

Preparing Massachusetts students for careers in science, technology, engineering and mathematics

SETDA STEM Report

With the following observations, the State Educational Technology Directors' Association makes the recommendation below.

• Workforce projections for 2014 by the U.S. Department of Labor show that 15 of the 20 fastest growing occupations require significant science or mathematics training to successfully compete for a job.

• According to the U.S. Bureau of Labor Statistics, professional information technology (IT) jobs will increase 24% between 2006 and 2016.

• Enrollment in undergraduate degree programs in computer sciences is more than 50 percent lower than it was five years ago.

• In 2001, only 8% of all degrees awarded in the U.S. were in engineering, mathematics or the physical sciences.

• The U.S. ranks 20th internationally based on our share of graduate degrees awarded in engineering, computer science, and mathematics.

• By 2010, if current trends continue, more than 90 percent of all scientists and engineers will be living in Asia.

• And current Societal and cultural beliefs that mathematics, science, engineering, and technology are not for everyone.

Key Recommendations

- 1. Obtain Societal Support for STEM Education
- 2. Expose Students to STEM Careers
- 3. Provide On-Going and Sustainable STEM Professional Development
- 4. Encourage STEM Pre-Service Teacher Training
- 5. Recruit and Retain STEM Teachers

For the full report go to http://www.setda.org/ and News and Announcements