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## MATH AND SCIENCE EDUCATION

### *American Competitiveness Initiative Education Funding in the President's 2007 Budget*

Improving K-12 education remains one of the President's highest priorities. The Nation is beginning to see positive results as schools uphold the requirements of and utilize the opportunities provided by the No Child Left Behind (NCLB) Act. Moving forward, successful programs that provide teachers with research-based solutions for improving student proficiency in reading will serve as a model for new programs focused on improving math and science education. In his 2007 Budget, President Bush introduced the American Competitiveness Initiative (ACI), which includes a number of new initiatives aimed at improving math and science education across the country.

#### **Advanced Placement (AP)/International Baccalaureate (IB) Program**

The 2007 budget requests \$122 million, an addition of \$90 million over the 2006 enacted level, to expand the AP/IB program such that low-income students will have greater access to rigorous math and science coursework. The Administration calls on States and the private sector to match, dollar-for-dollar, the Federal Government's investment in this program to meet the five-year goal of training 70,000 new teachers and increasing the number of students with passing AP/IB scores to 700,000.

#### **Adjunct Teacher Corps**

The 2007 Budget provides \$25 million to establish the Adjunct Teacher Corps. This Department of Education initiative will support partnerships between school districts and public or private organizations that encourage and prepare science, mathematics, and engineering professionals to teach specific high school math, science and technology courses as adjunct teachers. It will tap the skills of well-qualified individuals who reside outside of the public education system to meet specialized needs in secondary schools. This investment, matched by States and the private sector, is the first step towards building a 30,000 member Adjunct Teacher Corps by 2015.

#### **National Math Panel**

A pillar of NCLB is its requirement that schools utilize research-based curricula and proven methods to raise student performance. The National Reading Panel, established by Congress in 1997, made great strides in understanding how children learn to read, and as a result, identified best practices, teaching materials, and diagnostic tools that have led to improvements in student reading scores. Through the ACI, the 2007 Budget provides \$10 million to establish a National Math Panel, based on the model of the successful National Reading Panel, to identify effective teaching methods and instructional materials that best facilitate student learning in mathematics.

#### **Math Now Programs**

Armed with empirical information, proven materials and effective methods identified by the National Math Panel, the ACI establishes two new mathematics programs based on the successful Reading First model. The 2007 Budget requests \$125 million each to establish two Math Now programs. The dual programs will provide resources, models, diagnostic tools, and proven remediation strategies for use with elementary and middle school students, respectively. These initiatives are designed to help students develop a strong foundation in mathematics so that they can successfully complete more rigorous coursework in middle school and high school.

#### **Evaluating the Impact of Government-Wide Investments in Math and Science**

There are over 200 federally-funded programs which aim to improve math and science instruction, teacher preparation, teacher professional development, and student learning. However, only a small number of those programs have been evaluated to determine their effectiveness in meeting their stated goals or in improving student outcomes. The 2007 Budget includes \$5 million to establish a comprehensive program that will review federally-funded education programs to determine what works in preparing teachers and educating students in math and science.

#### **Math and Science Partnerships**

The 2007 Budget requests sustained funding of \$182 million for Math and Science Partnerships (MSP) at the Department of Education. This program is intended to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers. Partnerships between high-need school districts and the science, technology, engineering, and mathematics (STEM) faculty in institutions of higher education are at the core of these improvement efforts. The 2007 Budget also provides \$46 million to the National Science Foundation to fund its ongoing MSP projects.