
ELEMENTARY & SECONDARY EDUCATION

- **44 percent** of 2013 U.S. high school graduates are ready for college-level math.¹
- **36 percent** of 2013 U.S. high school students are ready for college-level science.²
- **26 percent** of 2009 U.S. students took Algebra I before high school. (Up from **20 percent** in 2005.)³
- Only **12 percent** of black students and **17 percent** of Hispanic students took Algebra I before high school in 2009. But, **48 percent** of Asian students took Algebra I before high school in 2009. ⁴
- In 2013, **42 percent** of American fourth grade students and **35 percent** of eighth grade students, performed at or above the proficient level in mathematics.⁵
- In 2011, **32 percent** of eighth grade students performed at or above the proficient level in science.⁶
- In 2009, **34 percent** of American fourth grade students and **21 percent** of twelfth grade students performed at or above the proficient level in science.⁷
- **9 percent** of Hispanic and **10 percent** of black U.S. students took advanced Algebra or calculus in 2008, compared to **22 percent** of white students and **43 percent** of Asian students.⁸
- **19.5 percent** of AP test takers in the class of 2012 earned a qualifying score on an AP exam.⁹
- **27 percent** of 2011 test takers took an AP science exam and **26 percent** took an AP math exam.¹⁰

HIGHER EDUCATION

- Students who progress through at least Algebra II in high school are **twice as likely** as those who do not to complete a four-year degree.¹¹
- **38 percent** of students who start with a STEM major do not graduate with one.¹²
- In 2009, men age 25 and older held **87 percent** of bachelor's degrees in engineering fields.¹³
- In 2009, of the 56 million people age 25 and over with a bachelor's degree, nearly **20 million** of them held a degree in a science and engineering field.¹⁴

TEACHERS

- In 2007, **about a third** of public middle school science teachers either did not major in the subject in college and/or are not certified to teach it.¹⁵
- **36 percent** of public middle school math teachers in 2007 either did not major in the

subject in college and/or are not certified to teach it.¹⁶

- Teacher turnover is costing America \$7.3 billion annually.¹⁷
- In 2007, the average cost of teacher turnover was over \$17,000.¹⁸
- Replacing a poor teacher with an average one would raise a single classroom's lifetime earnings by about \$266,000.¹⁹

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INTERNATIONAL COMPARISONS

- **29 nations:** The number of industrialized nations whose high school students performed better than U.S. students in math in 2012.²⁰
- **22 nations:** The number of industrialized nations whose high school students performed better than U.S. students in science in 2012.²¹
- In 2008, **4 percent** of U.S. bachelor's degrees were awarded in engineering. Compared to **31 percent** in China.²²
- In 2008, **31 percent** of U.S. bachelor's degrees were awarded in science and engineering fields. Compared to **61 percent** in Japan and **51 percent** in China.²³

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WORKFORCE

- As of February 2012, **more than half** of the 30 fastest growing occupations require some level of postsecondary education.^{24 25}
- The number of science and engineering (S&E) bachelor's degree completions has grown by 19% from 2009 to 2013, compared to 9% growth for non-S&E disciplines.²⁶
- Of the 15 Major categories, Engineering has the highest median earnings, yet less than 20% of students choose a STEM path.²⁷
- **"All of the increase in employment** over the past two decades has been among workers who have taken at least some college classes or who have associate or bachelor's degrees – and mostly among workers with bachelor's degrees."²⁸
- In 2008, **59 percent** of all jobs in the U.S. economy required postsecondary education. (Up from **28 percent** in 1973.)²⁹
- By 2018, it is projected that 63 percent of all jobs in the U.S. economy will require postsecondary education.³⁰
- By 2018, **92 percent** of traditional STEM jobs will be for those with at least some postsecondary education and training.³¹
- Women received **29.6 percent** of computer science B.A.'s in 1991, compared to **18.2 percent** in 2010.³²
- **23 percent** of STEM workers are women, however women make up **48 percent** of workers in all occupations.³³
- In 2009, **12 percent** of STEM workers were non-Hispanic black and Hispanic. But, non-Hispanic black and Hispanic individuals accounted for **25 percent** of overall employment.³⁴

References

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