

STEM and National Security

Investing in high-quality STEM programs that incorporate deeper learning practices support career success, national security, and job creation in California.

The Challenge

More than 70 percent of today's young adults ages 17 to 24 cannot qualify for military service because they are not academically prepared, are too overweight, or have a record of crime or drug abuse.¹

In California, a third of jobs require at least a BA and another third require some type of postsecondary training.²

STEM in the Military

To maintain a competitive advantage over adversaries, the United States Armed Forces requires a STEM-skilled uniformed military and civilian workforce capable of developing leading-edge technologies such as long-range strike capabilities, hypersonics, and artificial intelligence.

Economic Factor

Meeting the demands for a STEM workforce is critical for preserving our national security, especially considering America's largest employer is the U.S. Government.

National Security spending in California equates to \$156.3 billion in economic output and 767,000 jobs created.³

How to Meet the Challenge

Ensure adequate resources for our students in the classroom such as updated textbooks, computers and Internet access.

Provide students access to STEM courses that are aligned with the state's new Computer Science standards.

Support teacher preparation through professional development, classroom support and adequate salaries.

¹ 2013 Qualified Military Available (QMA), acquired through personal communication between Mission: Readiness and the Accession Policy and Joint Advertising, Market Research and Studies teams at the Department of Defense in July 2014.

² Public Policy Institute of California (PPIC). (2017). Addressing California's Skills Gap. PPIC Higher Education Center. http://www.ppic.org/wp-content/uploads/r_0917hj2r.pdf

³ Lavell, Devin. The Economic Impacts of National Security Spending in California. California Research Bureau. California State Library. August 2018. Note: Includes full-and part-time federal employees as well as the full-time equivalent (FTE) employment of federal contractors and vendors generated by direct government spending.