



Virginia Advanced Study

A National Math and Science Initiative of Virginia

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SUMMARY OF THE "AMERICA COMPETES ACT"

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The "America COMPETES Act" is a bipartisan legislative response to recommendations contained in the National Academies' "Rising Above the Gathering Storm" report and the Council on Competitiveness' "Innovate America" report. The bill is similar to the "National Competitiveness Investment Act" that Senators Frist, Reid, Stevens, Inouye, Domenici, Bingaman, Enzi, Kennedy, Ensign, Lieberman, Alexander, Mikulski, Hutchison, and others introduced in September 2006. Several sections of the bill are derived from proposals contained in the "American Innovation and Competitiveness Act of 2006" (S.2802), approved without opposition by the Senate Commerce Committee, and the "Protecting America's Competitive Edge Through Energy Act of 2006" (S.2197) approved without opposition by the Senate Energy Committee last year. Accordingly, the America COMPETES Act focuses on three primary areas of importance to maintaining and improving United States' innovation in the 21st Century: (1) increasing research investment, (2) strengthening educational opportunities in science, technology, engineering, and mathematics from elementary through graduate school, and (3) developing an innovation infrastructure. More specifically, the America COMPETES Act would:

Increase Research Investment by:

- Doubling funding for the National Science Foundation (NSF) from approximately \$5.6 billion in Fiscal Year 2006 to \$11.2 billion in Fiscal Year 2011.
- Setting the Department of Energy's Office of Science on track to double in funding over ten years, increasing from \$3.6 billion in Fiscal Year 2006 to over \$5.2 billion in Fiscal Year 2011.
- Establishing the Innovation Acceleration Research Program to direct federal agencies funding research in science and technology to set as a goal dedicating approximately 8% of their Research and Development (R&D) budgets toward high-risk frontier research.
- Authorizing the National Institute of Standards and Technology (NIST) from approximately \$703 million in Fiscal Year 2008 to approximately \$937 million in Fiscal Year 2011 and requiring NIST to set aside no less than 8 percent of its annual funding for high-risk, high-reward innovation acceleration research.
- Directing NASA to increase funding for basic research and fully participate in interagency activities to foster competitiveness and innovation, using the full extent of existing budget authority.
- Coordinating ocean and atmospheric research and education at the National Oceanic and Atmospheric Administration and other agencies to promote U.S. leadership in these important fields.

Strengthen Educational Opportunities in Science, Technology, Engineering, Mathematics, and Critical Foreign Languages by:

- Authorizing competitive grants to States to promote better alignment of elementary and secondary education with the knowledge and skills needed for success in postsecondary education, the 21st century workforce, and the Armed Forces, and grants to support the establishment or improvement of statewide P-16 education longitudinal data systems.
- Strengthening the skills of thousands of math and science teachers by establishing training and education programs at summer institutes hosted at the National Laboratories and by increasing support for the Teacher Institutes for the 21st Century program at NSF.
- Expanding the Robert Noyce Teacher Scholarship Program at NSF to recruit and train individuals to become math and science teachers in high- need local educational agencies.
- Assisting States in establishing or expanding statewide specialty schools in math and science that students from across the state would be eligible to attend and providing expert assistance in teaching from National Laboratories' staff at those schools.
- Facilitating the expansion of Advanced Placement (AP) and International Baccalaureate (IB) programs by increasing the number of teachers prepared to teach AP/IB and pre-AP/IB math, science, and foreign language courses in high need schools, thereby increasing the number of courses available and students who take and pass AP and IB exams.
- Developing and implementing programs for bachelor's degrees in math, science, engineering, and critical foreign languages with concurrent teaching credentials and part-time master's in education programs for math, science, and critical foreign language teachers to enhance both content knowledge and teaching skills.
- Creating partnerships between National Laboratories and local high-need high schools to establish centers of excellence in math and science education.
- Expanding existing NSF graduate research fellowship and traineeship programs, requiring NSF to work with institutions of higher education to facilitate the development of professional science master's degree programs, and expanding NSF's science, mathematics, engineering and technology talent program.
- Providing Math Now grants to improve math instruction in the elementary and middle grades and provide targeted help to struggling students so that all students can master grade-level mathematics standards.
- Expanding programs to increase the number of students from elementary school through postsecondary education who study critical foreign languages and become proficient.

Develop an Innovation Infrastructure by:

- Establishing a President's Council on Innovation and Competitiveness to develop a comprehensive agenda to promote innovation and competitiveness in the public and private sectors.
- Requiring the National Academy of Sciences to conduct a study to identify forms of risk that create barriers to innovation. ¹

¹ EdNews: <http://www.ednews.org/articles/10558/1/SUMMARY-OF-THE-AMERICA-COMPETES-ACT/Page1.html>