected these states "based on the following criteria: (1) the accountability system has a clear theory of action that connects purpose, goals, and indicators; (2) at least one component of the state policy context mirrors the environment of South Carolina; and (3) the state had recently undergone an accountability redesign process, reflecting the most contemporary educational policy agenda and available metrics for measuring school quality; "² and
- Designing an accountability system with actual indicators.

Between August of 2013 and April of 2014, members of the EOC discussed the framework and accountability system at each EOC meeting and received input from *TransformSC*, the initiative led by New Carolina, South Carolina's Council on Competitiveness, to transform the delivery system of education. The EOC also received a specific proposal from fellow board member John Warner, a business appointee to the EOC. Finally, the Academic and Standards Subcommittee of the EOC met in November of 2013 and March of 2014 to finalize the

² Ibid.

following findings and recommendations for the full EOC consideration at its April 28, 2014 meeting.

Findings

The academic performance of students in public schools and school districts in South Carolina is measured and reported by two accountability systems that give conflicting messages to parents, educators and communities.

Quality Counts, a publication of the education newspaper, *Education Week*, annually measures each state's public education performance against six indicators, assigning both a letter grade and a numeral score to each state. Overall, in 2013 South Carolina ranked at the national average. On Standards, Assessments and Accountability, the indicators for which the EOC's core mission focuses, South Carolina earned a **Grade of A** and a numerical score of **94.4** along with a national ranking of 6th best in the nation.³

When the Education Accountability Act (EAA) of 1998 was enacted, there was not a separate federal accountability system. South Carolina was a forerunner in establishing a formal reporting system for public schools and school districts. With passage of the No Child Left Behind Act in 2001, South Carolina public schools have been accountable to two systems – the state accountability system that the EOC is charged with creating and the federal accountability system that once was based on Adequate Yearly Progress but now is governed by the Education and Secondary Education Act (ESEA) waiver as designed by the South Carolina Department of Education and approved by the United Stated Department of Education. Prior to the U.S. Department of Education's offer for states to receive waivers from certain requirements of the No Child Left Behind Act of 2001, 20 states had both a state and a federal accountability system. ⁴ Furthermore, to receive Title I funds, which total approximately \$212 million annually, South Carolina must participate in either No Child Left Behind or the ESEA waiver process.

While the two accountability systems use the same state assessments to measure performance, the systems are markedly different and create conflicting messages in schools and communities.

• The federal accountability system combines the absolute achievement and growth in achievement into one score across subgroups. Growth is the difference between the achievement of students in the prior year to students in the current year (two different groups of students); It should be noted that these cohorts are

 ³ Quality Counts, 2013. Education Week. January 2013. < http://www.edweek.org/ew/qc/2013/state_report_cards.html>.
 ⁴ National Governors Association. "Creating a College and Career Readiness Accountability Model for High Schools." January 29, 2012. < http://www.nga.org/files/live/sites/NGA/files/pdf/1201EDUACCOUNTABILITYBRIEF.PDF>.

NOT the same students from year to year but compare the performance of students in the school in the prior year to the performance of students in the school in the current year (i.e. different cohorts of students.) The state system requires schools and districts to receive a status rating (Absolute Rating) and a separate growth rating (Growth Rating), which measures the improvement of **individual** student performance from year to year.

- The federal accountability system is based on average scale scores of students. These scores measure the average student performance in a school as well as average score of cohorts (students by ethnicity, disability, etc.) The federal system also measures gains made by subgroups of students. The state accountability system measures whether each individual student is meeting state standards or passing end-of-course assessments and the High School Assessment Program and whether each individual student improved from one year to the next. The state system focuses on whether students score Met, Not Met or Exemplary on the state assessment in grades 3 through 8, not on the individual student scale scores.
- Finally, due to the August release of the federal ratings, federal grades for high schools are based on the 2011-12, the previous school year's high school graduation rate and end-of-course assessments. The state ratings for high schools are based on the results of the 2012-13 school year graduate rate and assessment data.

Federal Rating	Number	%	State Absolute Rating	Number	%
A	10	12%	Excellent	30	37%
В	32	39%	Good	20	24%
С	21	26%	Average	24	29%
D	9	11%	Below Average	6	7%
F	<u>10</u>	12%	At Risk	<u>2</u>	2%
Total	82			82	

District 2013 Federal and State Ratings

While South Carolina has witnessed sustained improvement in student performance since passage of the Education Accountability Act in 1998, the rate of improvement must accelerate to meet the 21st century needs of our state. Too many South Carolina students are still ill-served by the current public education system.

Prior to enactment of the EAA in 1998, South Carolina:

- Did not have consistent standards in English language arts, mathematics, science and social studies across all districts and schools or assessments to measure student achievement across content areas;
- Did not publically report on the performance of schools or districts using consistent measures across time;
- Did not monitor individual student performance over time because unique student identifiers did not exist;
- Did not measure the achievement gaps between subgroups of students; and
- Did not know the graduation rate for its public schools because the reporting system was not available.

In the past fifteen years South Carolina students have made sustained progress. The state's graduation rate has improved from below 60 percent to 77.5 percent in 2013. South Carolina ranks in the top half of states in the percentage of students taking and passing Advanced Placement (AP) courses. South Carolina's average ACT scores increase annually. On the National Assessment of Education Progress (NAEP), South Carolina's reading and mathematics scores at grades 4 and 8 are consistently ranked 34th to 39th nationally.

However, even with the improvement, approximately 41 percent of students who enter the twoyear technical college system today require remediation in English language arts and/or mathematics at a cost to taxpayers of \$21.0 million. And, one out of every five students who enters the 9th grade does not graduate with a high school diploma four or five years later.

By 2020 the Georgetown University Center on Education and the Workforce projects that 62 percent of the job openings in South Carolina will require postsecondary education.⁵ Of these

⁵ *Recovery: Job Growth and Education Requirements Through 2020.* State Report. Center on Education and the Workforce, Georgetown University. June 2013. http://cew.georgetown.edu/recovery2020/states/

jobs, 34 percent will require some college, an associate's degree or some postsecondary vocational certificate.⁶ As of 2011 the United States Census Bureau reports that only 34 percent of the working-age population in South Carolina had at least an associate degree. Appendix B includes a list by county of the percentage of working-age population with at least an associate's degree. The relationship between public and higher education has never been so critical to the economy of our state and to the future of our citizens.

Educational attainment is highly correlated with personal income. The percentage of South Carolina's adult population graduating from high school and from college trails the nation as a whole, and as a result per capita personal income is below the national average. If per capita personal income was at the national average, there would be \$19 billion more personal income in South Carolina. (Appendix C) Few investments the state can make will have a bigger impact of the economic prosperity of our citizens than changes in the accountability and assessment system to provide the data and the flexibility for public schools to be transformed.

Recommendations

A. South Carolina should redefine what a strong academic foundation means for students and the goal of the State accountability system.

The original goal of the Education Accountability Act was "to establish a performance based accountability system for public education which focuses on improving teaching and learning so that students are equipped with a strong academic foundation." The stakeholders defined a strong academic foundation for 21st century students as having a strong foundation in the basics, literacy and numeracy **and** in higher-order thinking skills. Other descriptors included students being college and career ready, having a love of learning, being global and digital literate, and having soft skills such as collaboration and personal responsibility. Consequently, the goal of the State's accountability system for public education should be as follows:

All students graduating from public high schools in South Carolina should have the knowledge, skills, and opportunity to be college ready, career ready, and life ready for success in the global, digital and knowledge-based world of the 21st century. All graduates should qualify for and succeed in entry-level, credit bearing college courses without the need for remedial coursework, in postsecondary job training, or significant on-the-job training.

This definition supports the Vision and Profile of the Successful Graduate as developed and adopted by the South Carolina Association of School Administrators and supported by *TransformSC* (Appendix D) And, the "student-centered" focus is consistent with the State Superintendent of Education's recommendations for modernizing the EAA with a personalized system.

In 2013 the Arkansas legislature enacted Act 1081 which defines college and career readiness succinctly as:

"a set of criterion-referenced measurements of a student's acquisition of the knowledge and skills the student needs to be successful in future endeavors, including credit-bearing, first-year courses at a postsecondary institution, such as two-year or four-year college, trade school, or technical school, or to embark on a career."

Florida defines students as college and career ready when they have "the knowledge, skills, and academic preparation needed in introductory college credit-bearing courses within an associate or baccalaureate degree program without the need for remediation. These same attributes and levels of achievement are needed for entry into and success in postsecondary workforce education or directly into a job that offers gainful employment and career advancement." ⁷ Knowledge focuses on mastery of standards as well as higher levels of demonstrated competencies as measured by SAT, ACT, Advanced Placement, International Baccalaureate or Dual Enrollment. The term "skills" includes: effective communication skills; critical thinking and analytical skills; good time management skills; intellectual curiosity and a commitment to learning. Academic preparation encompasses students earning 24 credits, four each in English and mathematics and three each in science and social studies with one course taken online.

B. South Carolina must set goals to measure and improve college, career, and citizenship readiness.

Such goals would communicate the vision to the public, demonstrate the importance, and inspire transformative changes in the delivery of education. These goals would be set collaboratively with early childhood education, public education, postsecondary education, parents, and business. Annually, the EOC would monitor the state's progress toward these goals.

In 2010 the National Governors Association recommended that state leaders measure five key college- and career-ready performance measures:

- 1. Percentage of students completing (or on track to complete) a college- and career-ready course of study
- 2. Percentage of students demonstrating proficiency on "anchor" assessments
- 3. Percentage of students obtaining college credit or a career certificate in high school
- 4. Four-year cohort graduation rate
- 5. Percent of traditional, first-year students enrolling in remedial coursework at a postsecondary institution.⁸

⁷ Florida Department of Education. Division of Florida Colleges. Accessed on August 27, 2013. < <hr/><http://www.fldoe.org/fcs/collegecareerreadiness.asp>.

⁸ *Setting Statewide College- and Career-Ready Goals,*" NGA Center for Best Practices. August 5, 2010.

C. South Carolina should move from an assessment system to a balanced system of multiple measures that give comprehensive, valid and vital data to ensure that every student is prepared for the 21st century.

The measures used to determine how well our children are prepared for the 21st century will require accountability for the *knowledge, skills,* and *opportunity* that students acquire. These terms are defined below:

Knowledge – Do <u>all</u> students have the knowledge to be successful in the 21st century? At the elementary and middle levels, knowledge would focus on measuring student understanding of content standards. Specifically, schools and districts should be held accountable for:

- Absolute scores on English language arts and mathematics in grades 3 through 8 and expanding to include science and social studies in grades 4 through 8 for all students with equal weighting of each content area in the state accountability system. Stakeholders wanted to focus on students having the numeracy and literacy skills needed by third grade;
- Student growth scores on assessments in English language arts, mathematics, science and social studies to measure development over time;
- Reporting on subgroup scores to close achievement gaps; and
- Improving the performance of the bottom 25 percent of students to focus on students who need the most help and could be missed in subgroup data if the cohort size is too small.

At the high school level, the stakeholders resoundingly believed that while graduating from high school is important, it is no longer sufficient. Instead, student assessments used at the high school level should have a dual purpose: (1) accountability; and (2) the future goals of the student; i.e. college and career. The stakeholders emphasized the need to have a measure that has "high currency outside of the accountability system." Consequently, the framework should include a variety of a variety of assessments that measure both career and college readiness such as:

- Silver level or higher on WorkKeys;
- Armed Services Vocational Aptitude Battery;
- Compass; and
- ACT, SAT or Smarter Balanced 11th grade assessment.

The EOC endorses the replacement of the High School Assessment Program with assessments that measure college and career readiness. The two-year technical colleges already use Compass, an ACT product; the four-year colleges and universities in the state

accept ACT Plus Writing scores in making admission decisions; and Governor Haley, in collaboration with the business community, has implemented SC Work Ready Communities. Given these facts, the EOC would recommend that South Carolina provide to every student in public schools the following:

All students in the 11th grade would take WorkKeys and ACT plus Writing. Based upon the results of the assessments, students would then receive in their 12th grade year either the remediation needed to become college and career ready or opportunities such as dual enrollment or internships to begin the next step in their jobs and career.

To address the conflicting messages over the state and federal accountability systems, the state rating for **knowledge** should be consistent with the federal rating, if at all possible. In addition, the use of student growth in the knowledge measurement is consistent with the State Superintendent of Education's recommendations to combine student achievement and student growth into one measure of performance.

Skills – Do <u>all</u> students have the skills to be successful? These skills include the higher order thinking skills that stakeholders value including the ability to conduct sustained research; analyze information; experiment and evaluate; communicate in various forms; use technology; collaborate with others, problem solve; and persist.

A 2012 report by the RAND Corporation evaluated 17 state assessments and determined that fewer than 2 percent of the mathematics test items and 21 percent of the English language arts test items tested students' abilities to analyze, synthesize, compare, connect, critique, hypothesize, prove or explain their ideas.⁹ What is most troubling is that these were 17 states evaluated to have the most rigorous standards and assessments.

No standardized assessment can adequately measure these abilities. Instead, states like New Hampshire and others are using quality **extended performance tasks** to measure these skills. These extended performance tasks engage students in applying their knowledge and skills to a problem or challenge. At the high school level, extended performance tasks could be linked to work-based learning, internship opportunities and service learning projects. The results of the performance tasks would be submitted to the local school board of trustees.

According to the Center for Collaborative Education, quality performance tasks "get at essential questions of curriculum and instruction: What content is most important? What do we

⁹ Yuan, K. & Le, V. (2012). Estimating the Percentage of Students Who Were Tested on Cognitively Demanding Items Through the State Achievement Tests. Santa Monica, CA: RAND Corporation.

want learners to be able to do with their learning? What evidence will show that students really understand and can apply learned content?"¹⁰ Performance tasks are comparable to the assessments used in the performing arts.

Nationally, organizations are creating test banks with extended performance tasks that South Carolina should have the opportunity to use. Designing rubrics and training teaches in how to assess the results of the tasks would be the next step. Two school districts, Lexington 1 and Saluda County School Districts have volunteered to work with the EOC to pilot assessments of extended performance tasks.

Expanding the accountability functions of the local school boards of trustees will require board members to receive ongoing professional development and training. The recommendation is that annually each school board member attends three hours of training in each of the following four key policy areas for a total of twelve hours of continuing education training each year: (1) fiscal (2) accountability; (3) leadership; and (4) communication.

Opportunity – Do <u>all</u> students have the opportunity to be successful? The stakeholder groups identified several potential input measures whose inclusion in an accountability system could incentivize investment in a whole school curriculum and allow for multiple pathways that address college, career and life readiness.

Teacher and principal evaluations were recommended by stakeholders as a means to hold adults accountable for the overall school rating. These evaluations would include student academic achievement with a focus on student growth from one year to the next.

Within the classroom, which is the most important change agent, the quality of teachers is critical. Stakeholders also emphasized the importance of school climate surveys of teachers, students and parents.

"School environment is one of the most important measures of school and district performance, but it is often overlooked."¹¹

National Governors Association

Finally, beyond summative assessments at the end of the year, access to, participation in and performance on other measures and assessments are important including:

¹⁰ *Quality Performance Assessment: A Guide for Schools and Districts*. Center for Collaborative Education. Boston, MA. 2012.

¹¹ "Creating a College and Career Readiness Accountability Model for High Schools." January 29, 2012. National Governors Association. http://www.nga.org/files/live/sites/NGA/files/pdf/1201EDUACCOUNTABILITYBRIEF.PDF.

- Arts programs;
- Gifted and talented programs;
- World languages;
- Dual enrollment courses;
- Approved industry certification exams;
- IB/AP exams;
- Dropout recovery programs;
- Virtual or online learning;
- Students completing a college application;
- Students filling out a FAFSA form; and
- Students completing an individualized graduation plan

The National Governors Association in 2012 proposed that "schools and districts should receive additional credit for supporting all students on the path to college and career readiness with a special emphasis on hard-to-serve student populations. . . . States could give more weight to a school's scores on measures for students" who are "overage and undercredited, limited English proficient, or receiving special education services and those who scored in the bottom 25 percent on assessments in eighth grade."¹²

The relationship between public and higher education has never been so critical to the economy of our State and to the future of our citizens. The stakeholders prioritized other measures including college acceptance rates, college persistence rates, and college matriculation rates. With development and implementation of the South Carolina Longitudinal Information Center for Education (SLICE), the State will have in the future the ability to report on the success of students in post-secondary institutions. Such data could be useful in the redesign of the high school curriculum.

In September of 2013 the Colorado Department of Higher Education released an online, searchable database that provides information on college-going rates, first-year postsecondary outcomes, concurrent enrollment and remedial education for the graduates of each school district. ¹³

D. In addition to public reporting, accountability requires that standards for the core content areas and assessments be aligned to the mission and goals.

¹² "Creating a College and Career Readiness Accountability Model for High Schools." Page 7.

¹³District At A Glance. Tracking the Success of High School Graduates. Colorado Department of Higher Education. Accessed on September 6, 2013. < <u>http://highered.colorado.gov/Publications/districtataglance/districtglancedefault.html</u>>.

E. To accelerate improvement, professional educators must be empowered to deliver new forms of radically, personalized, technology-embedded, education. The accountability system must be flexible enough to allow and even support schools and districts to be incubators of change.

The EOC supports the recommendation of the State Superintendent of Education to personalize learning and the initiative of *TransformSC*. Assessing both the mastery of knowledge and the attainment of higher-order thinking skills requires a balance of objective and subjective assessments. Formative assessments are the most effective at improving teacher and student performance.

In a sentence, the South Carolina public education system, and the accountability system that supports it, should be transformed as follows.

Learning must be personalized to each student including project-based learning, real-time diagnostic assessments, and technology-infused instruction.

A new accountability system balanced between summative, objective and subjective approaches will empower teachers as professionals even in existing classrooms to own the delivery of and accountability for their students mastering knowledge and gaining knowledge and higher-order thinking skills. It can result in students taking more ownership of their own education.

A new accountability system personalized to students empowers entrepreneurial educators to deliver new forms of radically personalized, technology-enabled education that can co-exist with current public schools. Once accountability is at the level of individual students progressing at their own pace and assessments provide teachers real-time data to guide their students, the stage is set for the fundamental transformation of the entire public education system sought by parents, teachers, business leaders, and community advocates. Below are the essential elements of the accountability framework we recommend.

- Learning must be more personalized to each student. Personalizing learning allows students to advance through the standards at an individual pace, allowing advanced students to move faster and students requiring more time to master earlier standards before moving onto later ones.
- Learning must include project-based learning. In addition to objective measures of the mastery of knowledge, project-based learning requires subjective assessments by professional teachers. For example, students develop higher-order thinking skills through activities such as artistic works or science projects, which teachers subjectively assess using rubrics to ensure consistency. Balanced objective and subjective assessments are important even in the earliest grades. Higher-order thinking skills include the ability to

conduct sustained research, analyze information, experiment, and persist. In addition to individual skills, communication, teamwork, and collaboration are essential skills.

- Learning must include real-time diagnostic assessments. For teachers to become the empowered professionals, more assessments should be formative providing real-time data to teachers and parents so appropriate support can be provided to improve student learning.
- Learning must include technology-infused instruction. Merely loading an existing classroom with technology likely will yield marginal improvements at best because it doesn't fundamentally change the way the classroom is managed. Like personalizing education, it is easy to imagine more transformational forms of technology infused instruction. A novel system of highly personalized education delivered through mobile devices was demonstrated by a college student at the first *TransformSC* forum in the spring of 2013. This would be the transformative equivalent of a digital book being delivered by Amazon.com to a Kindle versus a physical book being sold in a Barnes and Noble store. These are profoundly different experiences of consuming books. Transformed education will be a profoundly Transformed education will be a profoundly difference experience of education.

Many of the schools and districts participating in *TransformSC* are using project-based learning and blended learning approaches to instruction. Other examples include the two high schools in South Carolina that are implementing the New Tech Network this year: Scotts Branch High School in Clarendon 1 and Cougar New Tech High School in Colleton County. Project-based learning is the instructional approach of these New Tech schools. Next High, a charter high school that will be opening in Greenville in 2015, will also employ project-based learning and web-delivered curriculum. These projects build upon pathways that represent the disciplines and skills in greatest demand relative to the regional industry and economic clusters of the community.

To facilitate the innovation, schools and districts that are transforming the delivery system of education may need to be exempted from the state accountability system for a specified time. Instead, these schools or districts would report publically on student mastery of learning using alternative measures rather than summative assessments.

F. South Carolina must evaluate and amend existing policies to remove barriers to transformation.

Are there barriers that restrict the number of high school students who take dual enrollment classes? Do the policies and guidelines that govern the state scholarships funded by the

lottery deter students from taking challenging courses? How can South Carolina prepare, recruit, retain and empower highly qualified teachers to lead the transformation, especially in historically low-achieving schools?

Because teachers are no longer the providers of information and instead are the facilitators of learning, the transformative shift in pedagogy will require changes in pre-service teacher education programs, extensive professional development for existing teachers, especially in school districts without the local capacity, and expansion of wireless Internet access throughout the school building for portable devices.

Teachers are the critical component of transforming the delivery system of education. Consequently, South Carolina must invest in transforming the preparation of teachers by our colleges and universities for the 21st century classroom and the delivery of instruction in the classroom.

- Students in our colleges of education must have more hands-on practicum experience in schools before becoming classroom teachers as well as more knowledge of the needs of the 21st century graduate.
- Current and future teachers must transform their classroom instruction. No longer are teachers the provider of information; they are the facilitators of learning. Students can find knowledge from multiple sources; however, students must learn to think, analyze, collaborate, problem-solve and communicate.
- Blended learning opportunities using virtual courses and virtual coaching are necessary for both teachers and students.

Appendix A

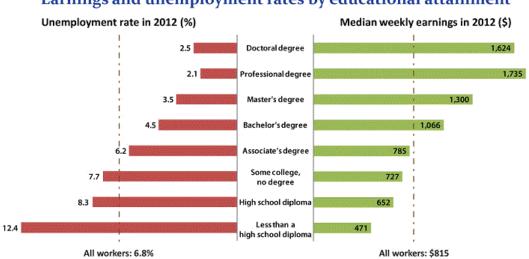
Members of the Cyclical Review Panel Name Representative of or Expertise in:				
Dr. Larry Allen, Clemson University	Higher Education			
Dr. Cynthia Ambrose, Horry County School	District Office/ Academic Officer			
District	District Office/ Academic Officer			
Ms. Mona Lisa M. Andrews, Florence 2	Local School Board of Trustees			
School Board				
Mr. Mike Brenan, President BB&T South	Business and Industry			
Carolina	State Board of Education			
Dr. Ray Brooks, President, Piedmont	Higher Education			
Technical College				
Mr. Jon Butzon, Charleston	Community Leader			
Dr. Jennifer Coleman, Richland 1	District Office/Accountability, Assessment,			
	Research and Evaluation			
Dr. James R. Delisle	Gifted and Talented Education			
Mr. Jim Dumm, Tara Hall Home for Boys	Community Leader			
The Honorable Mike Fair	Legislator			
The Honorable Nikki Haley	Governor			
Mrs. Jan Hammond, Lexington 2	Classroom Teacher			
The Honorable Chip Jackson, Richland 2	Local School Board of Trustees			
Dr. Rainey Knight, Darlington	District Superintendent			
Ms. Charlie Jean "CJ" Lake, Saluda	Recent Student			
The Honorable John W. Matthews	Legislator			
Mrs. Amy McAllister	State Teacher of the Year			
Mr. Charles O. Middleton, Jr.	Educator/Public Charter Virtual School			
Ms. Glenda Morrison-Fair, Greenville	Local School Board of Trustees			
County School District				
Mr. Wesley Mullinax	Business and Industry			
Ms. Maggie Murdock	Parent			
Ms. Linda O'Bryon	President SC ETV			
Dr. Darryl F. Owing, Spartanburg 6	District Superintendent			
Mr. Arthur Perry	Business Leader			
The Honorable Joshua A. Putnam	Legislator			
Mr. Jim Reynolds	Business Leader			
Dr. Janet Rose, Charleston	Retired Educator			
Mr. Phillip E. Waddell, Columbia	Business Leader			
Dr. Gary West, Jasper County School	District Office/Finance and Data			
District	Management			
Dr. Leila W. Williams, Colleton	District Superintendent			
Dr. Reginald Harrison Williams	Early Childhood Specialist			
Dr. Carol B. Wilson, Upstate	Parent and Higher Education			
Ms. Lee Yarborough, Greenville	Business Leader			
The Honorable Mick Zais	State Superintendent of Education			
Mr. Bernie Zeiler	Business Leader			

Appendix B Percentage of South Carolina adults (ages 25-64) with at least an associate degree by county

	with at l
Abbeville	26.03
Aiken	32.63
Allendale	18.68
Anderson	30.09
Bamberg	35.93
Barnwell	21.19
Beaufort	42.18
Berkeley	29.77
Calhoun	31.39
Charleston	47.75
Cherokee	20.56
Chester	19.89
Chesterfield	20.69
Clarendon	21.56
Colleton	21.08
Darlington	24.58
Dillon	15.72
Dorchester	36.92
Edgefield	25.73
Fairfield	25.73
Florence	31.43
Georgetown	30.13
Greenville	40.93
Greenwood	32.72
Hampton	18.68
Horry	33.37
Jasper	15.74
Kershaw	28.29
Lancaster	27.65
Laurens	23.92
Lee	16.03
Lexington	38.92
McCormick	27.79
Marion	20.51
Marlboro	12.93
Newberry	30.54
Oconee	32.21

hate degree by bount		
Orangeburg	25.73	
Pickens	34.28	
Richland	46.60	
Saluda	21.45	
Spartanburg	32.55	
Sumter	28.82	
Union	22.65	
Williamsburg	18.79	
York	39.99	

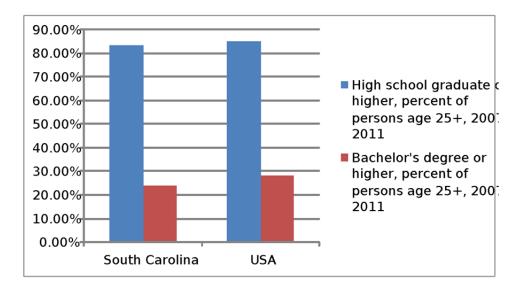
Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates



Appendix C



Source: Bureau of Labor Statistics, Current Population Survey



Per capita money income in the past 12 months (2011 dollars)

United States	\$	27,915
South Carolina	\$	23,854
Difference South Carolina population	\$	4,061 4,723,723
Additional per capita income if South Carolina was at the US average	<u>\$19,1</u>	<u>83,039,103</u>

Appendix D 2020 Vision Committee Superintendents' Roundtable (February 2013)

A clear picture of the new high school graduate will enable schools to best accomplish the goals of preparing students for the future.

Our vision for high school graduates is based on an education compass directed toward the future. Our vision and profile of our high school graduate follows. This vision is crafted toward preparing students for success and our communities, state and nation for prosperity in the 21st century world.

Vision of the EDCompass Graduate

"The EDCompass graduate of the K-12 public schools of South Carolina will be equipped for careers and college, lifelong learning and civic life in a global, digital and knowledge based world.

Our graduates will be creative, critical thinkers, problem solvers, collaborators, capable communicators and ethical."

Profile of the EDCompass Graduate

World Class Knowledge:

- 1. Rigorous standards in language arts and math for college and career readiness
- 2. Multiple languages, science, technology, engineering and mathematics (STEM), arts and social sciences

World Class Skills:

- 1. Creativity and innovation
- 2. Critical thinking and problem solving
- 3. Collaboration and teamwork
- 4. Communication, information, media and technology
- 5. Knowing how to learn

Life and Career Characteristics:

- 1. Integrity
- 2. Self-direction
- 3. Global perspective
- 4. Perseverance
- 5. Work ethic
- 6. Interpersonal skills

