

Education is Key to Economic Competitiveness

In today's high-tech global economy, our students will not just compete for jobs with students down the road from them—they will compete with students across the world from them. America is falling behind in this changing world, with dire economic consequences for all Americans. If elected officials truly want to boost America's economy, they must focus on strengthening K-12 education.

Americans are facing more competition for jobs than ever before.

- Geography matters less. Americans used to have an advantage—skilled jobs had to be done in the United States. However, with the massive investment in fiber-optic telecommunications cables across the globe, work can now easily be digitized (like music) and shipped anywhere in the world.¹
- “The world is flat.”² Now, the best opportunities go to the best educated, no matter where they live. According to the National Center on Education and the Economy, “American workers at every skill level are in direct competition with workers in every corner of the globe.”³
- America is losing ground. Other countries, such as India and China, are seizing this opportunity and improving their skills.⁴ As recently as 1998, the U.S. ranked first in percentage of 25-34 year olds with a bachelor's degree, but by 2004 it had dropped to 5th. Between 2000 and 2004, out of 24 countries, the U.S. was one of only two that showed *no increase* in bachelor's degree attainment.⁵ And while America once had the best high school graduation rate in the world, it has now slipped to 19th out of 26 countries.⁶

America is not preparing today's students to be skilled workers for tomorrow's economy.

- Our standards are too low. By the end of 8th grade, what passes for the U.S. math curriculum is two years behind the math being studied by 8th graders in other countries.⁷
- Our skills are too low. American 15-year-olds are significantly below average in math and science. Out of 30 countries participating in a 2006 assessment, America's 15-year-olds ranked 25th in math and 21st in science.⁸ Even America's *top* math students rank 25th out of 30 countries when compared with top students elsewhere in the world.⁹
- Our students are not prepared. Two-thirds of new jobs being created in today's economy require higher education or advanced training,¹⁰ but *only about half* of U.S. students who enroll in 4-year colleges after high school manage to earn a bachelor's degree within six years.¹¹

Improving our educational performance will pay huge economic dividends to Americans.

If America could raise the skills of its students to the middle of the pack of European nations over the next decade, our Gross Domestic Product (GDP) would grow by an additional five percent over 30 years. That would mean an extra \$1.5 trillion in 2037 alone—more than triple what we currently spend on K-12 public education. Over a 50-year period, this increase in skills would yield incomes that are an additional *64 percent higher*.¹²

Increasing our economic competitiveness requires strengthening K-12 schools.

- **Higher Standards:** In a recent report, the Organization for Economic Cooperation and Development (OECD) pegged America's low education standards as one of the biggest threats to the U.S. economy. "A country's ability to compete in an ever more integrated world economy depends on a highly educated workforce. However, with many countries making more progress in this respect, the United States has lost its leading position."¹³
- **Effective Teachers:** The British education expert Michael Barber recently told the *New York Times* that top-performing education systems around the world "all select their teachers from the top third of their college graduates, whereas the U.S. selects its teachers from the bottom third of graduates. This is one of the big challenges for the U.S. education system: What are you going to do over the next 15 to 20 years to recruit ever better people into teaching?"¹⁴ The likelihood that a highly talented female in the top ten percent of high school graduates will go into teaching declined by nearly half from 1964 to 2000.¹⁵
- **Time and Support for Learning:** According to the Center for American Progress, "Many of the countries that outperform the United States on international comparisons of student performance keep their students in school longer [...] There is little doubt that the extra time students in other countries devote to education contributes to the differences in academic achievement." On average, students in nations participating in the Trends in International Mathematics and Science Study (TIMSS) spent 193 days annually in school, compared with only 180 in the U.S. Over 12 years, this deficit translates into a gap of nearly one full school year.¹⁶

¹ Friedman, T. (2005, April 3). It's a Flat World, After All. *The New York Times*.

² Ibid.

³ National Center on Education and the Economy. (2007). *Tough Choices Tough Times: The Report of the New Commission on the Skills of the American Workforce*. San Francisco: Jossey-Bass. (p. XVII)

⁴ National Center on Education and the Economy. (2007). *Tough Choices Tough Times: The Report of the New Commission on the Skills of the American Workforce*. San Francisco: Jossey-Bass. Standard PowerPoint retrieved from http://www.skillscommission.org/pdf/TCTT_Standard_Powerpoint.pdf

⁵ Postsecondary Education Opportunity. (2007, April). *Bachelor's Degree Attainment of Young Adults in Industrial Democracies 1996 to 2004*. Oskaloosa, IA: Author.

⁶ Strong American Schools analysis of data from the Organization for Economic Cooperation and Development. (2006). *Education at a Glance: OECD Indicators 2006*. (ISBN 92-64-02531-6). Paris, France: OECD Publications.

⁷ Schmidt, W. (2003, February 4). "Presentation to Mathematics and Science Initiative." Retrieved from www.ed.gov/print/rschstat/research/progs/mathscience/schmidt.html

⁸ Organization for Economic Cooperation and Development. (2007). *PISA 2006: Science Competencies for Tomorrow's World, Executive Summary*. Table 2 and 5. Paris, France: OECD Publications. Retrieved from <http://www.oecd.org/dataoecd/15/13/39725224.pdf>

⁹ Strong American Schools analysis of data from the Organization for Economic Cooperation and Development. Based on data from Volume 2, table 6.2a (p. 227). Rank is based on students performing at Level 6 in each country on the 2006 PISA math assessment.

¹⁰ Remarks delivered by U.S. Secretary of Labor Elaine L. Chao at the Economic Club of America in Miami, Florida, Wednesday, May 31, 2006. Available at http://www.dol.gov/sec/media/speeches/20060531_miami.htm

¹¹ The NCHEMS Information Center. (2007). *Six Year College Graduation Rate of Bachelor's Students*. National Center for Higher Education Management Systems. Accessed at www.higheredinfo.org

¹² Hanushek, E. (2005, August). Alternative school policies and the benefits of general cognitive skills. *Economics of Education Review*, 25, 447-462.

¹³ Organization for Economic Cooperation and Development. (2007). *OECD Economic Surveys: United States*. (ISBN 978-92-64-03271-2). Paris, France: OECD Publications.

¹⁴ Dillon, S. (2007, August 15). Imported from Britain: Ideas to improve schools. *The New York Times*. Retrieved from <http://www.nytimes.com/2007/08/15/education/15face.html>

¹⁵ Hoxby, C., & Leigh, A. (2005). *Wage Distortion: Why America's Top Female Graduates Aren't Teaching*. The NCHEMS Information Center. (2007). *Six Year College Graduation Rate of Bachelor's Students*. National Center for Higher Education Management Systems. Accessed at www.higheredinfo.org

¹⁶ Brown, C., Rocha, E., & Sharkey, A. (2005, August 23). *Getting Smarter, Becoming Fairer: A Progressive Education Agenda for a Stronger Nation*. Washington, DC: Center for American Progress. (pp.16-17)