

STEM News



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Our Concern

Will Investment in Science Education be Sustained?

William Bonvillian, the director of the Washington office of the Massachusetts Institute of Technology, said in October 2011: "Congress is looking at major cuts in discretionary spending — it cut \$900 billion over 10 years in the August budget bill and is looking now at another \$1.2 trillion. These cuts will lock in 2013 and ensure stagnation for the following decade.

Our grad students are supported through federally funded research; they are the future of our innovation system, and we're about to send them a message that their research may well not be funded. In a way, we're in the process of telling our future innovation team to get off the playing field. Since U.S. economic growth is predominately based on our ability to innovate, we may be undermining our own future."

Support to keep and increase funding at the federal level also comes from the **American Association for the Advancement of Science** as in their [letter opposing a House proposal for a 50-percent cut](#) in the budget of the Office of Science and Technology Policy.

"US must win global competition in education": President Obama

Asserting that the US needs the best trained and skilled workforce in the world to win global competition for new jobs and industries, President Barack Obama seeks greater emphasis on education of kids, especially in mathematics and science. Obama rued that the US today has fallen behind in

math, science and graduation rates. As a result, companies like Intel struggle to hire American workers with the skills that fit their needs. "If we want to win the global competition for new jobs and industries, we've got to win the global competition to educate our people. We've got to have the best trained, best skilled work-

force in the world. That's how we'll ensure that the next Intel, the next Google, or the next Microsoft is created in America and hires American workers," Obama said. "We are poised to lead in this new century — and not just because of the good work that large companies like Intel are doing.





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About DEBLAR & Associates, Inc.

Our principals have a combined record of 58 years of comprehensive growth oriented achievement in primary, secondary, and post-secondary academic program design, administration, and evaluation. Our field of specialization is to develop strategies to increase the number of underrepresented students majoring in science and engineering programs. The signposts of our record in education include:

- Development and operation of secondary & college level engineering and science programs for underrepresented ethnic groups.
- Evaluation of statewide, regional, and national mathematics, engineering and science education programs for National Science Foundation, US Department of Energy, NASA and numerous universities and school systems.
- Facilitation of local industry/school system collaborations designed to provide teacher training, expanded corporate support, diversity, and academic achievement.
- Directed Massachusetts Math/science initiative for secondary schools

Industry Must Do its Part to Educate the Workforce of the Future

Jobs are also an issue for U.S. employers that have a need for talented employees but find an insufficient supply of candidates with the requisite skills in science, technology, engineering, and mathematics (STEM) to help them compete in the digital world. Though it is a global economy, one requiring a globally talented workforce, America plays a critical role as a primary innovator and engine of growth in the 21st Century, and STEM education is at the core of what it will take to fuel America's innovation engine.

Recognizing this situation, government, private enterprises and leading civic organizations and foundations are calling for graduating more engineers from American colleges and universities, and with good reason: STEM competency is critical to improving American employment and income.

The U.S. Bureau of Labor Statistics reports unemployment in the technology sector at only 3.8 percent, with 7 percent to 13 percent job growth for engineers. Additionally, the U.S. Department of Commerce's Economics and Statistics Administration reports that STEM jobs increased at a pace three times faster than other jobs over the last three years. In an August 31 interview with New America Media, Dr. Alicia Abella, executive director of the Innovative Services Research Department at AT&T Labs summed up the issue stating, "The highest growing number of jobs is in the technology field, and there is more demand for those jobs than there is supply. We're going to need 800,000 more [U.S.] jobs by 2018 in computer technology alone. In the last three years we've only graduated 24,000 in those sectors and that's not nearly enough."