

Weak Education Leaves Americans Unprepared

More than ever, the prospects of a nation and its children depend on the strength of its schools. Unfortunately, America's schools are not keeping pace with the demands of today's world. Our schools are failing to prepare all students for college, for careers, and for life, and they are failing to prepare our nation to compete in today's high-tech global economy.

Too many students drop out.

- More than 1.2 million students drop out of school every year. That's more than 6,000 students every school day and one every 26 seconds.¹
- The national high school graduation rate is only 70%, with states ranging from a high of 84% in Utah to a low of 54% in South Carolina.²
- Graduation rates are much lower for minority students. Only about half of the nation's African American and Latino students graduate on time from high school.³
- Dropping out has dire consequences. Young people who leave school today face a lifetime of economic hardship.
 - The poverty rate for families headed by dropouts is more than twice that of families headed by high school graduates.⁴
 - Nearly 44% of dropouts under age 24 are jobless,⁵ and the unemployment rate of high school dropouts older than 25 is more than three times that of college graduates.⁶
 - Over a lifetime, dropouts earn \$260,000 less than high school graduates and contribute about \$60,000 less in federal and state income taxes. Each cohort of dropouts costs the U.S. \$192 billion in lost income and taxes.⁷

High schools are a problem, but failure starts early.

- Ninth grade English teachers say they spend one-third of their time trying to re-teach skills that students should already have learned in middle school.⁸
- About 70% of U.S. 8th graders are below the proficient level in reading, and most will never catch up.⁹

Too many graduates leave unprepared for college, careers, and life.

Students who drop out face ever-diminishing opportunities, but so do many high school graduates. In fact, a high school diploma is no longer a guarantee that young people have the

skills to succeed in college or work. Weak preparation has terrible social and economic consequences for all Americans.

Not ready for college.

- Even among students *who prepare for college* by taking four years of English and three each of math, science and social studies, only one out of four leaves high school fully prepared to handle college courses.¹⁰
- ***More than one in three*** college freshmen have to take remedial courses to catch up on skills they should have learned in high school.¹¹ Those classes cost families and taxpayers money but earn students no credit toward a degree.
- In the nation's community colleges, which now enroll nearly half of all undergraduates in America, the remediation rate climbs to 42%.¹²
- In some states the numbers are even worse:
 - More than half of the freshmen (56%) admitted to the California State University system in 2006 had to take remedial math or English courses. Most of them were among the top third of high school graduates in the state and had earned a B average or better in high school.¹³
 - "More than three-quarters of students entering Florida's community colleges need remedial courses in math, reading or writing before they even can begin classes that count toward a degree."¹⁴
- The amount of time that college students have to spend in remedial courses is rising. From 1995 to 2000, the percentage of colleges reporting that students had to spend at least a year in remedial courses increased from 28% to 35%.¹⁵
- Lack of preparation for college has dire consequences.
 - Poor preparation contributes to America's huge college completion gap.
 - ✓ Only 56% of freshmen entering four-year colleges manage to earn a bachelor's degree after six years—one of the lowest college completion rates in the world.¹⁶
 - ✓ College freshmen who take remedial classes are much less likely to earn a degree. Only 30% of students who take remedial reading in college ever earn a degree.¹⁷
 - ✓ The biggest predictors of college completion are taking rigorous high school classes and acquiring strong math skills.¹⁸
 - Poor preparation costs billions of dollars.
 - ✓ Just at the community college level, families spend \$283 million to pay for remedial courses every year, and taxpayers foot an additional \$978 million.¹⁹

- ✓ One group estimates that, counting lost productivity from students who take remedial courses, poor preparation for college costs the U.S. \$2.3 billion annually.²⁰

Not ready for careers.

- Four in five American manufacturing companies (84%) say schools are not doing a good job preparing students for jobs, and more than half cite specific deficits in math and science.²¹
- Nearly three in four human resource officials (72%) rate young hires as deficient in basic writing skills, with 81% citing difficulties writing memos, letters, and reports.²²
- Nearly half of recent high school graduates who entered the workforce (46%) say they are not prepared for the jobs they hope to get in the future. Employers agree, estimating that nearly half of high school graduates (45%) are not prepared with skills to advance beyond entry level jobs.²³
- Among recent graduates who do not go on to college, nearly three in four (72%) regret not taking tougher math, science, or English classes during high school.²⁴
- Jobs that pay enough to support a family but don't require a bachelor's degree now demand the same level of preparation as college. The testing company ACT looked at the math and reading skills required by electricians, construction workers, upholsterers, and plumbers and concluded they match what's necessary to do well in college courses.²⁵
- Local trade union apprenticeship programs are struggling to find qualified applicants.
 - Jonathan Mitchell, training director at the International Brotherhood of Electrical Workers Local 490 in Concord, New Hampshire, says that last year about half of applicants failed a required entry test in math and reading.²⁶
 - Jane Templin, outreach coordinator at the Electrical Training Institute in Los Angeles, says that fewer students are passing the test required to become an apprentice electrician. Out of about 150 who take the test each month, only about a third pass—down from 40-45% ten years ago.²⁷
 - The National Joint Apprenticeship and Training Committee of Southern Nevada says that, of the 60 or so applicants who take an apprenticeship entry test each week, only about half pass.²⁸
 - Rosane Mesmer at the Ohio Plumbers and Pipe-fitters Local 425 says that most applicants earn only five or six points out of ten on a test of very basic math—addition, subtraction, and finding length, width, and area.²⁹

Not even ready for life itself.

We like to think we are giving our young people practical thinking skills that will allow them to make good decisions in their daily lives. But recent evidence says we are failing to do even that.

- American students have a harder time solving real-life problems than students in other countries.³⁰
 - A 2003 test called *Problem-Solving for Tomorrow's World* gave 15-year-olds real-life problems that called for decision-making and troubleshooting. Problems included:
 - ✓ Reading movie show times and coordinating schedules with two friends for a visit to the cinema;
 - ✓ Using a map to plan a trip that includes overnight stays;
 - ✓ Using a subway map and information about fares and schedules to figure out the best way to get from one part of a city to another;
 - ✓ Designing a bunking arrangement at a children's summer camp; and
 - ✓ Creating a plan to complete a set of technical training courses over a three-year period.
 - Out of 29 industrialized countries participating in the assessment, America ranked 24th in problem-solving.
 - The average American student could only solve very simple problems.
 - One in four American students (24%) couldn't even solve simple problems. Among 29 developed countries, the U.S. had the fourth-highest percentage of very weak problem-solvers and the sixth-lowest percentage of strong problem-solvers.
 - Latvia, Hungary, and the Slovak Republic are producing better problem-solvers than the United States.

America is falling behind the rest of the world—with dire consequences for all Americans.

- According to the Organization for Economic Cooperation and Development, education is one of the biggest challenges facing 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.”³¹
- America once had the best high school graduation rate in the world, but has now slipped to 20th out of 26 countries.³²
- Although the U.S. still ranks 8th in percentage of 25-34 year-olds with an associates degree or higher among 30 developed nations, it is one of only two countries where the older generation has more education than the younger generation.³³
- America is rapidly falling behind other nations in producing young adults with a college education.³⁴

- As recently as 1998, the U.S. still ranked first in percentage of 25-34 year olds with at least a bachelor's degree, but by 2005 it had dropped to 7th.
 - If this trend continues, the United States will rank 18th by 2010, 21st by 2015, and 22nd by 2019. Within a decade, most of the world's industrialized democracies will have surpassed the United States in postsecondary degree attainment.
 - Out of 23 countries, the U.S. was the only country that showed no increase in its postsecondary graduation rate between 2000 and 2005.
- American 15-year-olds are significantly below average in math and science. Out of 30 countries participating in a 2006 assessment, America ranked
 - 25th in math; and
 - 21st in science.³⁵
 - The performance gap is huge. American students lag about a full year behind their peers in the best-performing countries.³⁶
 - As computers take over routine work tasks that do not require a lot of thinking, more jobs are demanding that workers have strong communication and problem-solving skills.³⁷ But American students are not being prepared for the new job market. Fewer than half of our 15-year-olds are analytical problem-solvers who can communicate well about solutions.³⁸
 - We like to think America's best students can compete with any in the world, but that's no longer true either.
 - According to the Organization for Economic Cooperation and Development, "the United States does not just have more students performing badly—it also has many fewer students performing well."³⁹
 - America's **top** math students rank 25th out of 30 countries when compared with top students elsewhere in the world.⁴⁰
 - We like to say that America's weak performance is due to social ills or under funding. But that's not true either.
 - According to the Organization for Economic Cooperation and Development:

"The United States should be among the world leaders. On average, and relative to other [industrialized] countries, U.S. students come from well-educated, wealthy families and they go to schools that are unusually well-financed. Given any of these factors, U.S. students might be expected to be among the world leaders. But no."⁴¹
 - America's affluent 15-year-olds rank 23rd out of 29 when compared with affluent students in other industrialized democracies.⁴²
 - We have low expectations for American students.
 - By the end of 8th grade, what passes for the U.S. math curriculum is two years behind the math being studied by peers in other countries.⁴³

- In 2003, although they ranked 24th in actual math performance, U.S. 15-year-olds ranked 1st in the percentage of students saying “I get good grades in mathematics.”⁴⁴
- If America could raise the skills of our students to just the middle of the pack of European nations over the next decade, our Gross Domestic Product would grow by two percent extra over 20 years and five percent extra 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.⁴⁵

¹ Education Week. (2007, June 12). *Diplomas Count 2007: Ready for What? Preparing Students for College, Careers, and Life after High School*. Bethesda, MD: Editorial Projects in Education Research Center. Per day figure derived by dividing 1.23 million by 180 school days per year. Per second figure derived by dividing 1.23 million by 31,536,000 seconds in a full calendar year.

² Ibid.

³ Ibid.

⁴ Baum, Sandy and Payea, Kathleen (2004). *Education Pays 2004: The Benefits of Higher Education for Individuals and Society*. Trends in Higher Education Series. New York City: The College Board. Accessed at http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf

⁵ NCES. (2006). Digest of Education Statistics 2005. Table 368. DC: U.S. Department of Education. (http://nces.ed.gov/programs/digest/d05/tables/dt05_368.asp)

⁶ NCES (2006). Digest 2005. Table 370. Accessed at http://nces.ed.gov/programs/digest/d05/tables/dt05_370.asp

⁷ Rouse, C. (2005, September). The Labor Market Consequences of an Inadequate Education. Princeton University and NBER. Prepared for the Equity Symposium on “The Social Costs of Inadequate Education” at Teachers’ College, Columbia University.

⁸ ACT. (2007). Rigor at Risk: Reaffirming Quality in the High School Core Curriculum. Iowa City, Iowa: Author.

⁹ U.S. Department of Education, the National Assessment of Educational Progress, 2005. Accessed at <http://nces.ed.gov/nationsreportcard/>

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¹¹ Strong American Schools analysis of the National Postsecondary Student Aid Study (2003-2004) and the Beginning Postsecondary Students Survey (2003-2004).

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¹³ The California State University. (2007, March 13). *English, Math Proficiency of CSU Freshmen Remains Steady*. Retrieved from <http://www.calstate.edu/PA/news/2007/results.shtml>

¹⁴ Downs, M. (2007, June 17). *More community college students need prep class*. Retrieved from <http://www.floridatoday.com/apps/pbcs.dll/article?AID=/20070617/NEWS01/706170335/-1/archives>

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¹⁶ Postsecondary Education Opportunity. (2007, April). *Bachelor’s Degree Attainment of Young Adults in Industrial Democracies 1996 to 2004*. Oskaloosa, IA: Author.

¹⁷ Writ, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., and Tobin, R. (2004). *The Condition of Education 2004, Indicator 18* (NCES 2004-0777). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

¹⁸ Adelman, C. (2006). *The tool box revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education.

¹⁹ Alliance for Excellent Education. (2006). *Paying Double: Inadequate High Schools and Community College Remediation*. Washington, DC: Author.

²⁰ Ibid.

²¹ National Association of Manufacturers. (2005). *2005 Skills Gap Report – A Survey of the American Manufacturing Workforce*. Deloitte Development LLC.

²² Casner-Lotto, J., & Barrington, L. (2006). *Are They Really Ready to Work? Employers’ Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce*. (ISBN 0-8237-0888-8). The Conference Board, Inc., the Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management. USA: The Conference Board.

²³ Achieve, Inc. (2005). *Rising to the Challenge: Are High School Graduates Prepared for College and Work?* Conducted by Peter D. Hart Research Associates/Public Opinion Strategies. Washington, DC: Author.

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- ²⁵ ACT, Inc. (2006). *Ready for College or Ready for Work: Same or Different?* Iowa City, IA: Author.
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- ³⁰ Organization for Economic Cooperation and Development, Programme for International Student Assessment. (2004). *Problem Solving for Tomorrow's World: First Measures of Cross-Curricular Competencies from PISA 2003*. (ISBN 92-64-00642-7). Paris, France: OECD Publications.
- ³¹ Organization for Economic Cooperation and Development. (2007). *OECD Economic Surveys: United States*. (ISBN 978-92-64-03271-2). Paris, France: OECD Publications.
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- ³⁹ Organization for Economic Cooperation and Development. (2007). *OECD Economic Surveys: United States*. (ISBN 978-92-64-03271-2). Paris, France: OECD Publications.
- ⁴⁰ 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.
- ⁴¹ Organization for Economic Cooperation and Development. (2007). *OECD Economic Surveys: United States*. (ISBN 978-92-64-03271-2). Paris, France: OECD Publications.
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