



# The Importance of STEM Education

*Science, Technology, Engineering, Mathematics will Drive this Country Forward*

- **Many high-paying STEM jobs go unfilled as candidates lack necessary technical skills, training or post-secondary degrees. With millions unemployed, this skills gap is alarming.**
- **Illustrating the skills gap in America:**
  - Growing Demand:
    - STEM jobs are projected to grow by 17 percent and to produce 2.8 million new job openings. In contrast, job growth in other professions is projected to be less than 10 percent.
    - According to McKinsey, 64 percent of companies have vacancies for STEM positions due to a lack of qualified applicants.
    - By 2020, the U.S. will demand 123 million highly-skilled workers, but there will only be 50 million qualified people to fill these roles.<sup>1</sup>
  - Inadequate Supply:
    - Over one fifth of all students fail to graduate with their class.<sup>2</sup>
    - The U.S. ranked 47<sup>th</sup> out of 144 countries in the quality of our math and science education.<sup>3</sup>
    - Only 8 percent of American college students major in engineering, and only 5 percent major in computer science and math.<sup>4</sup>
- **STEM workers typically earn 26 percent more than those in non-STEM positions.**
- **STEM is a prominent focus and education policy priority of the public and private sector.**
  - The “Educate to Innovate” campaign focuses on improving the participation and performance of America’s students in STEM with the hope of increasing American workers’ competitiveness in the next decade. The campaign brings together leading companies, foundations, non-profits, and science and engineering societies, including AT&T, to promote initiatives such as Change the Equation, National Lab Day, and the White House Science Fair.
- **STEM is a focus of AT&T Aspire, a \$350 million investment in education to help more students graduate from high school ready for careers and college.**

For more information on AT&T Aspire, visit [www.att.com/education-news](http://www.att.com/education-news)

<sup>1</sup> Gordon, E. (2009). The Global Talent Crisis. *The Futurist*, 43(4) Sept/Oct: 34-39

<sup>2</sup> Alliance for Excellent Education, America’s Promise Alliance, Civic Enterprises, and the Everyone Graduates Center at Johns Hopkins University. *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic*, Annual Update February 2013.

<sup>3</sup> World Economic Forum (2012). The Global Competitiveness Report 2012-2013. Retrieved from <http://reports.weforum.org/global-competitiveness-report-2012-2013/>

<sup>4</sup> Anthony Carnevale, Jeff Strohl, and Michelle Melton. Selected Findings from What’s It Worth: The Economic Value of College Majors. Georgetown University: Center on Education and the Workforce.