



Math and Science Education

ACI in NCLB: The 2007 Nation's Report Card shows that the No Child Left Behind Act (NCLB) is helping raise achievement for all kinds of children, in all kinds of schools, in every part of the country. For example, last year, fourth and eighth graders achieved the highest math scores on record. President Bush believes we must build on this progress by reauthorizing and strengthening this law. As part of the President's NCLB reauthorization proposal, the President's 2009 Budget asks Congress to provide \$175 million in funding for the American Competitiveness Initiative (ACI) programs within the Department of Education (ED). Although two of these programs, Math Now and Advanced Placement (AP), were recently authorized under the America COMPETES Act, the Administration continues to seek program improvements through authorization language as part of NCLB reauthorization. The President's FY 2009 request includes:

- \$95 million for the Math Now program to implement research based practices in math instruction for students in kindergarten through 9th grade.
- \$70 million for the Advanced Placement program to target Federal support specifically to prepare more teachers to teach AP courses and to encourage more students from high-need schools to take and pass AP courses and tests. As authorized, the program can support awards to teachers who become qualified to teach AP courses or whose students pass the AP and IB tests.
- \$10 million for an Adjunct Teacher Corps initiative to create opportunities for qualified professionals from outside the K-12 educational system to teach secondary-school courses in the core academic subjects, with an emphasis on mathematics and the sciences.

Other elements of the ACI: The ACI is a multi-agency collaboration, first included in the 2007 Budget, aimed at ensuring America's competitive edge through targeted investments in scientific research and math and science education. Other education-related elements of the ACI include:

- The National Mathematics Advisory Panel (NMP) - Established by President Bush under Executive Order on April 16, 2006, the NMP was created to advise the President and the Department of Education on the conduct, evaluation, and effective use of the results of high quality research pertaining to the effective teaching and learning of mathematics. The NMP has met eleven times, reviewed over 16,000 studies and other scientific documents, and received public comment and testimony from over 60 individuals and organizations. Its recommendations will be issued in a final report on February 28, 2008. Findings will inform numerous educational efforts including the development of the Math Now program. The NMP is coordinated through the Department of Education; comprised of multidisciplinary experts; and includes ex-officio membership from the National Institutes of Health, the National Science Foundation, and the White House Office of Science and Technology Policy.
- Interagency coordination - The Academic Competitiveness Council (ACC), created by the Deficit Reduction Act of 2005 and chaired by the Secretary of Education, identified over 100 programs in 12 Federal agencies which received over \$3.1 billion in total 2006 funding. Through collaborative interagency efforts undertaken by the ACC and the President's National Science and Technology Council, the Administration is working to improve the effectiveness of existing investments to ensure that they produce measurable results in math and science education.

Math and Science Partnerships: The FY 2009 Budget provides sustained funding for the Math and Science Partnerships (MSP) programs at both the Department of Education (\$179 million) and the National Science Foundation (\$51 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.

R&D in ED: Research, Development, and Dissemination at the Department of Education, part of the Federal Science and Technology Budget, is increased four percent to \$167 million in FY 2009.