STEM Education Coalition



Science, Technology, Engineering and Mathematics

July 1, 2009

The Honorable Tom Harkin Chairman The Honorable Thad Cochran Ranking Member Labor, Health and Human Services and Education Appropriations Subcommittee US Senate Washington, DC 20510 The Honorable David Obey Chairman The Honorable Todd Tiahrt Ranking Member Labor, Health and Human Services and Education Appropriations Subcommittee US House of Representatives Washington, DC 20515

Dear Chairmen Harkin and Obey and Ranking Members Cochran and Tiahrt:

On behalf of the Science, Technology, Engineering, and Mathematics (STEM) Education Coalition, we are writing to convey our views on federal investments in fiscal year 2010 that you and your colleagues on the Labor, Health and Humans Services and Education Appropriations Subcommittees will consider shortly.

Over the past several years, Congress has repeatedly demonstrated strong bipartisan support for increased investment to strengthen the U.S. STEM education pipeline. This year, President Obama added his voice to that support during his remarks at the April 2009 meeting of the National Academies. Citing investments in math and science education and basic research that buoyed the country's success and innovation in the 20th Century, he signaled a renewed commitment, through which, "American students will move from the middle to the top of the pack in science and math over the next decade. For we know that the nation that out-educates us today will out-compete us tomorrow."

To this end, we urge you to adequately fund a number of programs in the FY 2010 Labor, Health and Human Services and Education appropriations bill.

Math and Science Partnerships at the Department of Education

The STEM Education Coalition has long supported the Math and Science Partnership (MSP) program at the Department of Education, authorized via Title II, Part B of the No Child Left Behind Act, and we strong urge you to provide \$450 million in funding for this program in FY 2010.

This program has yielded strong results. It is integral to federal efforts to strengthen STEM education, and funding the MSP program at the fully authorized level of \$450 million will allow states to provide more research-based reform initiatives to enhance teacher content knowledge and increase student achievement in these areas. This program fosters innovative curriculum development and collaboration among math and science teachers, and, as you now, it is imperative to give schools and teachers the tools and knowledge they need to effectively teach math and science.

Math Now

Congress overwhelmingly approved the authorization of Math Now when it passed the America COMPETES Act in 2007. This new mathematics education initiative awards competitive grants to improve instruction in mathematics for student in kindergarten through ninth grade. Grantees would implement research-based mathematics program to enable all student to reach or excel grade-level achievement standards and prepare them to enroll in and pass algebra courses—an achievement that a number of studies, including the report of the National Mathematics Advisory Panel, point to as a harbinger of success in postsecondary study and beyond. The program and its goals warrant an investment of \$95 million in the program.

Investments in Teachers

The value of a qualified math, science, technology, engineering, chemistry, computer science, physics, or biology—to name a few—teacher in the development of a would-be scientist, mathematician or engineer is invaluable, and there are a number of other federal programs that aim to produce highly qualified teachers for every classroom, in every subject. The Transition to Teaching program, the Teacher Incentive Fund, Teacher Quality Partnerships, Educational Technology State Grant program, and School Improvement Grant program, among others, aim to produce high quality, well-supported teachers that are able to thrive in the workplace and effectively teach all students. Strong academic preparation is crucial to success in the STEM fields after high school or in pursuing STEM disciplines in postsecondary institutions, and we support federal investments in efforts provide it to the country's young people.

The STEM Education Coalition is composed of a diverse range of organizations representing all sectors of the technological workforce—from knowledge workers, to educators and education researchers, to scientists, engineers and technicians. Our Coalition works to raise awareness in Congress and throughout the Executive Branch about the critical role that STEM education—both form and informal—plays in enabling the United States to remain the economic and technology leader of the global marketplace of the 21st century.

If we can provide you any additional information on STEM education, please do not hesitate to contact James Brown at 202-872-6229 or Jodi Peterson at 703-312-9214.

Sincerely,

Allegheny-Singer Research Institute Altshuller Institute for TRIZ Studies American Association of Colleges of Teacher Education American Association of Physicists in Medicine American Association of University Women (AAUW) American Chemical Society American Society for Engineering Education American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. American Statistical Association ASME Center for Public Awareness Association for Computing Machinery Association for Women in Science Association of Science-Technology Centers ASTRA, The Alliance for Science & Technology Research in America Biological Sciences Curriculum Study (BSCS) Biotechnology Institute Buhach Colony Engineering Academy California Healthcare Institute (CHI) Campaign for Environmental Literacy Chicago Educational Publishing Company, LLC Council on Undergraduate Research EAST Initiative Education Development Center, Inc. Engineers Without Borders-USA ETA/Cuisenaire *Exploratorium* IEEE-USA Illinois Mathematics and Science Academy In Reach, Inc. Information in Place, Inc. INSPIRE, Institute for P-12 Engineering Research and Learning, Purdue University Institute of Food Technologists (IFT) International Technology Education Association Kitchen Culture Education Technologies Inc. Kitchen Culture Kits Inc. Laurel School District. Delaware LEARN Coalition LEED - Linking Education and Economic Development Maritime Academy Charter High School Maryland Science Center Math for America Museum of Science, Boston Museum of Science and Industry National Action Council for Minorities in Engineering, Inc., National Alliance for Partnerships in Equity National Center for Technological Literacy National Council for Advanced Manufacturing National Girls Collaborative Project National Science Education Leadership Association National Science Teachers Association National Society of Professional Engineers New York Hall of Science New York State Technology Education Association Ohio Mathematics and Science Coalition Ohio Technology Education Advisory Council

Ohio Technology Education Association Pathways into Science PBS Play Well TEKnologies Project Exploration SACNAS Science Teachers Association of New York State Self Sufficient Investors Society for Research in Child Development Society of Women Engineers South Carolina's Coalition for Mathematics & Science SPIE – The International Society for Optics and Photonics STEM School Administrators Association Technology Education Association of Massachusetts Tennessee Science Teachers Association Thunderbird Early College Charter School, Inc. Triangle Coalition University of Pittsburgh at Johnstown Urban STEM Strategy Group