

**Education Oversight Committee
August 11-12, 2014
Marriott Resort
Hilton Head Island, SC**

REVISED AGENDA

Monday, August 11, 2014

- | | | |
|-----------|---|-------------------|
| 1:00 p.m. | <u>Welcome and Introductions</u>
Approval of Minutes of June 9, 2014
Tentative Meeting Schedule for 2014-15 | David Whittemore |
| 1:15 p.m. | <u>Overview of EOC Responsibilities</u> | Melanie Barton |
| 1:30 p.m. | Accountability | |
| | <u>A. Update on Special Assessment Panel</u> | Dr. Danny Merck |
| 1:45 p.m. | <u>B. Designing Accountability Systems</u>
Dr. Gene Wilhoit
Executive Director
National Center for Innovation in Education
University of Kentucky | |
| 3:30 p.m. | <u>C. Reviewing ELA and Math Standards</u> | Dr. Rainey Knight |
| 4:45 p.m. | <u>D. Science Standards</u>
Action Item: Standard H.B.5 | Melanie Barton |
| 5:00 p.m. | Executive Session – Personnel Issue | |
| 5:15 p.m. | Adjourn | |
| Dinner | On-Your-Own
If interested, Alexanders, which is within walking distance of the hotel, will accommodate any EOC members interested in dining there. | |

Tuesday, August 12, 2014

Breakfast on your own using vouchers

9:00 a.m. **Early Readiness**

A. Beaufort County School District – Early Childhood Initiative
Dr. Jeffrey C. Moss, Superintendent

B. Overview of Early Readiness Assessments
Joe Waters
Vice President
Institute for Child Success

Katy Sides
Director of Research and Grants
Institute for Child Success

10:30 a.m. **Folk Legends and Facts: Using Data to Vanquish Myths about Education in South Carolina**

Dr. Mick Zais
State Superintendent of Education

Adjourn

The attached is a paper that Dr. Wilhoit will refer to when discussing accountability systems.

Accountability for College and Career Readiness: Developing a New Paradigm

Linda Darling-Hammond, Gene Wilhoit, and Linda Pittenger¹

[To the Reader: The Center for Innovation in Education is authoring a paper, with others, on new models of assessment and accountability that is now out for peer review and should be published in mid-to-late August. Because it is germane to the EOC's discussion on instructional transformation in South Carolina, the draft is offered to provide additional background and food for thought. Because the paper continues to be revised, please do not distribute or share with others.]

As new College and Career Ready Standards for learning are being adopted by virtually every state across the country, it has grown clear that many states and communities see the need to move toward more aligned systems of assessment and accountability that support genuinely higher and deeper levels of learning for all students, and more flexible designs for schools so that their graduates can meet the challenges of a world in which both knowledge and tools for learning are changing rapidly.

Outline of the Paper

This paper outlines a proposal for a new approach to accountability that is responsive to these demands, drawing on the experiences of states and nations that have tackled these challenges, as well as research that has evaluated the consequences of different approaches to educational improvement.² It focuses primarily on how states might construct well-aligned systems for assuring high-quality education for all students, and treats aspects of the federal role and local activities from that perspective.

In the first section, we set out some principles for effective accountability systems. In the second section, we imagine how these principles might be enacted in an imaginary "51st state," as an illustration of one of the many ways the principles might be applied. We were advised and assisted in this process by a group of individuals deeply knowledgeable about policy and school improvement, who had convened to tackle the question of what a new accountability system might look like. (They are listed in endnote 1.) In the final section, we present examples of how elements of these proposals are already being enacted in some states and communities, in order to offer concrete form to some of the ideas.

Background

Policymakers and practitioners have learned a great deal from the experiences of the last 25 years and can build on educational improvements accomplished under both Democratic and Republican Administrations. Our next steps should preserve the positive gains achieved as a result of a collective commitment to all of our children, while responding to current realities and concerns. Under the Improving All Schools Act during the Clinton Administration, we began the process of organizing school improvement around standards for learning, and measuring those standards periodically with state assessments, which included, in many states, portfolios and performance tasks assessing higher-order skills. Under No Child Left Behind (NCLB) during the Bush Administration, we articulated a commitment to pursuing higher and more equitable outcomes for children across social groups, and a commitment to providing well-qualified teachers for all children.

Since 2002, these efforts have been pursued largely through test-based accountability strategies that have articulated annual targets for growth, along with consequences for not meeting those targets. Noticeable gains have been registered on the state tests that have been the focus of these accountability efforts. However, progress has been less evident on the National Assessment of Educational Progress (NAEP), where 8th and 12th grade scores have been largely flat. And on the Program for International Student Assessment (PISA) – a more open-ended test evaluating how students can apply their knowledge and can demonstrate their reasoning – U.S. performance has declined in math, reading, and science between 2000 and 2012, both absolutely and in relation to other countries. On all of these

measures, large and persistent achievement gaps remain among students by income, language background, and racial/ ethnic groups.

It is clear that the NCLB legacy that “every child matters” represents an evolution in our thinking. It is also clear that our current strategies are not sufficient to ensure that, indeed, every child will be enabled to learn the higher-order skills that they need to acquire to succeed in today’s world. The fuller array of deeper learning outcomes students need to acquire include the knowledge, skills, and dispositions needed to foster critical and creative thinking, problem solving, collaboration, multiple modes of communication, uses of new technologies, the capacity to learn to learn, and the social-emotional intelligence that fosters a growth mindset and supports resilience and resourcefulness. The broadened definitions of readiness being adopted by states, along with proposals emerging under recent ESEA flexibility waivers, are creating demand for greater investments in rich curriculum, sophisticated teaching, and new, more robust assessment systems that go beyond the multiple choice approaches that have been prominent since 2001.

The emerging paradigm for accountability must be anchored in this new vision for learning and should be coherently aligned to systemic changes implied by that goal. It should foster a culture of inquiry and continuous improvement at all levels of the system. This new accountability model must foster collaborative change that can transform schools from the industrial model of the past to innovative learning systems for the future. Accountability will need to build school capacity and enable thoughtful risk-taking informed by continuous evaluation to inform improvement.

While it is evident that we must pursue new assessment and accountability systems, we should learn from the accumulated wisdom of recent experiences. We know that supporting student growth is as important as tracking the status of a child’s achievement. We know it is important to pay constant attention to children’s progress, and we must maintain systems for determining how student learning is advancing each year.. We must work toward a clear vision of what proficiency means for student performance, anchored in realistic and defensible standards. We must hold ourselves accountable for the success of all groups of students. We must develop more informative reporting systems and be more transparent in our communication with parents. Our evolving standards must accommodate a broad set of knowledge, skills and aptitudes. And, our new designs must allow us to compare student learning within and across schools and districts.

Additionally, we must be prepared to challenge ourselves to take the next steps to ensure we are on track to developing systems to support success for all learners. We are positioned to move to a system of multiple assessments “of, for, and as learning,” with curriculum-embedded local performance assessments embodying and supporting learning in classrooms, along with richer and more meaningful assessments that evaluate learning at the state and local levels.

We propose this new approach knowing that it is an intermediate step forward that is designed within the constraints of the current educational system. We realize that the experience and hard work of practitioners has expanded our vision of what is possible and our knowledge of how to implement this new vision. We will know a lot more because of innovations in policy, research and practice that are challenging prior assumptions about what is taught, how students learn, when learning occurs, and where learning happens. It is our desire that this design support those who are creating more personalized learning anchored in deeper learning, competency-based learning and student agency. It is our hope that this next-best-step-forward we are proposing will be evaluated, improved and enhanced as the work evolves. No system should be frozen for extended periods of time to the point where we find ourselves now: in a place where the system inhibits our ability to do what we learn is best for the students we serve.

A New Approach to Accountability for Learning

Genuine accountability must both raise the bar of expectations for learning – for children, adults, and the system as a whole – *and* trigger the intelligent investments and change strategies that make it possible to achieve these expectations. It must involve

communities, along with professional educators and governments, in establishing goals and contributing to their attainment. It must attend to parents' desires and students' rights to be taught relevant skills that will matter for their future success by competent and caring professionals in adequately resourced schools that are responsive to their needs.

Such genuine accountability will nurture the intrinsic motivation needed to develop *responsibility* on the part of each actor at each level of the system. Thus, a new paradigm for accountability should rest on three pillars:

- (1) A focus on meaningful learning, enabled by
- (2) Professionally skilled and committed educators, supported by
- (3) Adequate and appropriate resources.

It should be animated by processes for continuous evaluation and improvement that lead to problem solving and corrective action at the local level, supported by the state.

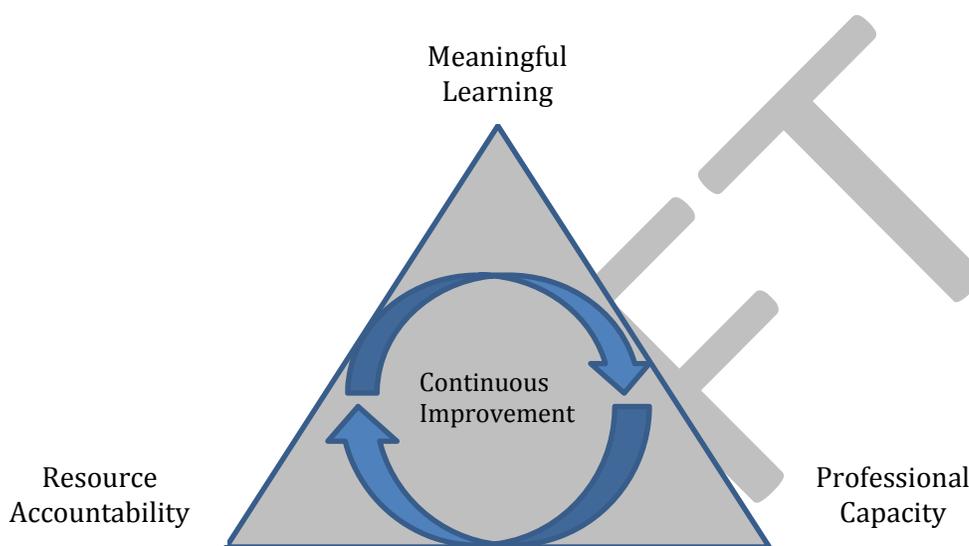


Figure 1: Key Elements of an Accountability System

Such a system should be:

- Reciprocal and comprehensive
- Focused on capacity-building
- Performance based
- Embedded in a multiple measures system

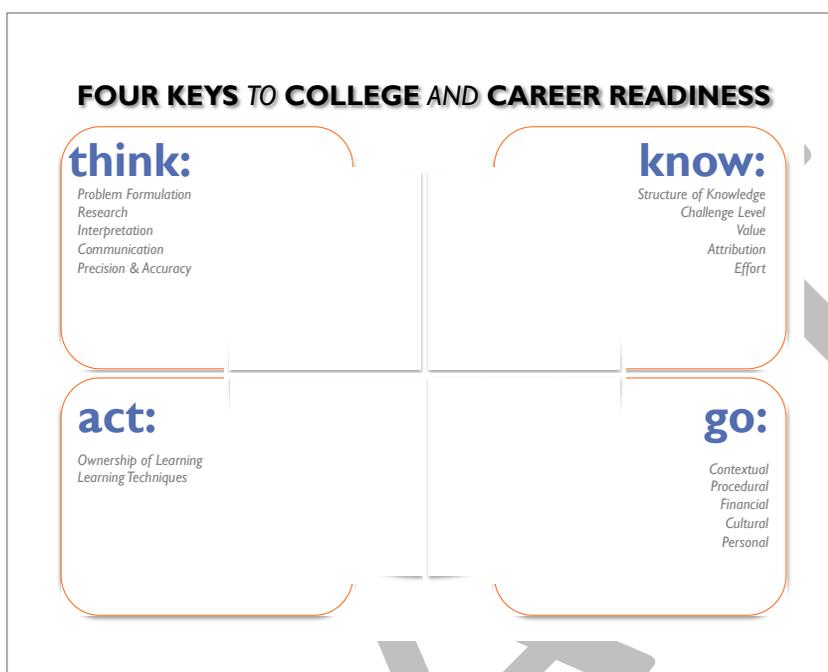
When we say that accountability must be *reciprocal* and *comprehensive*, we mean, first of all, that each level of the system should be held accountable for the contributions it must make to produce an effective system. Second, it must attend to the inputs, processes, and outcomes that produce student learning: In others words, it must *build capacity* to offer high-quality education, while holding educators accountable for providing such education. In addition to adequate, intelligently allocated resources and professional expertise, this should include developing *problem-solving capacity* that guides ongoing improvement, informed by data and by processes such as strategic planning, evaluation, and school quality reviews that identify and correct problems in effective ways. Intelligent evaluation of accomplishments, needs, and next steps that can guide diagnosis and improvement requires a dashboard of useful measures of student, educator, school, and system efforts and outcomes that are developed at both the state and local levels.

Accountability for Meaningful Learning

If meaningful learning for all students is the focus of an accountability system, the system should use a range of measures that encourage and reflect such learning – and it should use those measures in ways that improve, rather than limit, educational opportunities for students. This means we need both much better assessments of learning, representing much more authentically the skills and abilities we want students to develop, and multiple measures of how students, educators, schools, districts, and states are performing.

These skills and abilities include both the applications of content knowledge reflected in new learning standards and the “soft skills” that allow people to be strategic in their learning. For example, David Conley’s description of skills needed for college and career readiness includes key *cognitive strategies*, such as problem formulation, research, interpretation, communication, precision and accuracy; key *content knowledge*, including the structure of knowledge; key *learning skills and techniques* that allow learners to be conscious of how they learn and capable of taking ownership of their learning; and key *transition knowledge and skills* that allow young people to understand and manage the context, processes, cultural and personal factors, and financial dimensions of the decisions they might make as they move into college and career settings.³

Figure 2: Keys to College and Career Readiness



A system of **higher-quality assessments**, both state-designed and locally-developed, should include authentic performance tasks (e.g., classroom-based projects and products like those used in other countries) that assess and encourage the development of the full range of higher order skills. These kinds of assessments should be part of student learning evaluations and should also be part of a multi-faceted *collection of evidence* for teacher evaluation and school review. Moving to a *system of assessments* necessitates that we abandon a singular focus on statewide summative assessments as the basis of all important decisions.

As the CCSSO Accountability Advisory Committee recommended:

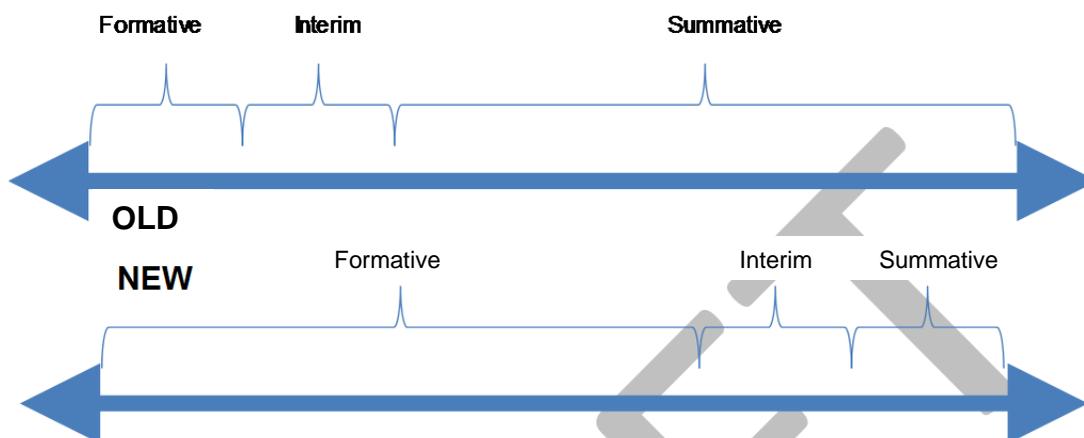
Each state should establish rigorous statewide measures of CCR (such as through Common Core-aligned assessments), but should also provide latitude for district innovation to expand on those measures to include additional indicators of CCR skills or dispositions deemed important by the local community.

As in jurisdictions like Australia, Finland, and Singapore, the standardized measures can be used to validate the local assessment results, while the performance assessments are used to inform instruction, provide feedback to students and teachers, and enable diagnostic decisions, as well as to provide evidence of student learning. Both should be part of a research and development process to validate the assessments and to provide evidence of their effects on instruction and learning.

As performance tasks offer more detailed information about how students think and perform, they are more useful for formative purposes, although they can offer information for summative judgments as well. Many school districts are routinely using digital tools that engage students in embedded performance assessments as an inseparable part of the

learning process. In a new system of assessments, it should be possible to move from an overemphasis on external summative tests, even as they become better representations of what students should know and be able to do, to a greater emphasis on assessment that can shape and inform learning. This strategy will reduce the “over testing” burden, shifting time and energy from external summative events to formative assessments that can be used in more efficient and effective ways. (See figure 3 below.) To achieve these benefits, we will need to rely more on adjudication at the local level where learning occurs. This implies more trust of professionals who are highly trained and supported with judgment tools and processes, such as common rubrics along with moderation and auditing processes for evaluating student work consistently.

Figure 3: Relative Emphasis on Assessment Purposes¹



In a new system of accountability, **multiple measures**, coupled with thoughtful systems of judgment, should be used to inform decision making at each level. **Transparency** in providing information to the public and to educators and policymakers is a key aspect of the new accountability. Like businesses that use a dashboard of measures to provide a comprehensive picture of performance, we need a *dashboard of indicators* to inform key decisions (student placement, graduation; teacher evaluation, tenure, dismissal; school recognition, intervention). Full and timely reporting of a wide array of information to parents and the community is a basic element of accountability. In line with professional standards, test scores should never be used alone for any such decision. Data should be thoughtfully interpreted and weighed by experts who make decisions based on multiple sources of evidence.

Through the Federal waiver process for ESEA flexibility, states have already begun to incorporate broader measures into their accountability systems. Ultimately, long term outcomes, such as success in negotiating college and careers, can become the true accountability measures. In the immediate future, a number of leading indicators can become part of state accountability systems. When evaluating schools, multiple measures of student learning can be coupled with other indicators of important education outcomes, such as,

- Students’ social-emotional competence, responsibility, citizenship, etc.;
- Teachers’ professional contributions to the professional team and the school as a whole, as well as evidence of individual practice; and
- School graduation rates, attendance, evidence of school climate (through surveys of teachers, students, and parents), rich curriculum opportunities; indicators of college and career readiness, and measures of successful transition to postsecondary learning and work.

This information should be used in a system that makes *strategic investments in educational improvement* rather than being used mechanically to mete out sanctions.

Resource Accountability in a Reciprocal System

¹ Source: Paul Leather, personal communication, September 3, 2013.

Accountability tools must address the barriers to good education that exist not only within schools and classrooms, but at the district, state, and national levels as well. For although schools themselves may be appropriately viewed as a key unit of change in education reform, the structuring of inequality in learning opportunities occurs outside the school in the governmental units where funding formulas, resource allocations, and other educational policies are forged. In sum, if students are to be well-served, accountability must be **reciprocal**. That is, federal, state and local education agencies must themselves meet certain standards of delivery while school-based educators and students are expected to meet certain standards of practice and learning.

Thus, in addition to learning standards that rely on many kinds of data, accountability must encompass **resource standards**. With the advent of more challenging and authentic measures of student performance, the creation of accountable schools and school systems will demand methods for inspiring and ensuring equitable access to necessary learning opportunities, so that all students can achieve these learning goals. This means that local decisions about how people, funds and time are allocated should not be separated from decisions about how the school is performing in relation to student learning. It also means that states should design funding policy to address equity and adequacy.

A complete view of accountability must take into account smarter resource allocation throughout the system, including the appropriate roles of states and school districts in supporting local schools in their efforts manage resources more effectively to meet standards. This includes:

- Allocating adequate school **resources** in relation to students' learning needs;
- Ensuring equitable access to high-quality **curriculum** and instructional materials that support students in learning the standards; and
- Providing well-prepared **teachers and other professional staff** to all students in settings that allow them to attend effectively to student needs.

Professional Capacity and Accountability

Also critical are **professional standards of practice** that should guide how educators are prepared and how they teach and support students. Accountability for implementing professional practice rests not only with individual educators but also with schools, districts and state agencies that recruit, train, hire, assign, support, and evaluate staff. Collectively, they hold responsibility for ensuring that the best available knowledge about curriculum, teaching, assessment, and student support will be acquired and used. Individuals and organizations should be responsible for building their own capacity for professional practice; they should be accountable for evaluating practice and student progress, and engaging in continual improvement based on the results.

These core building blocks of state accountability systems provide the foundation for schools' capacity to serve their students well:

- **Educator capacity** that enables teachers to teach for deeper learning and administrators to understand and support this work at the school and district level. Ensuring this capacity requires:
 - High-quality **preparation, induction, and professional development**
 - **Accreditation and licensing** based on evidence of teacher and administrator performance in supporting diverse learners to meet challenging standards
 - **Evaluation** based on multiple indicators of practice, contributions to student learning, and contributions to colleagues that supports ongoing learning
- **School capacity** to meet student needs is based on school, district, and state actions that ensure:
 - the availability of an appropriate mix of well-qualified staff who are properly assigned and adequately supported with professional development, and

- well-designed curricula and educational programs that are consistent with research
- **System capacity** for professional practice and improvement must be supported by:
 - awareness of research, as well as
 - inspection or school quality review processes, that evaluate policies, programs, practices, and outcomes, diagnose areas for improvement, and guide appropriate interventions.

Professional capacity and accountability are reinforced by a system that has developed professional judgment as a key expectation for evaluating the work of students, the work of other teachers, and the work of schools. Expert professional judgment, used to make sense of qualitative and quantitative information, can support more defensible decisions. In addition, it can help professionalize education by serving as a form of professional development for educators, and it can support a more genuine sense of responsibility as educators, working with students and families, feel a sense of engaging in accountability themselves, rather than having it imposed externally. Finally, a more relational accountability is developed when educators act in a professional community with each other and when they interact in learning communities with families – something that can prove much more powerful than a more impersonal institutional accountability.

Continuous Improvement and Corrective Action

These three elements of a new system -- supports for meaningful learning, accountability for resources, and accountability for professional practice – provide the grist for specific improvement processes that are informed by rich sources of data and diagnostic information about what is happening and what is needed to sustain growth and learning, as well as to solve pressing problems. These processes, like quality reviews for schools, use data in combination with expert judgment to evaluate progress in ways that provide actionable guidance for improvement.

They should be accompanied, as needed, by resources that can be directly applied to a turnaround effort – for example, the time and skills of expert educators who are trained and funded to work with struggling schools in teams, school pairs, or networks; curriculum specialists who can help overhaul instructional plans and coach teachers; the availability of wraparound services where those are needed to support student welfare and success; models and supports for successful after school or summer programs; and so on.

The same general principles should inform thoughtful evaluations for educators, coupled with supports for improvement, and learning reviews for students.

New Accountability in the “51st State”

What might this new accountability model look like in state that decided to develop all of these components in an integrated system? Figure 4 illustrates what the components of the system might look like. This is, of course, only one approach among many that could be used to put these principles into action.

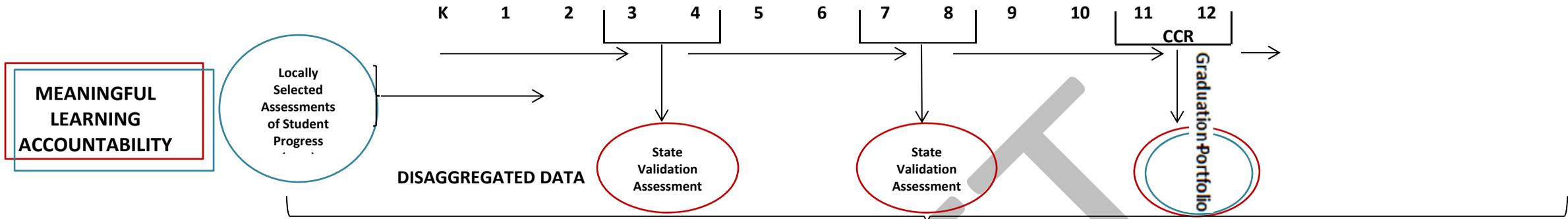
Accountability for Meaningful Learning

The 51st state wants students’ and teachers’ work to be focused on the kinds of knowledge and skills that will contribute to student success after graduation, developed in relevant and engaging ways. The state pursues *meaningful learning* by:

- 1) establishing College- and Career-ready standards anchored in core academic knowledge and skills that recognize competencies considered by higher education, employers, and parents as critical to success;
- 2) supporting the development and distribution of high quality curriculum materials and assessment tools for use by teachers and students; and
- 3) encouraging local districts to select and/or develop thoughtful, curriculum-embedded assessments of students’ knowledge and skills that provide ongoing diagnostic information to support learning.

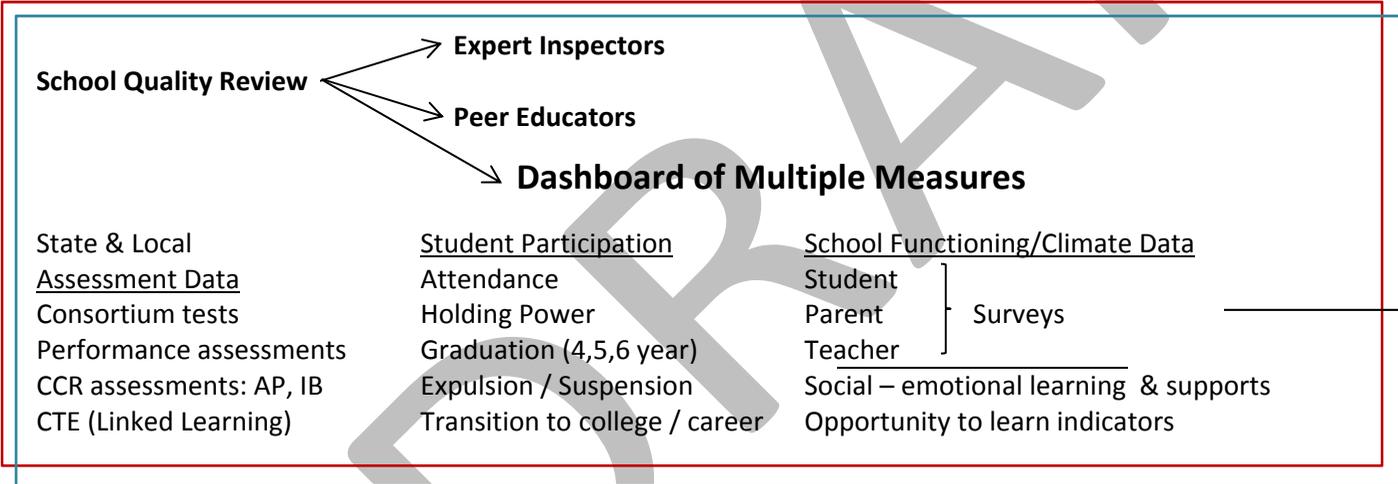
The state also plays a role in validating district and school outcomes and intervening in underperforming districts and schools to support corrective action.

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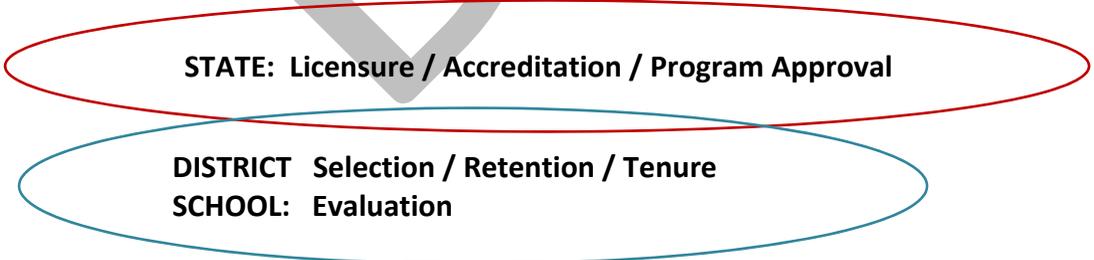
Assessment Quality Assurance Strategy
reviews local assessment plans

RESOURCE ACCOUNTABILITY



Intervention
Whether
What
& How

PROFESSIONAL ACCOUNTABILITY



Outline legend
State = Red
Local = Blue
Federal = Black

/ Professional Development

**FEDERAL / STATE: Instrument Development
Research – Best Practice, Network Support
Data Collection & Reporting**

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The system is premised on **multiple measures**, which include, as one component, robust local assessments that can evaluate deeper learning skills, as well as state, standardized validations of student performance to verify the results of local assessments. Such state validation could occur every year for every child, or at points in the grade spans which represent critical developmental junctures (for example, grades 3/4, 7/8, and 11/12), or differentially, depending on local needs. State assessments employ matrix sampling so that judgments can be made about a broader and deeper set of skills without over-testing children. **Disaggregation of results** is part of the reporting system for assessments.

Annual determinations of progress are maintained for every child at the school and district levels. These determinations are made more meaningful through tools that assess student movement along **learning progressions** (e.g. the Developmental Reading Assessment, the STEP reading assessment, writing portfolios providing evidence of growth in multiple genres along a continuum reflected in shared rubrics, assessments of progress in mathematical thinking and skills along key progressions). Most local assessments are designed to be embedded in the curriculum, just as teachers' assessments in the form of papers, projects, presentations, quizzes, and other diagnostic evaluations currently are. However, these are designed to provide much richer diagnostic information more aligned to the new standards than many local assessments currently offer.

The 51st state recognizes that students learn in different ways at different rates so that growth is benchmarked against learning progressions rather than grade-levels. It also recognizes that students may progress at different rates in different disciplines or skills areas, and students are served much more flexibly than in our current fixed organizational structures. Districts can use state-developed or approved tools to track student progress (including common tasks assembled in an Assessment Bank, for example), or they can develop their own and bring them to the state quality assurance panel for approval.

State validations of student learning include assessments in English language arts, mathematics, and science that combine 'sit-down' tests with structured performance tasks (e.g. writing samples taken individually or organized in structured portfolio collections; mathematics applications; structured scientific investigations). Locally administered tasks allow students to develop and demonstrate complex college- and career-ready skills that require more time and different modes of demonstration than a short sit-down test can accommodate: inquiry skills, written and spoken communication, ability to use feedback to revise, uses of technology, etc. The state provides common rubrics, training for scoring, and auditing to ensure that these can be scored reliably. **Teachers are involved in designing and scoring** open-ended items and tasks in both the state and local assessments as a means for professional learning about the standards as well as for sharing strategies for designing curriculum and teaching to meet the standards.

Together, these comprise a **system of assessments** using both state and local sources of information: standardized test measures of certain aspects of students' learning that are assessable in a testing context – including performance elements that measure some higher-order analytic skills – augmented by more robust local performance assessments that can support and evaluate harder-to-measure abilities: the ability to design and conducted extended investigations; to collaborate; to communicate in multiple forms; to persevere, exhibit resilience, use feedback productively, and learn-to-learn.

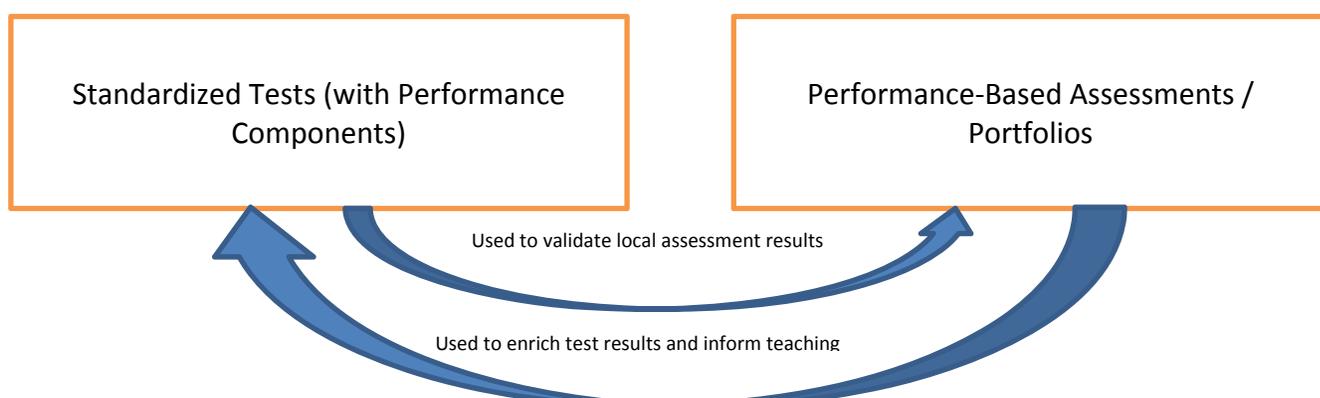


Figure 5: Elements of the Assessment System

Measures embedded in local assessment programs that are used for state accountability purposes may be approved through **Assessment Quality Assurance Processes** (which can take the form of a Panel comprised of expert practitioners and other curriculum and assessment experts, or other approaches to peer review). These processes are designed to ensure that the assessments and the ways they are applied (rubrics, scoring procedures, uses of results) are appropriate (e.g. that they measure the standards well and with high-fidelity, are valid and can be reliably scored, and are used appropriately).

At both the state and local levels, curriculum and assessments support and reflect **deeper learning skills**, including critical thinking, problem solving, communication, collaboration, creativity, and the ability to learn to learn. The system also supports the development of social-emotional skills that colleges and employers recognize as important and that have both intra- and interpersonal dimensions, such as collaboration, resilience, perseverance, and an academic growth mindset, by including complex extended tasks that require students to learn how to work with others, to take and use feedback productively, to solve problems resourcefully, and to persevere in the face of ambiguity and problems. These kinds of tasks are, necessarily, embedded in the local curriculum, but those used for student or school judgments are scored with **common rubrics**, using **moderation and auditing processes** to achieve consistency, where they are used as part of the reporting for accountability purposes.

State assessments address some of the key deeper learning skills as well, in less extended tasks, so as to signal what is valued and attended to. Local assessments can go further to foster and assess student initiative and choice, calling on students to be agents in their own learning by requiring them to design and complete their own investigations, assemble evidence about their progress and skills, and orchestrate collaborations that lead to the creation of products (e.g. software solutions, engineering designs, data collection and analysis, literary anthologies, topological maps, artistic productions, museum exhibits) that emulate work or are created as a result of work in the world outside of school.

	Pre-Secondary Level	Secondary Level
Curriculum Guidance	<i>Curriculum Resources for New Standards:</i> Curriculum frameworks that include unit templates, formative instructional tools, and performance assessment options with quality descriptors (rubrics)	Courses of study with embedded assessments (e.g. IB, AP, Linked Learning (CTE) or Early College / dual credit pathways, optional state courses of study with syllabi, locally designed alternatives
External tests	State assessments validating mathematics, ELA, and science learning at each grade span, one test per grade in grades 3-5, 6-8, and 9-11 (subjects may alternate at different grade levels)*	Consortium College and Career Ready Test, at grade 11 or when ready, including research/writing task and mathematical application
Common performance tasks, locally administered	Common Assessment Tasks: Common performance tasks evaluating inquiry in science and social studies once per grade span; guidance for arts, writing, and technology tasks or portfolios	Common assessments embedded in courses of study; guidance for exhibitions of mastery in different fields, including competency-based badging or micro-credentialing
Locally developed assessments	Local performance assessment systems - locally scored and internally moderated	Graduation portfolios supporting student profiles, guided by state standards -- locally scored / externally moderated

* Note: Although this description references classrooms, courses and grade levels, the 51st state is moving toward a competency-based approach to education, which allows students to be assessed along a broader continuum of learning and achievement, using specific tests or tasks when they are appropriate for the individual child without regard to age or grade level.

At the capstone level, in addition to the **Consortium assessment of college- and career readiness** at grade 11, students develop and maintain a **portfolio of evidence** (drawn from the assessments already described) regarding their performance in key areas of the curriculum and a **profile of their accomplishments** that can be communicated to colleges

and employers. The portfolio serves as evidence that the student has met core competencies for readiness and has also prepared to meet personal goals for next levels of learning and work. Students complete some components in common, and others that illustrate their unique talents and specialized studies and skills in chosen pathways. The common components are used to demonstrate college and career-ready competencies that have been shown to be associated with postsecondary success:

- Research and inquiry skills that require critical thinking and analysis (generally demonstrated in scientific investigations and/or social science research)
- Quantitative reasoning applied to a real-world problem (through the use of statistical analysis in the science or social science investigations above, for example, or a project designed to illustrate mathematical problem-solving)
- Communication skills (written and oral)
- Collaboration skills
- Use of technology for investigation and presentation of information

These may be illustrated through tasks that are constructed to illustrate the mastery of disciplinary modes of inquiry in fields like science or history, or tasks that engage students in interdisciplinary problem solving. The competencies are incorporated into common rubrics; tasks are scored with moderation. Students are also encouraged to include demonstrations of competence in other areas, for example:

- World language – A demonstration of proficient communication in a language other than English, through a recorded conversation or a written paper or letter
- Arts – A demonstration of performance in an area of the performing arts
- Career / Technical education – A demonstration of competence outlined in a career pathway (often developed with industry).

These components should be completed as part of the assessments already planned in a school, refined to meet a “**portfolio standard**,” and may be drawn directly from a student’s participation in an existing program of study, such as the International Baccalaureate program or a College Board suite of courses that include such assessments. Schools that participate in the NY Performance Standards Consortium, many Linked Learning schools, and schools in Deeper Learning networks will also have already developed portfolios that address these expectations. The state provides a set of models for districts to use if they so desire. At least one of these components should be defended before a panel that allows the student to share and explain his or her work orally and in writing with a panel of teachers, other students, and community members, and to respond to questions.

This compilation of evidence is assembled with other evidence about a student’s accomplishments (e.g. grades, test scores, extracurricular activities, work experiences, letters from employers or teachers) and a reflective statement from the student about his/her experiences and goals in a **student profile** that can be used as a tool to guide student advisement, goal-setting, and communication with colleges and employers.

The state has developed a platform in which students can upload the profile and their work samples into a **digital portfolio** that can be used by employers and postsecondary institutions for admissions, advisement, and placement. The portfolio includes a summary that makes key evidence easily understood by a user within a 10-15 minute time frame – providing summary data, a short writing sample, a short videotape of the student presenting a learning demonstration, and a table of contents that can direct those who want more information of a particular kind to a link where they can retrieve it. Some users will look only at the summary data. But a college considering a student for an art major could look more deeply at the art portfolio, while an employer wondering about a student’s oral skills and career/ technical knowledge could click on the link to the presentation about a design solution that the student developed. Students carry their portfolio with them after high school to support their strategies for postsecondary success.

Figure 6
Digital Portfolio

Summary: Transcript, GPA, CCR Test Scores, Statement of Goals, Distinctive accomplishments or "badges," Short Essay, 2 minute videoclip from portfolio presentation, Table of contents



Investigation of climate change trends in a local community (science and mathematics), includes paper, data set, and powerpoint



What social and political forces influenced the passage of the 14th Amendment to the Constitution? (historical inquiry)



The American Dream in 20th century literature (literary analysis), includes videotaped presentation to panel



Demonstration of competence in world language : Tamil (audiotaped conversation and paper)

Accountability for Adequate and Intelligently Used Resources

The 51st state has pursued **resource accountability** by developing a weighted student funding formula that allocates funds based on pupil needs, allocating a greater weight to students living in poverty, English learners, and students in foster care. By providing resources more equitably, the state can expect schools that serve high-need students to provide the wraparound services that will enable children to come to school healthy and ready to learn and can ensure that they are adequately supported once they are there. In addition, the state holds districts accountable for intelligent and equitable use of funds by requiring that local communities be involved in decision making about budgets and programs, and by tracking key inputs and results for all districts and schools.

Transparency is a key aspect of the accountability strategy. A **multiple measures** system of accountability includes a dashboard of indicators -- some required by the state for all schools and others proposed and tracked by local communities which have a voice in the accountability process. The measures include evidence about both outcomes and inputs, supporting **diagnosis** of what is working and what is not. Like the dashboard on a car – which provides indicators of speed, distance traveled, fuel, fluids, tire pressure, and more -- the combination of measures signals where to look further in order to figure out how things are working. Outcome data are **disaggregated** by student race/ethnicity, poverty, language status and disability status.

The report card for each school indicates current status and progress on each of the measures, much like the reporting system used in Alberta, Canada. (See Appendix A.) Thus, the public has access to evidence provided by districts and schools about what they offer their students and what the outcomes are; schools can see where they are doing well and where they may focus improvement efforts, and the state has a well-organized set of indicators about how schools are progressing and which ones need further assistance.

Figure 7

Dashboard of Multiple Measures: Outcomes

State & Local Assessments

Consortium tests
Performance assessments
English language proficiency gains
Assessments of college & career-ready skills: AP, IB, CTE

Student Participation

Attendance
Persistence rates
Graduation (4, 5, & 6 year)
Expulsion / Suspension
Postsecondary transition
2nd year enrollment in IHEs

School Climate / Opportunity to Learn

Student
Parent
Teacher } Surveys
% completing CCR courses of study
Social-emotional learning & supports

Inputs / Context

Instructional expenditures
Educator qualifications

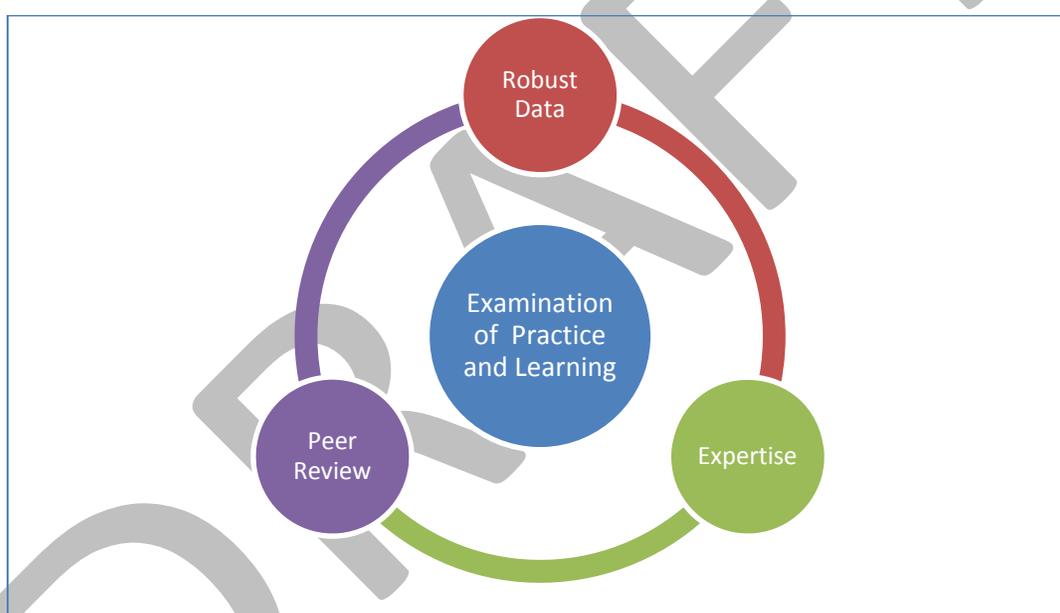
Student characteristics
Student supports

Curriculum offerings
Extracurricular opportunities

Corrective Action. These data are the grist for a **School Quality Review** system that helps schools assess their practices and work on areas for improvement, and that supports **intervention and corrective action** in schools where the evidence suggests that achievement is not adequate and students needs are not being met.

The School Quality Review process brings together several elements that have not been joined before in most education policy systems: **robust data, educational expertise, and peer review.** Like the Inspectorate model used in many countries abroad, it is guided by experts who are deeply knowledgeable about practice and well-trained in how to conduct a diagnostic inquiry into school practices and their relationship to the nature and quality of student learning. [Similarly, states like Kentucky and North Carolina have formed teams of expert educators (often highly accomplished teachers and administrators) to diagnose and help address the needs of low-performing schools.] Like U.S. accreditation systems, the engagement of peer reviewers from other schools in the state brings multiple perspectives to the task while stimulating a learning process for participants that expands their knowledge and sharpens their analytical skills. Like many research endeavors, the skillful use of robust quantitative data, much of which is comparable across schools, with qualitative insights developed from looking purposefully at teaching and student work and talking to stakeholders, allows reviewers to get a better understanding of *how* the school is working and what may help it improve. By combining these things, the process is more powerful and purposeful than accreditation approaches have been in the past.

Figure 8: School Quality Review



In the 51st state, the School Quality Review process is available to all schools on a cyclic basis (typically every 5th year), and to schools that volunteer to participate more frequently because they want the additional help it can provide. It is activated immediately for schools that are identified by red flags associated with their students' achievement, participation, or opportunity-to-learn outcomes (low performance, little improvement, or large equity gaps). The Review is joined with an intensive support process in which the district and state identify and activate the human and other resources that are needed to enable the school to **turnaround** its practices and students' performance. The system of identification for intervention is based on a set of criteria for school conditions and progress, rather than on a norm-referenced percentage of schools.

A **support capacity** has been built to work with schools or districts that request or are identified for improvement assistance. The support structures include:

- Training and deployment of a cadre of Distinguished Educators – accomplished teachers, principals, and superintendents – who are intensively trained and made available to work with schools and districts that are engaged in intensive improvement or turnaround efforts.

- Support for pairings and networks of schools focused on sharing expertise for the purpose of school improvement
- Professional development for school leaders and school teams implementing new curriculum standards, using assessments to inform improvement, and developing school improvement initiatives, including more productive professional learning communities and Peer Assistance and Review Programs
- Training of mentors for teacher and administrator induction and coaches for veteran teacher support.

These structures build the capacity of schools to do their work well, while ensuring that students are not left to languish in schools that are performing poorly.

Professional Capacity and Accountability

Finally, the 51st state works to ensure **professional capacity and accountability** in a number of ways:

It has strengthened **initial entry** into the profession for teachers and administrators by:

- **Strengthening expectations** for programs to develop candidates' capacities to teach the Common Core State Standards and to work with diverse learners (including economically disadvantaged students, special education students and English language learners). These capacities include a strong understanding of student learning and development; curriculum, instruction, and assessment within the content areas to be taught; classroom management; and how to work collaboratively with colleagues and parents;
- **Sharing information** about successful program models;
- Investing in **stronger clinical training** models through residencies and professional development schools;
- Evaluating candidates' readiness to teach and lead through **teacher and administrator performance assessments for licensing** and feeding results back into programs for reflection and improvement;
- Leveraging higher quality preparation through **performance-based accreditation** that examines program results (through pass rates on teacher and administrator performance assessments; graduate and employer surveys, entry and retention rates in teaching / administration, and evidence of graduates' later effectiveness) as part of a more serious accreditation process;
- Supporting **high-quality induction** by training and supporting the time for mentors to work closely with beginning teachers and administrators.

It has built on this stronger foundation to develop **professional learning systems** that:

- Offer high-quality **curriculum resources** (including instructional materials and videotapes of practice) around which professional development can be organized and on which teacher teams can build, try, and refine locally adapted lessons and instructional strategies;
- Organize **sustained, high-quality professional learning opportunities** for networks of educators (e.g. through subject matter projects) focused on developing practice through extended institutes, collective inquiry, action research to solve complex problems of practice, and coaching;
- Provide incentives for schools to establish flexible structures within the teaching day and year that provide **time** for teachers to participate in collegial planning and job-embedded professional learning opportunities;
- Provide ongoing training for schools to develop effective **professional learning communities** that can analyze student learning and school progress in relation to practice, and engage in ongoing improvement.

It has helped local districts build **stronger evaluation systems** that:

- Are based on **professional standards** that are used to assess educators' practices from pre-service preparation to induction and through the remainder of the career;
- Combine **evidence from several sources**, including standards-based measures of educator practice and valid evidence of student learning that is appropriate to the curriculum and students being taught. These are examined in relation to one another, along with evidence of professional contributions to school improvement;
- Include opportunities for both **formative and summative** evaluation, providing information both to improve practice and to support personnel decisions;
- Tie evaluation to useful **feedback** and to **professional learning** opportunities that are relevant to educators' goals and needs;
- Acknowledge the **time, curriculum resources, and professional learning** needed to learn to implement more complex standards, such as the CCSS and NGSS;
- **Differentiate support** based on the educator's level of experience and individual needs;
- Build on successful **Peer Assistance and Review models** for educators who need assistance (both administrators and teachers), to ensure intensive, expert support and well-grounded, timely, and effective personnel decisions;
- Value and promote **collaboration**, which feeds whole school improvement;
- Are a priority within the district, with **dedicated time, training, and support** provided to evaluators and to those who mentor educators needing assistance.

It has promoted **equity** in the provision of expertise to students by:

- **Equalizing resources** to districts while tracking and encouraging the provision of well-qualified and effective teachers to all schools.
- Creating a greater supply of experienced, qualified, in-field, and effective teachers to high-need schools through **service scholarships** to recruit a diverse pool of high-ability educators to high-need fields and locations by paying for their preparation in exchange for at least 4 years of service in the State's schools and through **teacher residency programs** that recruit, prepare, and mentor candidates to learn to teach well in high-need districts.
- Building professional capacity through the state by create a **statewide learning system**, developing a State Education Agency that sees its job as building professional expertise rather than just managing compliance. This agency **shares research and best practices** through its website and dissemination activities (newsletters, conferences, school quality review activities); **documents and disseminates what is working in schools** in the state in multiple ways, including case studies, site visits, and tools to support local policy and practice; and sets up and supports **learning networks** that allow districts, schools, and educators to learn from one another.

At the end of the day, policymakers and practitioners hope that these strategies will produce schools that are **responsible** for implementing a strong teaching and learning system and **responsive** to the individual needs of all the students they serve.

Endnotes

¹ This paper was developed in the course of a series of discussions about the design of a new accountability system with the following individuals, who offered substantial input and ideas. There was strong agreement about many of the ideas, and diverse perspectives about others. The final product does not reflect an endorsement by any of these individuals or organizations. These intellectual contributors include: [list]

² Much of this research is summarized in Linda Darling-Hammond (2010). *The flat world and education: How America's commitment to equity will determine our future.*

³David Conley (2014). *Getting ready for college, careers, and the Common Core: What every educator needs to know.* San Francisco: Jossey-Bass.

DRAFT

EDUCATION OVERSIGHT COMMITTEE

Subcommittee: **Special Panel on H.B.5.**

Date: **August 11, 2014**

INFORMATION/RECOMMENDATION

High School Biology Standard H.B.5.

PURPOSE/AUTHORITY

The statutory authority for the report is Section 59-18-350 of the EAA, as amended in 2008 (Act 282 of 2008) and in 2014 (Act 200 of 2014).

CRITICAL FACTS

A special panel composed of three members of the EOC and three members of the State Board of Education were selected to review and recommend changes to the High School Biology Standard, H.B.5. The recommendations of this panel are to be considered by the full EOC.

TIMELINE/REVIEW PROCESS

June 2012 – EOC adopts *Report on the Review of the South Carolina Science Academic Standards*

April to January 2013 – SCDE revises science standards

February 2013 - SCDE publishes draft standards and online feedback survey tool to get input from educators

May to July 2013 - SCDE revised and edited draft standards per public comments

October 9, 2013 - State Board of Education (SBE) gives first reading to new science standards

November 18, 2013 – Academic Standards and Assessment (ASA) Subcommittee of EOC reviews science standards, receives public input, and suggests changes to standards.

December 9, 2013 – EOC adopts the subcommittee recommendation as amended. The science standards are referred to SCDE and SBE with eight specific recommendations for clarifying and condensing several standards.

January 27, 2014 – ASA Subcommittee reviews standards as amended by the State Board. ASA votes to send revised science standards to the full EOC without a recommendation.

February 10, 2014 – EOC approves all science standards with one exception, Standard H.B.5 in High School Biology

March 24, 2014 – ASA Subcommittee reviews Standard H.B.5 and a recommendation from the SCDE to amend Performance Indicator H.B.5C.3. Votes to send Standard H.B.5 to full EOC without a recommendation

April 28, 2014 – EOC adopts an additional performance indicator, H.B.5C.4, to the High School Biology Standard, and forwards language to SBE

June 11, 2014 – SBE meets and does not approve changes to H.B.5 standard.

July 29, 2014 – Special panel meets and unanimously approves language that will be submitted to respective bodies for consideration.

ECONOMIC IMPACT FOR EOC

Cost: Absorbed in operating budget

Fund/Source:

ACTION REQUEST

For approval

For information

ACTION TAKEN

Approved

Amended

Not Approved

Action deferred (explain)

MEMORANDUM

TO: Members, EOC
FROM: Melanie Barton
DATE: August 1, 2014
IN RE: High School Biology Standard, H.B.5.

On April 28, 2014 the Education Oversight Committee (EOC) met and voted to recommend to the State Board of Education that it consider approving an additional performance indicator, H.B.5C.4, to the High School Biology Standards, which appears below.

H.B.5C.4. (NEW)

Construct scientific arguments that seem to support and scientific arguments that seem to discredit Darwinian natural selection.

The State Board of Education (SBE) met on June 11, 2014, but did not adopt the EOC recommendation. Instead the Board suggested that a special panel be created with three members of EOC and three members of State Board to see if the two bodies could mutually agree to language on the standard. Chairmen Bolen and Whittemore appointed the members of the panel, which consisted of the following individuals:

Dr. Traci Young Cooper, Chair Elect, SBE
Dr. Rhonda Edwards, SBE
Dr. Danny Varat SBE
Ms. Anne Bull, EOC
Senator Mike Fair, EOC
Mr. Neil Robinson, EOC

The special panel met on July 29, 2014 and voted unanimously to recommend to the State Board of Education and the Education Oversight Committee the following:

Standard H.B.5. as approved by the State Board of Education on first reading should be amended to include the following conceptual understanding and performance indicator:

H.B.5D. Conceptual Understanding: Science is the systematic gathering of information through both direct and indirect observation, and the testing of this information by experimentation with the aim of developing concepts and formulation of laws and

theories. Scientific conclusions are tested by experiment and observation, and evolution, as with any aspect of science, is continually open to and subject to experimental and observational testing.

Performance Indicator: Students who demonstrate this understanding can:

H.B.5D.1 Explain how scientists develop theories and laws by using deductive and inductive reasoning in situations where direct observation and testing are possible and also by inference through experimental and observational testing of historical scientific claims. Students should understand assumptions scientists make in situations where direct evidence is limited and understand that all theories may change as new scientific information is obtained.

The objective of the new language is to emphasize the importance of students developing the skills and abilities to analyze critically new scientific information, (e.g. development of antibiotic resistance in bacteria or germ theory of disease), and then use deductive and inductive reasoning and inference to test the theory of evolution against such scientific information. The language incorporates the position statements of the National Science Teachers Association on evolution and the nature of science.

Position Statement of National Science Teachers Association:

“Evolution – There is no longer a debate among scientists about whether evolution has and is occurring. There is debate, however, about how evolution has taken place: What are the processes and mechanisms producing change, and what has happened specifically during the history of the universe? Scientists often disagree about their explanations. In any science, disagreements are subject to rules of evaluation. Scientific conclusions are tested by experiment and observations, and evolution as, with any aspect of science, is continually open to and subject to experimental and observational testing.” (<http://www.nsta.org/about/positions/>)

Position Statement of National Science Teachers Association on Nature of Science:

“Science is characterized by the systematic gathering of information through various forms of direct and indirect observations and the testing of this information by methods including, but not limited, to experimentation. The principal product of science is knowledge in the form of naturalistic concepts and the laws and theories related to those concepts. . . . The history of science reveals both evolutionary and revolutionary changes. With new evidence and interpretation, old ideas are replaced or supplemented by newer ones. “ (<http://www.nsta.org/about/positions/>)

BIOLOGICAL EVOLUTION – UNITY AND DIVERSITY

Standard H.B.5: The student will demonstrate an understanding of biological evolution and the unity and diversity of life on Earth.
(In red is the additional language)

H.B.5A. Conceptual Understanding: Scientific evidence from the fields of anatomy, embryology, biochemistry, and paleontology underlie the theory of biological evolution. The similarities and differences in DNA sequences, amino acid sequences, anatomical features and fossils all provide information about patterns of descent with modification. Organisms resemble their ancestors because genetic information is transferred from ancestor to offspring during reproduction.

Performance Indicators: Students who demonstrate this understanding can:

H.B.5A.1 Analyze scientific data to explain how multiple lines of evidence (including DNA or amino acid sequences, anatomical and embryological features, fossils and artificial section) are used to investigate common ancestry and descent with modification.

H.B.5A.2 Explain how scientists use data from a variety of sources to investigate, critically analyze, aspects of the theory of biological evolution.

H.B.5A.3 Construct and interpret a phylogenetic tree, based on anatomical evidence, of the degree of relatedness among various organisms and revise the model based on the inclusion of molecular (such as DNA and/or amino acid sequence) evidence.

H.B.5B. Conceptual Understanding: Biological evolution occurs primarily when natural selection acts on the genetic variation in a population and changes the distribution of traits in that population over multiple generations.

Performance Indicators: Students who demonstrate this understanding can:

H.B.5B.1 Critically analyze and interpret data to explain that natural selection results from four factors: (1) the potential for a population to increase in number, (2) the genetic variation among individuals in a species due to sexual reproduction and mutation, (3) competition for a limited supply of resources, and (4) the ensuing proliferation of those individuals that are better able to survive and reproduce in that environment.

H.B.5B.2 Conduct investigations by simulating several generations of natural selection to investigate how changes in environmental conditions may lead to changes in selective pressure on a population of organisms.

H.B.5C. Conceptual Understanding: According to the theory of biological evolution, natural selection results in populations that are adapted to a particular environment at a particular time. Changes in the physical environment have contributed to the expansion, emergence, or extinction of the Earth's species. Biodiversity is increased by the formation of new species (speciation) and decreased by the loss of species (extinction). Modern classification of Earth's biodiversity is based on the relationships of organisms to one another.

Performance Indicators: Students who demonstrate this understanding can

H.B.5C.1 Analyze and interpret data, using the principles of natural selection, to make predictions about the long term biological changes that may occur within two populations of the same species that become geographically isolated from one another.

H.B.5C.2. Construct scientific arguments using data on how changes in environmental conditions could result in (1) the expansion of some species, (2) the emergence of new species over time, or (3) the extinction of other species.

H.B.5C.3. Use models of the current three-domain, six-kingdom tree of life to explain how scientists classify organisms, and how classification systems are revised over time as discoveries provide new evidence.

H.B.5D.Conceptual Understanding: Science is the systematic gathering of information through both direct and indirect observation, and the testing of this information by experimentation with the aim of developing concepts and formulation of laws and theories. Scientific conclusions are tested by experiment and observation, and evolution, as with any aspect of science, is continually open to and subject to experimental and observational testing.

Performance Indicator: Students who demonstrate this understanding can

H.B.5D.1 Explain how scientists develop theories and laws by using deductive and inductive reasoning in situations where direct observation and testing are possible (e.g., development of antibiotic resistance in bacteria or germ theory of disease) and also by inference through experimental and observational testing of historical scientific claims. Students should understand assumptions scientists make in situations where direct evidence is limited and understand that all theories may change as new scientific information is obtained.