



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

April 23, 2007  
(Senate)

**STATEMENT OF ADMINISTRATION POLICY**  
**S. 761 – America Creating Opportunities to Meaningfully Promote Excellence in**  
**Technology, Education, and Science Act**  
(Sen. Reid (D) Nevada and 55 cosponsors)

One of the more important domestic priorities of the Administration over the last two years has been the American Competitiveness Initiative (ACI), a comprehensive strategy to keep our Nation the most innovative in the world by increasing investments in research and development (R&D), strengthening education, and encouraging entrepreneurship. Thus, the Administration shares the goals of S. 761 to ensure the continued economic competitiveness of the United States through research and education and has been encouraged by the bipartisan support for addressing this vital topic. However, the Administration has serious concerns with S. 761 in its current form. The Administration believes that the bill does not prioritize basic research, authorizes excessive and inappropriate spending, and creates unnecessary bureaucracy and education programs. The Administration looks forward to working with Congress to address these various policy concerns as the legislative process moves forward.

The research component of the ACI is a targeted effort to focus increased funding on enhancing physical sciences and engineering research at the three highest-leverage agencies – the National Science Foundation (NSF), the Department of Energy’s (DOE) Office of Science, and the Department of Commerce’s National Institute of Standards and Technology (NIST). Unfortunately, the Senate bill creates at least 20 new programs across many agencies that, if enacted, would divert resources from and undermine and delay the priority basic research. The Senate bill would cost over \$61 billion over the next four years – about \$9 billion more than the President’s ACI proposals. The bill conflicts with the Administration’s well regarded Research and Development Investment Criteria by diverting funds from critical basic research to commercially-oriented research and other efforts that are less deserving of Federal support.

The education components of the ACI are targeted toward filling clear and specific gaps in the Federal funding portfolio with programs that will improve the quality of math and science education in the Nation’s K-12 schools. The Administration appreciates that the bill authorizes most of the Department of Education programs the President called for in the ACI. These include authorizations for: (1) the Advanced Placement Program to increase the number of teachers instructing and students enrolled in advanced placement or international baccalaureate courses in mathematics, science, or critical foreign languages; (2) the Math Now programs to improve instruction in mathematics; and (3) part of the President’s National Security Language Initiative proposal to strengthen the teaching and study of critical foreign languages. However, the Administration is disappointed that the bill does not authorize the President’s Adjunct Teacher Corps, to encourage math, science, and other professionals to teach in our neediest middle and high schools.

Also, the Administration is concerned that the bill expands many existing science, technology, engineering, and mathematics (STEM) education programs that have not been proven effective and creates new STEM education programs that overlap with existing Federal programs. In its soon-to-be-released report, the Academic Competitiveness Council has identified 105 existing STEM education programs spending over \$3 billion annually, including 45 programs that support training of STEM teachers, and found that very few of these programs demonstrated evidence-based effectiveness. Given this, the Administration believes it is premature to expand or begin new STEM education programs that do not have a plan in place for rigorous, independent evaluation or are duplicative of existing Federal programs.

In addition to the excessive authorization levels, lack of focus on basic research, and unnecessary new bureaucracy, created by S. 761, the specific provisions of serious concern include the following:

Advanced Research Projects Agency–Energy (ARPA-E). The Administration supports the conceptual goal of ARPA-E “to overcome the long-term and high-risk technological barriers in the development of energy technologies.” However, the Administration continues to strongly object to this provision due to serious doubts about the applicability of the national defense model to the energy sector and because a new bureaucracy at the DOE would drain resources from priority basic research efforts. The Administration believes that the goal of developing novel advanced energy technologies should be addressed by giving the Secretary of Energy the flexibility to empower and reward programs within existing DOE offices to fund unique, cross-cutting, and high-risk research.

Innovation Acceleration Research. The Administration strongly objects to requiring each Federal science agency to set aside 8 percent of its research and development budget – a new program of over \$10 billion of the Federal R&D budget at dozens of agencies – for projects that are “too novel or span too diverse a range of disciplines to fare well in the traditional peer review process.” Such a large earmark of the agencies’ ongoing research efforts would certainly have negative, unintended consequences and could well impede the ability of these agencies to carry out their missions.

Equitable Distribution of New Funds. The Administration strongly objects to a requirement specifying particular funding increases for Education and Human Resources (EHR) activities at NSF. This is especially inappropriate while the Administration is responding to the findings and recommendations of the Academic Competitiveness Council to ensure that funding is targeted toward programs with plans to demonstrate effectiveness.

Experimental Program to Stimulate Competitive Technology. The Administration believes that additional resources provided to NIST should focus on existing internal innovation-enabling research activities and strongly objects to creating new programs that would drain resources from such activities.

Specialty Schools for Mathematics and Science. The Administration strongly objects to creating a responsibility for DOE to establish or expand K-12 schools.

Discovery Science and Engineering Innovation Institutes. The Administration strongly objects to using DOE funds to support State and local economic development activities. In addition to diverting funds from priority research areas, such a focus on commercialization is not a priority of the Federal government and could result in putting the government in the position of competing with private investment and influencing market decisions in potentially inefficient and ineffective ways.

Experiential-Based Learning Opportunities. The Administration objects to creating new K-12 education programs unless the need is clear and compelling, which is not the case for this program. As illustrated by the Academic Competitiveness Council's findings, the solution to improving the Federal government's impact on STEM education must come from identifying what works and improving the effectiveness of existing efforts before starting new programs.

Federal Information and Communications Technology Research. The Administration objects to the creation of a new program specifically aimed at "enhancing or facilitating the availability and affordability of advanced communications services." Such an industry- and sector-directed program is well beyond NSF's traditional role of advancing the frontiers of knowledge in the academic disciplines.

National Laboratories Centers of Excellence. The Administration objects to the use of DOE funds to establish Centers of Excellence at K-12 schools. The establishment of school-based centers is not a proper role for DOE and would divert national laboratory resources that currently benefit their surrounding communities. The Administration believes that the President's Adjunct Teacher Corps proposal is a more promising approach to bringing subject experts into our neediest schools.

Experimental Program to Stimulate Competitive Research (EPSCoR). The purpose of the EPSCoR program is to build research capacity; it is not an education program. If EPSCoR funds are diverted for the purpose of hiring faculty or providing supplemental K-12 courses to pre-college students, there will be less money available for increasing the research capacity in EPSCoR States.

Robert Noyce Teacher Scholarship Program. NSF's Robert Noyce scholarship program is too new to have been evaluated for its impact on improving the efficacy or retention of teachers who are program graduates. Therefore, it is unreasonable to increase the authorizations of appropriations at the pace and magnitude called for in this provision.

NASA Funding for Basic Science and Research and Aeronautics Research Institute. The Administration objects to the redirection of unobligated balances from existing NASA programs, because it would disrupt funding for ongoing activities. The establishment of an Aeronautics Institute for Research within NASA is objectionable because it would be duplicative of the agency's existing Aeronautics Research Mission Directorate.

Constitutional Concerns. Several provisions of the bill incorporate classifications and preferences based on race, national origin, or gender that are subject to the rigorous standards applicable to such provisions under the equal protection component of the Due Process Clause of the Fifth Amendment. (See sections 1405(d), 2003(a) and (d), 4005(b), and 4009.) Unless the

legislative record adequately demonstrates that those standards are satisfied, those provisions are objectionable on constitutional grounds.

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