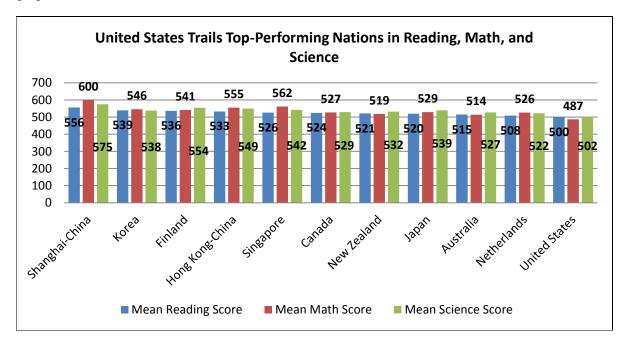




GETTING BACK TO AVERAGE: American Fifteen-Year-Olds Rank 14th in Reading, 17th in Science, and 25th in Mathematics, According to Latest PISA Results

Released December 7, the results of the 2009 Programme for International Student Assessment (PISA) show that American fifteen-year-olds ranked 14th in reading, 17th in science, and 25th in mathematics among the thirty-four countries of the Organisation for Economic Co-Operation and Development (OECD). These results, which are outlined in *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*, place the United States near the OECD average in reading and science but below the OECD average in mathematics.

Since the last PISA exam in 2006, the United States has seen significant performance gains in science, but its average scores in reading and mathematics have improved only slightly. Even with these gains, American fifteen-year-olds still finished far below their counterparts in topperforming countries such as Shanghai–China, Korea, Finland, and Canada, as shown in the graph below.



<sup>&</sup>lt;sup>1</sup> The thirty-four OECD members are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

Although the United States, unlike other federated nations, does not measure the performance of individual states on PISA, it is still possible to compare the performance of groups of states. For example, public schools in the Northeast scored 510 on average in reading, compared to 500 in the Midwest, and 483 in the South; the international average in reading is 493.

Since the 2006 PISA results, the United States has pursued significant educational reforms, including Race to the Top, which places a greater focus on teacher quality and data. Most notable is the state-led Common Core State Standards Initiative, which defines the knowledge and skills students need in English language arts and mathematics to be prepared for college and careers. The common core state standards build upon the strengths and lessons of current state standards and are informed by top-performing countries, solid evidence, and research. Currently, 43 states and the District of Columbia, representing 85 percent of the U.S. student population, have moved to adopt them.

However, the United States has much ground to make up among its international peers at all levels of student performance. For example, 10 percent of students in the United States reached the highest levels (Levels 5 and 6) in reading—higher than the international average of 8 percent), but lower than higher-performing nations such as Shanghai—China, New Zealand, Singapore, Finland, and Japan, where 19.5 to 13.4 percent of students are considered high-performers. In math, the United States, at 10 percent, has fewer students at Levels 5 or 6 than the OECD average of 13 percent and is significantly behind Shanghai—China where 50 percent of students reached Level 5, and Singapore and Hong Kong, where 30 percent of students reached this level. In science, 9 percent of U.S. students reached Levels 5 or 6, which corresponds to the OECD average, but still trails Shanghai—China (24.3 percent), Singapore (19.9 percent), Finland (18.7 percent), and several others, including Canada (12.1 percent).

At the other end of the spectrum, the 2009 results show that 18 percent of fifteen-year-olds in the United States did not reach Level 2, the PISA baseline of reading proficiency at which students begin to demonstrate the reading competencies that will enable them to participate effectively and productively in life. This percentage is close to the OECD average, but it is higher than those in high-performing nations such as Shanghai—China, Hong Kong—China, Canada, Finland, and Korea, where 10 percent or fewer of students failed to reach this level. The Level 2 threshold is significant because the OECD has determined that students scoring below Level 2 face a disproportionately higher risk of poor postsecondary participation or low labor market outcomes at ages nineteen and twenty-one.

In mathematics, 23.4 percent of U.S. students failed to reach Level 2, compared to the OECD average of 20.8. In science, 18.1 percent of American fifteen-year-olds scored below Level 2, which is close to the OECD average, and a significant improvement over the 24.4 percent who failed to reach Level 2 in 2006.

The report examines students at these lowest levels in more detail and finds that socioeconomic disadvantage has a "particularly strong" impact on student performance in the United States. In fact, 17 percent of the variation in student performance in the United States is explained by students' socioeconomic background, compared to only 9 percent in Canada or Japan. Put another way, "Socioeconomic disadvantage translates more directly into poor educational

performance in the United States than is the case in many other countries," the report reads. It also notes that some countries succeed, "even under difficult conditions," to moderate the impact of socioeconomic background on educational success."

At the same time, however, the relationship between socioeconomic background and learning outcomes in the United States is far from "deterministic," the report notes. For example, some of the most socioeconomically disadvantaged schools match the performance of schools in Finland. Additionally, one-quarter of American fifteen-year-olds enrolled in socioeconomically disadvantaged schools reached the average performance standards of Finland, one of the best-performing education systems.

"The fact that the lowest-income American students facing the longest learning odds are matching the average score of Finland, one of the world's top performers, shows the importance of pushing aggressive reform efforts everywhere," <u>said Bob Wise, president of the Alliance for Excellent Education and former governor of West Virginia</u>. "But only having some students competing at this high level isn't enough. For the United States to remain the world's strongest economy, it needs the brainpower of all students."

The report examines four aspects of socioeconomic background—community size, family composition, immigrant students, and concentration of socioeconomic disadvantaged students in schools—and their relationship to student performance. It finds that while students in large U.S. cities (over one million inhabitants) scored an average of 485 in reading, which is below the international average of 493, students in suburban schools performed, on average, just slightly higher than the OECD average. Consequently, the report notes that "performance challenges for the United States therefore do not just relate to poor students in poor neighborhoods, but to many students in many neighborhoods."

On the subject of immigrant students, the report notes that the United States, at 19.5 percent, has the sixth-largest proportion of students with an immigrant background. However, it also finds that the share of students with an immigrant background explains just 3 percent of the performance variation between countries. Additionally, it notes that the reading performance of students in the United States without an immigrant background—a score of 506—is only marginally higher than the performance of all students. Finally, among the countries that took part in the latest PISA assessment, Switzerland, Canada, and New Zealand have larger immigrant intakes than the United States, but scored significantly better.

"What PISA data also show is that students in the United States with an immigrant background tend to attend schools with a socioeconomically more disadvantaged background, that have a lower quality of educational resources, a more disadvantageous student/staff ratio, and greater teacher shortage as reported by school principals," the report notes. "Such challenges are, however, not uncommon across OECD countries."

The PISA report also examines how student performance is affected by teacher-student relationships, school governance, school choice, educational standards, assessment and accountability arrangements, and many other factors that are too numerous to cover here. To read the entire report, go to <a href="http://www.oecd.org/dataoecd/32/50/46623978.pdf">http://www.oecd.org/dataoecd/32/50/46623978.pdf</a>.

#### COMING DECEMBER 17: One-on-One Opportunity to Ask Questions of the OECD's Andreas Schleicher

On December 17, Andreas Schleicher will join Alliance President Bob Wise for a one-on-one Q&A on the PISA results and lessons learned from the world's highest performers. This special webinar will largely be driven by questions submitted by webinar participants. To register for the webinar or ask a question, go to <a href="http://www.newmediamill.com/webcasts/all4ed/registerdec172010/">http://www.newmediamill.com/webcasts/all4ed/registerdec172010/</a>.

### ALSO ON THE ALLIANCE WEBSITE: Series of Webinars Offer Additional Insight on PISA Results

On December 7, the Alliance for Excellent Education, Asia Society, Committee for Economic Development, Council of Chief State School Officers, and National Governors Association Center for Best Practices cohosted a live webcast featuring **Andreas Schleicher**, head of indicators and analysis division for OECD's Directorate of Education.

During the webcast, Mr. Schleicher provided an extensive analysis of the PISA 2009 results in reading, math, and science. Following Mr. Schleicher's presentation, a panel of business, state, and national education leaders examined the implications for state and federal education policy and what the United States can do to develop a world-class education system for all of its students. Watch video or download audio from the Dec 7 webcast.

On December 6, the Alliance held an informational webinar, "PISA: What It Measures, Why It Matters," to prepare educators and policymakers for the 2009 results. Watch video or download audio from the Dec 6 webinar.



#### A FIRST LOOK: New Report Finds Many Students Lack Skills Outlined in Common Core State Standards

Only about one-third of the nation's eleventh-grade students are performing at the academic levels described as college and career ready in the common core state standards, according to a new report by ACT. The report, *A First Look at the Common Core and College and Career Readiness*, finds that only 38 percent of eleventh graders it studied met the benchmark in reading and only 34 percent hit the mark in the foundations of mathematics. The percentages are much lower for students of color.

ACT acknowledges that its analysis is not meant to focus on student performance on current state standards but to provide data on current student achievement levels in relation to the common core state standards. The report's authors warn that these results should be taken with caution, writing, "Given that states were teaching to and assessing different sets of standards, it can be argued that students were not adequately prepared for an assessment of the Common Core State Standards."

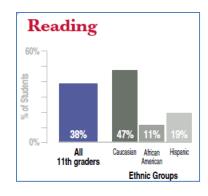
"If states are to be successful in raising the expectations for what students should know and be able to do by the end of high school, it is important for them to understand their students' level of college and career readiness today," said **Cynthia B. Schmeiser, president and chief operating officer, education division, ACT**. "This report is our first attempt to provide states with the best data and information available so that they can make informed education policy and practice decisions moving forward."

The report analyzes test results from more than 250,000 eleventh-grade students who were administered the ACT, a prominent college entrance exam, in the spring of 2010. The student

test data is measured against ACT's research-based College Readiness Benchmarks to estimate how many students are proficient in each common core state standards category in English language arts and literacy and mathematics.

The common core state standards were developed through a state-led effort and define the knowledge and skills that students should have within their K–12 education careers so that they will graduate from high school able to succeed in college and career. Currently, forty-three states and the District of Columbia have adopted the standards. (To learn whether your state has adopted the common core state standards, visit the Alliance's common standards portal.)

The report also finds large achievement gaps between white students and students of color. In reading, 47 percent of white students met the benchmark, compared to only 11 percent of black students and 19 percent of Hispanic students. In writing, 51 percent of all students and 60 percent of white students met the benchmark, compared to only 33 percent and 24 percent, respectively, of Hispanic and black students. The percentages were similar in language, with 53 percent of all students meeting the standard, but only 32 percent and 26 percent of Hispanic and black students, respectively, compared to 63



percent of white students. These numbers are in line with existing research on the achievement gap and, according to the report, strengthen the argument for raising college and career readiness rates of black, Hispanic, and other underserved populations.

In math, only 34 percent of students mastered the area of numbers and quantity, which is described as the foundation of math; 37 percent of students mastered statistics. The strongest math area was functions, which includes linear, quadratic, and exponential models. Across all areas of math, minority groups struggled with meeting the bar. For example, 42 percent of white students performed at the proficient level in the area of numbers and quantity compared to only 10 percent of black students and 16 percent of Hispanic students.

In a recent <u>Education Week</u> (subscription required) article, **David Coleman, founder of Student Achievement Partners and coleader of the writing of the English and language arts section of the common core state standards**, said the study confirms much of what the standards are meant to address: students' struggles with such college-necessary skills as handling complex texts and mastering reading material in subjects like social studies and science among other things.

To help more students meet the bar set by the Common Core State Standards Initiative, ACT recommends that state and district education leaders focus on creating a school culture of high expectations, using data to individualize student learning, and fostering an atmosphere of support and collaboration among teachers. The report also advises policymakers at the federal, state, and local levels to recognize that the adoption of "fewer, clearer, higher" standards is a significant shift in expectations and that the shift has very real implications for education monitoring and accountability systems. *A First Look* recommends aligning federal programs and resources around the goal of college and career readiness, helping the public to better understand the

importance of the common core state standards, and ensuring full and meaningful implementation of the common standards.

"The results of this study suggest that far too many of today's students will graduate from high school unprepared for college-level work or career training programs without some type of remediation in English language arts or mathematics," Schmeiser said. "The time is now for state, district, and school leaders to begin targeting those areas of the common core where performance is weakest so that all students are prepared for college and career opportunities."

To read the full report, visit: http://www.act.org/research/policymakers/pdf/FirstLook.pdf.

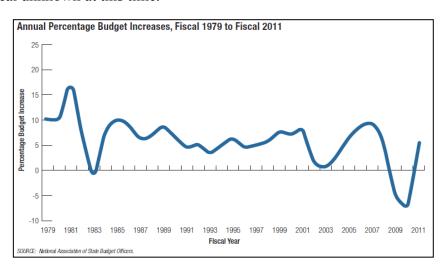


## THE FISCAL SURVEY OF STATES: Despite Small Increases in State Revenues, Most States Still Facing Significant Budget Gaps, Report Finds

After going through two of the most challenging years since the Great Depression, state budgets should see a slight improvement in Fiscal Year (FY) 2011 as revenues are expected to grow slightly, according to a new report from the National Governors Association (NGA) and National Association of State Budget Officers (NASBO). However, the report, *The Fiscal Survey of States*, warns that most states will still face significant budget gaps. Further complicating matters, the federal money provided to plug state budget gaps through the American Recovery and Reinvestment Act is unlikely to continue. According to the report, the wind down of these flexible funds in FY 2012 will result in a cliff of more than \$65 billion.

"Even with a slight improvement over FY 2010, FY 2011 is expected to be another very difficult fiscal year for states," said **NGA Executive Director Raymond C. Scheppach**. "Spending and revenue is unlikely to return to prerecession until 2013 or 2014. Since the recession began, states have had significant revenue declines and in order to balance their budgets, have made significant cuts and in some cases enacted tax and fee increases. The end of Recovery Act funding in 2012, along with the growing pension liability and the rise of Medicaid enrollment could further exacerbate the already tight fiscal conditions. Finally, the potential impact of healthcare reform in 2014 is a real unknown at this time."

According to the report, FY 2010 general fund expenditures were \$612.6 billion, a 7.3 percent decrease compared to FY 2009. FY 2011 state enacted budgets call for \$645.1 billion in general fund spending, a 5.3 percent increase, but still \$42.2 billion below the level enacted in FY 2008, as shown in the chart to the right.<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> The report notes that general funds do not represent the totality of state spending, but are used to finance most broad-based state services and are the most important elements in determining the fiscal health of the states.

The reduction in general fund spending compared to FY 2008 is the result of significant declines in sales, personal income, and corporate tax income collections, which make up approximately 89 percent of general fund revenue, the report finds. It notes that while revenues are projected to increase by 4.4 percent in FY 2011, they are still expected to be \$43.7 billion, or 6.5 percent below FY 2008.

Currently, eleven states are reporting nearly \$10 billion in budget gaps that must be closed by the end of FY 2011. Looking further into the future, the report finds that FY 2012 and FY 2013 will also represent significant challenges for states are revenues will continue to remain below their 2008 levels. In fact, twenty-three states are already reporting \$40.5 billion in budget gaps for FY 2012 and seventeen states are reporting \$40.9 billion in budget gaps for FY 2013, the report notes. Those numbers could grow even larger as not all states have completed budget forecasts.

To help close budget gaps, thirty-nine states made \$18.3 billion in mid-year budget cuts to their FY 2010 budgets while fourteen states made \$4 billion in cuts to their FY 2011 enacted budgets. Of the thirty-nine states that made midyear cuts in FY 2010, thirty-five reduced K–12 education and thirty-two cut higher education. For FY 2011, thirteen of fourteen states reduced K–12 education while ten states have cut higher education spending.

The report notes that the economic recession led to accelerations in Medicaid spending and enrollment growth. In fact, for FY 2010, Medicaid is estimated to account for 21.8 percent of total spending—the single largest portion of total state spending. Elementary and secondary education, at 20.8 percent, is second, followed by higher education (10.1 percent), transportation (8.1 percent), corrections (3.1 percent), public assistance (1.7 percent), and all other expenditures (34.4 percent).

The complete report is available at <a href="http://www.nga.org/Files/pdf/FSS1012.PDF">http://www.nga.org/Files/pdf/FSS1012.PDF</a>.



# Happy Holidays from the Alliance for Excellent Education!

The Alliance for Excellent Education wishes you and yours a happy holiday season and best wishes for the new year!

This is the last issue before the Alliance newsletter—although not the Alliance staff—settles in for a short winter's nap. The next issue of *Straight A's* will be dated January 10, 2011.

Straight A's: Public Education Policy and Progress is a 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. The Alliance for Excellent Education is a national policy and advocacy organization that works to improve national and federal policy so that all students can achieve at high academic levels and graduate from high school ready for success in college, work, and citizenship in the twenty-first century. For more information about the Alliance, visit <a href="http://www.all4ed.org">http://www.all4ed.org</a>.