



MATH AND SCIENCE EDUCATION

Building on Results: ACI in the No Child Left Behind Act

The No Child Left Behind Act (NCLB) is challenging students to succeed and schools to improve, yet more work remains to be done. In the 2008 Budget, President Bush has introduced his plan for reauthorization, *Building on Results: A Blueprint for Strengthening the No Child Left Behind Act*. This *Blueprint* aims to focus attention on turning around struggling schools and improving the academic performance of older students through the use of evidence-based teaching practices and materials. The *Blueprint* incorporates the education components of the American Competitiveness Initiative (ACI), introduced last year, which aim to improve math and science achievement among all students.

National Math Panel – On April 16, 2006, President Bush signed Executive Order 13398 creating the National Mathematics Advisory Panel (NMP) to review existing scientific research and make recommendations regarding proven practices for increasing student readiness for, and achievement in, algebra and higher level mathematics courses. The Panel has met five times and has prepared an interim report outlining the process it will use to identify, select and evaluate high quality research papers. The Panel will make its recommendations through a final report, due on February 28, 2008.

Academic Competitiveness Council – Authorized in the Deficit Reduction Act of 2005, signed into law by President Bush on February 8, 2006, the Secretary of Education created the Academic Competitiveness Council (ACC), which includes as members officials of all Federal agencies with responsibility for managing Federal mathematics and science education programs. The ACC was charged with identifying all Federal programs with a mathematics or science education focus, determining their effectiveness, and then recommending ways to efficiently integrate, coordinate, and avoid unnecessarily duplication among those programs. The ACC identified over 100 STEM (science, technology, engineering and math) education programs funded in FY 2006 at a total of over \$3.1 billion. Of that total, approximately 77 percent was spent on postsecondary education, 19 percent on elementary and secondary education, and 4 percent on informal education and outreach. A full report of the ACC's findings and recommendations will be submitted to Congress in March, 2007.

Advanced Placement (AP)/International Baccalaureate (IB) Program – Advanced Placement and International Baccalaureate courses provide rigorous instruction to high school students as well as a national assessment of student performance through standardized assessment exams. In order to ensure that students in all schools have access to these courses, the 2008 Budget requests a \$90 million increase (\$122 million total) for the AP/IB program. This ACI Education funding, matched by contributions at the local level, will train 70,000 additional teachers over the next five years to lead these rigorous courses, and increase the number of students achieving passing AP/IB scores from 230,000 to 700,000 per year.

Adjunct Teacher Corps – The 2008 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 share their expertise in middle and high school classrooms. 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 ACI Education investment, matched by States and the private sector, is the first step towards building a 30,000 member Adjunct Teacher Corps by 2015.

Math Now Programs – Armed with empirical information, proven materials and effective methods identified by the National Math Panel, the Department of Education will establish two Math Now programs to improve instruction in mathematics for students in elementary and middle school. The FY 2008 Budget includes \$250 million to launch the ACI Math Now programs.

Math and Science Partnerships – The FY 2008 Budget provides sustained funding for the Math and Science Partnerships (MSP) programs at both the Department of Education (\$182 million) and the National Science Foundation (\$46 million). Although both MSP programs facilitate partnerships between local school districts and institutions of higher education aimed at improving math and science education, the Education Department component is a formula program that provides money to states (who in turn sponsor funding competitions), whereas the NSF component is a nationally competitive program. Although the two programs share the same name and similar goals, there is an appropriate role for each agency in developing, assessing and disseminating effective instructional materials and methods to students across the country. The Administration will ensure that evaluation principles developed by the ACC are reflected in both programs and that these complementary programs coordinate their activities, as appropriate, to meet their shared goals.