



StraightA's

Public Education Policy And Progress



STANDARDS MOVEMENT GAINING STEAM: Duncan Announces Plan to Commit Up to \$350 Million for Assessments Linked to Common Standards

Earlier this month, the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) announced that forty-six states and the District of Columbia have signed on to a joint effort to develop a common core of state standards in English language arts and mathematics for grades K–12.¹ The standards will be “research and evidence-based, internationally benchmarked, aligned with college and work expectations, and include rigorous content and skills,” [according to a press release from CCSSO](#).

NGA and CCSSO will create an expert validation committee to undertake an independent review of the common core state standards, as well as grade-by-grade standards that emerge from this effort. The organizations were careful to point out that the validation committee will consist of nationally and internationally recognized education experts who are neutral to—and independent of—the process. They expect the college- and career-ready standards to be completed in July while the grade-by-grade standards work should come in December.

In a [June 14 address at the 2009 Governors Education Symposium](#) in Cary, North Carolina, U.S. **Secretary of Education Arne Duncan** expressed strong support for the state-led common standards movement. The symposium was cosponsored by NGA and the James B. Hunt, Jr. Institute for Educational Leadership and Policy and included twenty-one of the nation’s governors in its attendance, as well as some chief state school officers.

“For too long, we’ve been lying to kids,” Duncan said. “We tell them they’re doing fine, give them good grades, and tell them they’re proficient on state tests that aren’t challenging. Then they get to college and they’re put into remedial classes. Or they go into the workforce and find out that they don’t have the skills they need to succeed. We need standards that will get them ready for the day after they graduate. That means they must be rigorous. Today, our standards are too low—and the results on international tests show it.”

Duncan said that the standards that emerge from the state-led process must be “rigorous” and limited to the “essential knowledge and skills” that students need. He added that current standards are too broad and cover thirty-five to forty topics per subject in each grade compared to fifteen or twenty in many high-performing countries. “Teachers scramble to cover everything...and not enough of what’s really important. They can’t dig deeper on a challenging

¹ The four missing states are [Alaska](#), [Missouri](#), [South Carolina](#), and [Texas](#). (Clicking on the hyperlink will load a newspaper article explaining why the state is not included in the effort).

subject that excites their students. And students can't master material when they are racing through it.”

Duncan acknowledged that higher standards will make some states look bad in the short term because fewer students will be meeting them. He pledged to work with states to ensure that they are not penalized for “doing the right thing.” He added that the reauthorization of the Elementary and Secondary Education Act will allow the administration to change the law so that it rewards states for raising standards.

“I always give [the No Child Left Behind Act] credit for exposing the achievement gap but the central flaw in the law is that it was too loose about the goals and too tight about how to get there,” Duncan said. “As states come together around higher common standards, I want to flip it—and be tighter about the goals—but more flexible in how you can meet them.”

To help measure whether students are meeting the new standards that states set, Duncan announced that the U.S. Department of Education will provide up to \$350 million to states to create rigorous assessments that are linked to the new standards that emerge from the state-led effort. The money will come from the \$4.35 billion Race to the Top Fund, which was included in the American Recovery and Reinvestment Act.

“Once new standards are set and adopted you need to create new tests that measure whether students are meeting those standards,” Duncan said. “We need tests that measure whether students are mastering complex materials and can apply their knowledge in ways that show that they are ready for college and careers. We need tests that go beyond multiple choice—and we know that these kinds of tests are expensive to develop. It will cost way too much if each state is doing this on its own. Collaboration makes it possible for this to happen quickly and affordably.”

In an effort to ward off claims that a commonly created test could be a threat to state control, Duncan stressed that states will create the tests, drive the process, and “call the shots.” He also encouraged the governors to work together to develop benchmark tests that can help teachers understand how their students are doing during the school year and help target instruction accordingly.



MEANINGFUL MEASUREMENT: Collection of Essays Published by the Alliance for Excellent Education Examines the Role of Assessments in Improving High School Education

Federal policy must support a radically different system of assessments if the United States is to succeed in preparing all students for college and career. So says [*Meaningful Measurement: The Role of Assessments in Improving High School Education in the Twenty-First Century*](#), a new collection of essays written by leading education experts and published by the Alliance for Excellent Education.

“At all levels of the education system, assessments serve as a way to establish meaningful goals and signal to all stakeholders the progress in reaching them, said **Bob Wise, president of the Alliance for Excellent Education and former governor of West Virginia**. “Unfortunately,

there is a general consensus that current assessment policies and practices do not establish the goal of college and career readiness for all students, nor do they support improved teaching and learning.”

Meaningful Measurement contains nine essays with themes that include the need for assessments that measure students’ college and career readiness, the interest in performance assessments, and the role of benchmark assessments. Some of the essays also examine promising assessment practices from across the globe and offer recommendations on how the federal government can support an assessment agenda for the twenty-first century. (A complete list of the essays and their authors appear in the box below).

“In today’s economy, there aren’t many well-paying jobs for individuals without some form of postsecondary education,” Wise said. “But rather than measuring whether students are ready for college or career, the assessments used in many states are pegged to tenth-grade levels or lower. If the nation is to truly prepare its students to compete on a global scale, it must move beyond multiple-choice questions and rudimentary assessments to twenty-first-century measurements that effectively measure whether students are meeting higher expectations.”

Meaningful Measurement argues that federal policy should support states in their efforts to develop common standards and assessments that are aligned to college and career readiness as well as lessons learned from the world’s highest-performing nations. The report notes that federal policy should also help build educators’ capacity to use assessments and other data to improve teaching and learning and to ensure that assessment data is communicated quickly to educators and the public. Additionally, it calls on federal policymakers to invest in research and development to improve knowledge at all education levels about using higher-quality assessments in ways that improve teaching, learning, and student outcomes.

“Secretary Duncan’s announcement, combined with the upcoming congressional reauthorization of the Elementary and Secondary Education Act, provide excellent opportunities to rethink the federal role in standards and assessments and how to improve current assessments and educators’ capacity to use them,” said Wise. “When developed and used properly, assessments not only make the expectations we set through our standards real, they can also play an important role in holding the system accountable for the education of poor and minority students while providing critical information that assists classroom instruction and school improvement efforts.”

A Complete List of Essays Included in *Meaningful Measurement*

“College and Work Readiness as a Goal of High Schools: The Role of Standards, Assessments, and Accountability,” by **John Tanner of the Center for Innovative Measures at the Council of Chief State School Officers**: This essay establishes why, in the twenty-first century, the nation needs standards, assessments, and accountability systems aligned to college and career readiness, and offers recommendations for federal policymakers to support such efforts.

“Reframing Accountability: Using Performance Assessments to Focus Learning on Higher-Order Skills,” by **Linda Darling-Hammond and Ray Pecheone of the School Redesign Network at Stanford University**: This essay discusses how performance assessments can help evaluate students’ ability to apply their knowledge and encourage teaching and learning of higher-order skills.

(Continued on page 4)

“Formative Assessment and Assessment *for* Learning,” by **Jan Chappuis, Stephen Chappuis, and Richard Stiggins of the ETS Assessment Training Institute**: The authors describe the characteristics of formative assessment, with a particular focus on those formative assessment practices that engage and empower students in their own learning, or assessments *for* learning.

“The Role of Interim Assessments in a Comprehensive Assessment System,” by **Judy Wurtzel, formerly of the Aspen Institute, and Marianne Perie, Scott Marion, and Brian Gong of the National Center for the Improvement of Education Assessment**: The authors differentiate between true classroom formative assessment and the interim assessments currently in the marketplace. They then provide a framework for considering the appropriate role of interim assessments.

“International Assessments of Student Learning Outcomes,” by **Andreas Schleicher of the Organisation for Economic Co-operation and Development**: This essay provides a brief introduction of the history of international assessments and describes the potential benefits of international assessments for educational policy and practice. It also includes some of the methodological challenges faced in providing valid, comparable, and reliable evidence, and offers recommendations to U.S. policymakers.

“Measuring Student Achievement Growth at the High School Level,” by **Joseph Martineau of the Michigan Department of Education**: This essay explains the technical underpinnings of growth models, describes the various types of growth models, articulates challenges inherent to measuring growth at the high school level, and explores implications for policymakers interested in moving toward the widespread use of growth models.

“Assessing High School English Language Learners,” by **Jamal Abedi of the University of California at Davis**: Abedi describes the challenges inherent in assessing the English proficiency and content knowledge of the diverse high school English language learner (ELL) population and offers recommendations to federal policymakers for creating reliable, valid, and accessible assessments for ELL students.

“Students with Disabilities: Expectations, Academic Achievement, and the Critical Role of Inclusive Standards-Based Assessments in Improving Outcomes,” by **Rachel Quenemoen of the National Center on Educational Outcomes**: Quenemoen describes issues concerning the assessment of high school students with disabilities in a standards-based accountability system, ways to evaluate assessments that are inclusive of all students in the accountability system, and recommendations for policymakers.

“Assessments and Technology: A Powerful Combination for Improving Teaching and Learning,” by **Erin Martin Gohl, Daniel Gohl, and Mary Ann Wolf of the State Educational Technology Directors Association**: The authors describe how the use of technology to assess students and to record and analyze performance can result in timely, appropriate, and individualized instruction for all students.



THE SECOND DERIVATIVE: Student Math Proficiency in States and Districts Fails to Measure up to Global Benchmark

According to a recent report from the [American Institutes for Research](#) (AIR), the math performance of American students in almost every state and city is ranked “average” at best and pales in comparison to student performance in several Asian countries including Taiwan, South Korea, Singapore, Hong Kong SAR, and Japan. In grade eight, Massachusetts is the only state achieving academic proficiency and fully preparing its students to compete with students from top nations.

“These Asian nations consistently perform at the B+, B, and B- levels,” said **report author and AIR vice president and chief scientist Gary W. Phillips**. “Their students are learning

mathematics not just at a higher level than students in the United States, but at a level that is a quantum leap higher.”

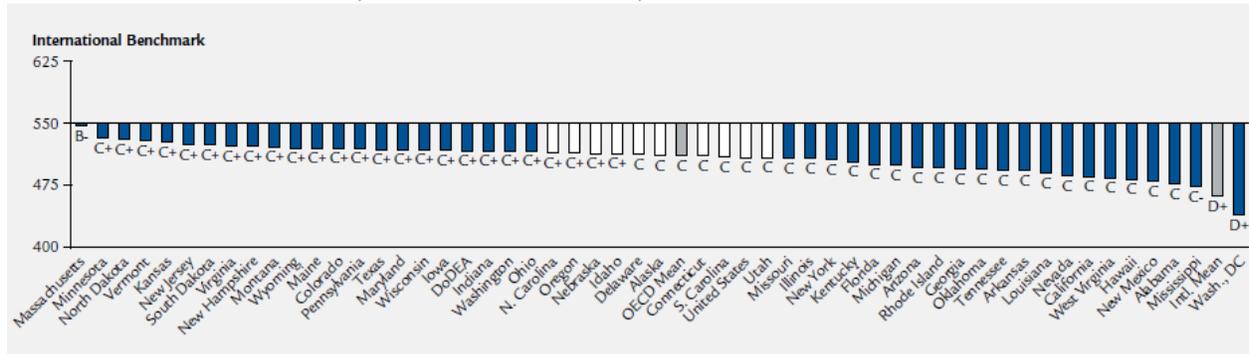
The Second Derivative: International Benchmarks in Mathematics for U.S. States and School Districts pulls from data provided in the 2007 Trends in International Mathematics and Science Study (TIMSS) and the 2007 National Assessment of Educational Progress (NAEP) and uses it to create a new international letter-grade index, which assumes a grade of B as the benchmark.

“The grade of B was chosen because this report shows it is statistically equivalent to the Proficient level on NAEP that has been recommended by the National Assessment Governing Board and No Child Left Behind as the level of performance we should expect from our students,” the report reads.

The math proficiency average for U.S. students is C+ in grade four and C at grade eight, indicating a general tendency for students to drop in performance as they advance through middle school. Unfortunately, this decrease in mathematical competency was observed at both the state and district levels. For example, four major districts (Los Angeles, Chicago, Atlanta, and Cleveland) fell from C to D levels from grade four to grade eight. Charlotte, North Carolina, and Austin, Texas, were the only two cities that performed at the average score of the participating Organisation for Economic Co-operation and Development (OECD) countries.

At the state level in eighth-grade math, only Massachusetts’ students achieved a letter grade of B. And five states (Kansas, Minnesota, New Hampshire, New Jersey, and Vermont) fell from B to C level from grade four to grade eight.

Estimated TIMSS Mean Achievement in Each State Benchmarked Against an International Grade of “B,” 2007 Mathematics, Grade 8



Source: *The Second Derivative: International Benchmarks in Mathematics for U.S. States and School Districts*

The report echoes U.S. Secretary of Education Arne Duncan’s call for states to develop internationally benchmarked standards in order to best prepare our students to compete in a global economy. In his June 14 speech at the Governors Education Symposium, Duncan remarked, “Today, our standards are too low—and the results on international tests show it. Worse yet, we see the signals in the international economy as more and more engineers, doctors, science and math PhDs come from abroad.”

The international comparisons provided in the AIR study are helpful in understanding the high expectations the states are facing in their effort to develop common internationally benchmarked standards. In Phillips' words, "The race to the top starts with knowing where we stand and how high the bar is over which we need to jump. Establishing state or national thresholds uninformed by what is happening around the world is like flying without radar."



THE OPPORTUNITY EQUATION: In Effort to Raise Math and Science Levels of American Students, Report Says that the Nation Must "Do School Differently"

A new report from Carnegie Corporation of New York's Institute for Advanced Study Commission on Mathematics and Science Education argues that the United States must "mobilize for excellence" in mathematics and science education so that all students achieve much higher levels of math and science learning. The report, *The Opportunity Equation: Transforming Mathematics and Science Education for Citizenship and the Global Economy*, says that knowledge and skills from science, technology, engineering, and mathematics (STEM) are crucial to virtually every endeavor of individual and community life and maintains that all young Americans should be educated to be "STEM-capable," no matter where they live, what educational path they pursue, or in which field they choose to work.

"The nation's capacity to innovate for economic growth and the ability of American workers to thrive in the global economy depend on a broad foundation of math and science learning, as do our hopes for preserving a vibrant democracy and the promise of social mobility for young people that lie at the heart of the American dream," said **Vartan Gregorian, president of Carnegie Corporation of New York**. "We need an educated young citizenry with the capacity to contribute to and gain from the country's future productivity, understand policy choices, and participate in building a sustainable future."

The report argues that the nation must "do school differently" in order to make excellent mathematics and science learning possible for all Americans. In the different world envisioned by the report, math and science are at the center of the education system and new school models reengage disconnected students in academically rigorous math and science education. The result is an education system that raises the levels of performance of all American students, providing them with a strong foundation for success in college and careers while enabling many more individuals to pursue advanced training in STEM fields.

In order to get there from here, the report finds that the nation cannot make the necessary improvements to mathematics and science education by solely focusing on mathematics and science learning. In addition, the nation will need to give "at least equal weight to driving fundamental change to the nation's schools and to strengthening the innovation capacity of the educational system."

The report presents a comprehensive program of action complete with recommendations for the federal government, states, schools and school districts, colleges and universities, unions, businesses, nonprofit organizations, and philanthropies. Recommendations are grouped into four priority areas: 1) Higher levels of mathematics and science learning for all American students; 2) Common standards in math and science that are fewer, clearer, and higher, coupled with aligned

assessments; 3) Improved teaching and professional learning, supported by better school and system management; and 4) New designs for schools and systems to deliver math and science learning more effectively.

For priority number one in the paragraph above, the report calls for an awareness campaign that would mobilize the nation for excellence and equity in mathematics and science education. More specifically, it calls for a campaign that would “generate public awareness of math and science as central to the revitalization of the American economy and social mobility for young Americans” and increase public understanding that math and science are connected to “virtually any secure and rewarding job in any sector of the economy.” Also included under this priority is a recommendation that improvement in math and science outcomes, especially by historically underperforming groups, be a benchmark in designing and evaluating school improvement efforts at all grade levels for all students.

Priority number two calls for common standards that are fewer, clearer, and higher and guide instructional improvement in mathematics and science, as well as sophisticated assessments and accountability mechanisms that, along with common standards, stimulate instructional improvement and innovation in mathematics and science.

Under priority number three, the report calls for an increase in the supply of well-prepared teachers of mathematics and science at all grade levels through improved teacher preparation, recruitment, and professional learning for all teachers and an upgrade in human capital management throughout U.S. schools and school systems toward ensuring an effective teacher for every student, regardless of socioeconomic background.

Priority number four focuses on building high expectations for student achievement in mathematics and science into school culture and operations as a pathway to college and careers, enhancing systemic capacity to support strong schools and act strategically to turn around or replace ineffective schools, and tapping a wider array of resources to increase educational assets and expand research and development capacity.

“Math and science education today falls far short of meeting students’ future needs or the needs of society,” said **Phillip A. Griffiths, chair of the Commission and past director of the Institute for Advanced Study**. “Recent rounds of school reform have paid far too little attention to math and science. Schools must inject rigorous and relevant math and science throughout the curriculum. The goal of improving math and science should sound a call for change that will reverberate throughout our schools and increase student learning in *all* areas.”

The complete report is available at <http://www.opportunityequation.org>.

Straight A's: Public Education Policy and Progress is a biweekly newsletter that focuses on education news and events both in Washington, DC and around the country. The format makes information on federal education policy accessible to everyone from elected officials and policymakers to parents and community leaders. The Alliance for Excellent Education is a nonprofit organization working to make it possible for America’s six million at-risk middle and high school students to achieve high standards and graduate prepared for college and success in life.