

## THE DEEPEST LEARNERS: U.S. Producing Fewer Top-Performing Students than Many International Peers, Says New Alliance Report Based on Latest PISA Data

Based on data released on December 3 from the Programme for International Student Assessment (PISA),<sup>1</sup> a new report from the Alliance for Excellent Education reveals that the United States struggles to produce top performers in reading, math, and science at the rates of its international peers. These students, who the report calls the "deepest learners," demonstrate the deep understanding of content and the ability to apply knowledge to solve problems, think critically, and communicate effectively.

"The term 'deeper learning' may be new, but its basic concepts are not," said **Bob Wise**, **president of the Alliance for Excellent Education and former governor of West Virginia**. "Deeper learning is what highly effective educators have always provided: the delivery of rich core content to students in innovative ways that allow them to learn and then apply what they have learned. These deeper learning skills are what PISA assesses, and they are the skills most in demand in today's global economy; unfortunately, they are also the skills that far too many U.S. students lack."

According to the report, *The Deepest Learners: What PISA Can Reveal About the Learning that Matters*, the United States lagged behind familiar names, including Shanghai-China, Finland, and Canada, in producing students who scored at PISA's highest levels (Levels 5 and 6). In the United States, only 12 percent of students reached the highest levels in at least one subject while 4.7 percent did so in all three subjects. Compare those results to Shanghai-China, where 56 percent of students were top performers in at least one subject and 19.6 percent were in all three, and Canada, where the percentages were 21.9 percent and 6.5 percent, respectively. The international average was 16.2 percent and 4.4 percent, respectively.

The proportion of top performers in the United States has declined over time in reading and math, the report shows. "Most disturbing," Wise noted, "is that a gap is growing between our nation's current economic strength and the future human capital with the deeper learning skills needed to sustain and strengthen U.S. growth."

By combining existing research with the latest PISA data, *The Deepest Learners* offers four recommendations based on practices in high-performing countries that can inform policymakers as states move forward to implement college- and career-ready standards.

<sup>&</sup>lt;sup>1</sup> See the article on page two for more information on the latest PISA results.

The first two recommendations, which focus on standards containing deeper learning competencies and assessments aligned with them, are already underway with the adoption of the Common Core State Standards (CCSS) by forty-six states and the District of Columbia and the development of high-quality assessments to measure student performance against the CCSS by the two state consortia—Partnership for Assessment of Readiness for College and Careers and Smarter Balanced Assessment Consortium.

The report cautions that development and adoption are only the first two steps and that implementation and resources will be keys to the standards' success. It recommends that states and higher education institutions revamp teacher preparation programs and professional development programs to ensure that teachers are prepared to enable students to develop deeper learning competencies.

"Of all the daunting challenges the nation faces—economic, social, environmental, and educational—perhaps the most vexing is whether schools are preparing all children to apply what they're learning to the critical decisions that power our economy and democracy," said **Barbara Chow**, **program director for education at the William and Flora Hewlett Foundation**. "Incorporating the latest PISA results, this report demonstrates how high-performing nations are implementing deeper learning to prepare their students for a complex future."

The report also recommends that the federal government support deeper learning through legislation and competitive grants and that the Elementary and Secondary Education Act should make clear that the goal of the law is to enable all students to graduate from high school ready for college and a career and that this goal requires the development of deeper learning competencies.

"By implementing new standards, assessments, and teacher development programs, the United States is taking important steps to produce significant changes in classroom practice and student outcomes over the next few years. These changes could, in turn, result in significant improvement in PISA scores in 2015," said Wise. "More importantly, improvement in PISA performance would also signal that more students in the United States have developed the knowledge and skills they need to succeed in an increasingly complex world."

The complete report is available at

http://all4ed.org/wp-content/uploads/2013/12/DeepestLearners.pdf.

### PISA RESULTS: U.S. Slips in International Reading, Science, and Mathematics Rankings According to Latest Results from Programme for International Student Assessment

Released December 3, the results of the 2012 Programme for International Student Assessment (PISA) show that American fifteen-year-olds ranked seventeenth in reading, twentieth in science, and twenty-seventh in mathematics among the thirty-four countries of the Organisation for Economic Co-Operation and Development (OECD).<sup>2</sup> Those rankings are lower than in the

<sup>&</sup>lt;sup>2</sup> The thirty-four OCED countries are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israël, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

previous PISA given in 2009 when the United States ranked fourteenth in reading, seventeenth in science, and twenty-fifth in mathematics.

Like traditional tests, PISA, which consists of multiple-choice and open-ended questions, tests students on what they have learned, but it goes one step further by also asking students to extrapolate what they have learned and apply that knowledge in unfamiliar settings, both in and outside of school. The thirty-four OECD member countries and thirty-one partner countries and economies that participated in PISA in 2012 represent more than 80 percent of the world economy.

"More and more countries are looking beyond their own borders for evidence of the most successful and efficient policies and practices," said **OECD Secretary-General Angel Gurría**. "Indeed, in a global economy, success is no longer measured against national standards alone, but against the best-performing and most rapidly improving education systems. ... By identifying the characteristics of high-performing education systems, PISA allows governments and educators to identify effective policies that they can then adapt to their local contexts."

As shown in the table below, the United States, with a mean score of 481, ranks twenty-seventh out of thirty-four OECD countries in math performance—below the OECD average (494) and far behind top-performers Korea (554), Japan (536), and Switzerland (531), as well as Canada (518). Not included in the table are the thirty-one partner countries and economies that also took PISA, many of which performed better than the United States, including Shanghai-China (613), Singapore (573), and Hong Kong–China (561). When including these countries, the U.S. ranking slides down to thirty-six out of sixty-five.

Country	Mean Score	Country	Mean Score
Korea	554	OECD Average	494
Japan	536	United Kingdom	494
Switzerland	531	Iceland	493
Netherlands	523	Luxembourg	490
Estonia	521	Norway	489
Finland	519	Portugal	487
Canada	518	Italy	485
Poland	518	Spain	484
Belgium	515	Slovak Republic	482
Germany	514	United States	481
Austria	506	Sweden	478
Australia	504	Hungary	477
Ireland	501	Israel	466
Slovenia	501	Greece	453
Denmark	500	Turkey	448
New Zealand	500	Chile	423
Czech Republic	499	Mexico	413
France	495		

PISA 2012: Mean Math Scores Among OECD Member Nations

In reading, the United States's mean score (498), beat the OECD average (496), but fell far behind top-performers such as Shanghai-China (570), Hong Kong–China (545), Singapore (542), Japan (538), and Korea (536). Canada (523) was the highest-performing country in North America.

In science, the United States's mean score (497) trailed the OECD average (501), as well as those of top performers Shanghai-China (580), Hong Kong–China (555), Singapore (551), Japan (547), and Finland (545). Again, Canada (525) was the highest-performing country in North America.

For the first time, three U.S. states—Massachusetts, Connecticut, and Florida—independently participated in PISA. In math, Massachusetts (514) and Connecticut (506) posted mean scores higher than the OECD average and that of the United States as whole while Florida (467) trailed both.

The complete PISA results are available at <u>http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf</u>.

Highlights for the United States are available at <u>http://www.oecd.org/pisa/keyfindings/PISA-2012-results-US.pdf</u>.



#### SIG-NIFICANT DATA: Schools Receiving School Improvement Grants Increase Math and Reading Proficiency at Higher Rates than Non-SIG Schools, According to New Data from U.S. Department of Education

New data on the School Improvement Grants (SIG) program released by the U.S. Department of Education (ED) on November 21 shows that schools that have received two years of SIG funds are making larger increases in average proficiency rates in both reading and math, compared to all schools nationally. Under the Obama administration, the SIG program, which targets the nation's lowest-performing schools, has allocated up to \$2 million per school at more than 1,300 schools, approximately 40 percent of which are high schools.

"The progress, while incremental, indicates that local leaders and educators are leading the way to raising standards and achievement and driving innovation over the next few years," said **U.S. Education Secretary Arne Duncan**. "To build on this success in our disadvantaged communities, we must expand the most effective practices to accelerate progress for students and prepare them for success in college and careers."

On average, the more than 400 schools that received SIG funds in the 2010–11 and 2011–12 school years improved their percentages of students scoring "proficient" on state assessments by 8 percentage points in math and 5 percentage points in English, compared to 3 percentage points and 2 percentage points, respectively, among non-SIG schools. When broken out by grade, similar gains were seen at the high school level; high schools receiving SIG funds increased their average proficiency rates by 7 percentage points in math and 3 percentage points in reading.

A <u>press release from ED</u> released in conjunction with the SIG data highlights progress at Baltimore's Frederick Douglass High School, where the dropout rate was cut in half and proficiency in English language arts jumped from 41 percent to 53 percent in the first year of the grant.

"For too long, federal education policy has overlooked struggling students, especially those attending the nation's lowest-performing high schools," said **Bob Wise**, **president of the Alliance for Excellent Education and former governor of West Virginia**. "Results from the

School Improvement Grant (SIG) program demonstrate that the significant federal investment made in turning around low-performing schools is having an impact. After several years of implementation, now is the time for the U.S. Department of Education to revise its SIG policy to address the positive impact of personalization on high school turnaround, as well as other tenets of high school reform based in research and best practice."

In total, 285 of 414 schools (69 percent) demonstrated gains in math since the school year prior to receiving SIG funds (2009–10); 122 schools (30 percent) experienced declines, and seven schools (2 percent) demonstrated no change. In reading, 304 of 461 schools (66 percent) demonstrated gains since the 2009–10 school year; 142 schools (31 percent) experienced declines, and 15 schools (3 percent) demonstrated no change.

ED notes that roughly half of schools that received SIG funds in the 2010–11 and 2011–12 school years could not be included in its analysis due to several different reasons, including significant changes in state assessments or cut scores during the grant years, a school split or merger, or missing proficiency rates for a given year.

The complete report is available at <u>http://www2.ed.gov/programs/sif/sigassessmentrpt-cohort1-2.pdf</u>.



## YOUTH CAREERCONNECT: Obama Announces New \$100 Million Grant Program for High Schools

On November 19, President Obama announced a new \$100 million collaboration between the U.S. Department of Labor and the U.S. Department of Education that will provide high school students with education and training that combines rigorous academic and career-focused curriculum with work-based learning opportunities.

The program, called Youth CareerConnect, is aligned with the \$300 million high school redesign program that the president announced in his State of the Union address earlier this year. The program is designed to promote reform at the local level by supporting it with federal funding. According to a <u>fact sheet</u> released by the White House, the program will help "scale up evidence-based high school models that will transform the high school experience for America's youth." Because they are funded from revenues from the H-1B visa program, Youth CareerConnect grants will not need congressional approval.

In announcing the program to a collection of top global CEOs gathered in Washington, DC, Obama called the idea behind the program—redesigning high schools to give students hands-on training and ensure that they develop the science, technology, engineering, and math skills that they need and employers want—a "good example" of a public-private partnership.

One school fitting this model that Obama has frequently cited, including in his <u>State of the Union</u> <u>address</u>, is P-Tech, an early college high school in Brooklyn that enjoys a collaboration between New York Public Schools and City University of New York and IBM. At P-Tech, students graduate with both a diploma and an associate's degree in a field related to computers or engineering.

The \$100 million allocated for Youth CareerConnect and will permit approximately twenty-five to forty grants, which will be awarded to partnerships among local education agencies, local workforce entities, employers, and institutions of higher educations. Applicants may also involve nonprofits with experience integrating academic and career-focused learning. At a minimum, applicants will also be required to provide a match of 25 percent of the grant award. The application deadline is January 27, 2014. Awards are expected in early 2014 so that programs can get underway in time for the 2014–15 school year.

In a <u>statement</u>, **Bob Wise**, **president of the Alliance for Excellent Education and former governor of West Virginia**, said the program has "great potential" to reduce the high school dropout rate and revitalize students' interest in their education by pairing rigorous academic and career-focused curriculum with relevant work-based learning opportunities.

"Successfully stemming the tide of high school dropouts—who number more than 1 million each school year—and ensuring that they graduate prepared for college and a career represents a tremendous economic opportunity," said Wise, who pointed to <u>data from the Alliance</u> finding that increasing the national high school graduation rate to 90 percent for just one high school class would create as many as 65,700 new jobs and boost the national economy by as much as \$10.9 billion.

Wise added that successful education models, such as Linked Learning, already implement innovative partnerships between individual schools and businesses and institutions of higher education, making high school more engaging and preparing students for college and a career. "It is time to bring this effective practice to scale," Wise said.

More information on Youth CareerConnect is available at <u>http://www.whitehouse.gov/the-press-office/2013/11/19/fact-sheet-youth-careerconnect-grants</u>. Applications for funding are available at <u>http://www.doleta.gov/ycc/</u>.

# **CLIMATE CHANGE:** Rigorous, Engaging Course Work Linked to Positive School Climate, Narrowed Achievement Gap in New Alliance Report

A new report from the Alliance for Excellent Education examines how implementing rigorous and engaging curriculum aligned with college- and career-ready standards fosters positive school climates in which students are motivated to succeed, achievement gaps narrow, and learning and outcomes improve. The report, *Climate Change: Providing Equitable Access to a Rigorous and Engaging Curriculum*, includes federal, state, and local recommendations for increasing access to high-quality, high-standards curriculum for all students and is the third in the Alliance's series on school climate.

"One of a school's main goals should be to engage students—whether through work-based learning opportunities that apply classroom knowledge to real life or through high-level courses that give them the chance to earn college credits," said **Bob Wise, president of the Alliance for Excellent Education and former governor of West Virginia**. "Engaged students are motivated students, and motivated students succeed, every time." Citing several studies, including data analysis from the National Assessment of Educational Progress (NAEP), the report finds that access to rigorous and engaging curriculum that prepares students for college and a career is associated with higher academic achievement and provides students with opportunities to apply what they learn in the classroom to their lives in school and beyond. Students are also more invested in their own learning, show higher attendance, and have a more positive school experience.

Unfortunately, providing access to rigorous and engaging curriculum is a challenge that many schools face—particularly those with high percentages of students of color, students with disabilities, low-income students, and English language learners. Citing data from the U.S. Department of Education's Civil Rights Data Collection, the report notes that these traditionally underserved student groups are less likely to attend schools with the resources to provide high-quality, challenging course work and have fewer options for Advanced Placement (AP) courses than white and affluent students.

The report places some of the blame for the lack of access to a rigorous and engaging curriculum on the No Child Left Behind Act, which it says emphasized test-based accountability at the expense of student engagement and failed to provide students with different learning styles with increased and varied opportunities to demonstrate what they have learned.

The report includes recommendations at the federal, state, and local levels for increasing access to a rigorous and engaging curriculum. These include implementing deeper learning, which focuses on communication, collaboration, and critical thinking skills; linked learning, which incorporates industry-specific skills into a high school education; and dual enrollment, where students receive high school and college credits simultaneously. The report also recommends supporting, at the federal level, the development and implementation of technology that can offer specialized and advanced courses to all students; increasing funding for AP courses at the local level; and focusing on high-quality teacher preparation.

"Our nation needs students who can compete in a global, knowledge-based world. As educators, parents, and policymakers, we owe it to our students to challenge and engage them through highquality curriculum that is aligned with college- and career-ready standards in every school," said Wise.

The full report is available at http://all4ed.org/wp-content/uploads/2013/11/HSClimate3.pdf.

All of the reports in the Alliance's Climate Change series are available online at <u>http://all4ed.org/?s=&category=school-climate&show\_only=reports-factsheets</u>.

*Straight A's: Public Education Policy and Progress* is a free biweekly newsletter that focuses on education news and events 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. Contributors include Jason Amos, editor; Cyndi Waite; and Kate Bradley.

The Alliance for Excellent Education is a Washington, DC-based national policy and advocacy organization dedicated to ensuring that all students, particularly those traditionally underserved, graduate from high school ready for success in college, work, and citizenship. For more information, visit <u>www.all4ed.org</u>. Follow the Alliance on Twitter (<u>www.twitter.com/all4ed</u>), Facebook (<u>www.facebook.com/all4ed</u>), and the Alliance's "High School Soup" blog (<u>www.all4ed.org/blog</u>).