



June 20th, 2011

The Honorable Tom Harkin  
Chair  
Committee on Health, Education, Labor, and  
Pensions  
United States Senate  
731 Hart Senate Office Building  
Washington, DC 20510-1502

The Honorable Michael B. Enzi  
Ranking Member  
Committee on Health, Education, Labor, and  
Pensions  
United States Senate  
379A Russell Senate Office Building  
Washington, DC 20510-5004

Dear Chairman Harkin and Ranking Member Enzi:

As members of the Science, Technology, Engineering, and Mathematics (STEM) Education Coalition, we are writing you with our recommendations for the reauthorization of the Elementary and Secondary Education Act (ESEA), otherwise known as the No Child Left Behind Act. We look forward to working closely with you and the members of the Committee on Health, Education, Labor and Pensions (HELP) as you reauthorize this critical law.

Our Coalition is a broad alliance of education, business, professional, and science and technology organizations working aggressively to raise awareness in Congress, the Administration, and other organizations about the critical role that STEM education plays in enabling the U.S. to remain the economic and technological leader of the global marketplace of the 21st century.

According to the U.S. Department of Labor, 15 of the 20 fastest growing occupations projected for 2014 require preparation in STEM subjects. If our nation is to keep up with our international peers, we absolutely must step up our efforts to improve STEM education.

Our Coalition includes a wide range of stakeholders who are deeply committed to ensuring that STEM education is a top priority in the revised ESEA. We urge you and your colleagues to strongly consider the following recommendations to improve the Elementary and Secondary Education Act. We support:

- The inclusion of student performance in science alongside math and reading as a core element of the accountability system;
- Robust and dedicated programs to provide effective STEM-related professional development and preparation for educators and other educational innovation activities under Title II.B;
- Strengthening STEM-focused formula-funded programs that provide resources to each state for high-need students and areas, complemented with competitive grant programs in STEM education to promote ambitious reform efforts;

- Federal efforts to empower each state to develop its own comprehensive STEM education action plan – including its own definition of STEM needs – that will include input from a wide range of business, professional, and education stakeholders;
- The integration of STEM-focused curricula, projects, and programs as high-priority allowable uses of funds under other ESEA programs that support classroom and field teaching and learning as well as out of school experiences such as afterschool and summer programs;
- A strong emphasis in K-12 learning environments on hands-on, experiential, inquiry-based and learner-centered student experiences and activities, including engineering design processes and digital access for STEM students and educators to help foster 21<sup>st</sup> Century skills;
- Federal efforts to encourage and foster ongoing collaborative state efforts to adopt “common core” or other high-quality standards in math and science;
- Targeted efforts to promote STEM subject master teachers and teacher specialists; and
- Federal efforts to expand the diversity of the STEM pipeline and workforce, including targeted initiatives to promote the inclusion of underrepresented minorities and women in STEM fields.

Our Coalition values our relationship with you and your HELP Committee colleagues. Please let us know if we can be of further assistance as you advance the reauthorization of the Elementary and Secondary Education Act. Please contact James Brown, Executive Director of the Coalition at (202) 223-1887 or [jfbrown@stemedcoalition.org](mailto:jfbrown@stemedcoalition.org) with questions, comments, or for further information.

Respectfully,

*National Science Teachers Association  
 American Chemical Society  
 ASME  
 Education Development Center, Inc.  
 Hands on Science Partnership  
 Microsoft Corporation  
 National Council of Teachers of Mathematics  
 Alliance for Science and Technology  
 Research in America (ASTRA)  
 American Society for Engineering Education*

*American Society of Civil Engineers  
 Battelle  
 Business-Higher Education Forum  
 Campaign for Environment Literacy  
 Committee for the Advancement of STEM  
 Specialty Schools  
 IEEE-USA  
 Afterschool Alliance  
 American Association of Colleges for  
 Teacher Education (AACTE)*

3-D Community Services and Housing  
 ACHIEVE3000  
 American Association of Physics Teachers  
 American Geophysical Union  
 American Institute of Biological Sciences  
 American Institute of Mining, Metallurgical, and  
 Petroleum Engineers, Inc  
 American Institute of Physics  
 American Mathematical Association of Two-Year  
 Colleges  
 American Museum of Natural History  
 American Nuclear Society  
 American Society for Microbiology  
 American Statistical Association  
 Arkansas STEM Coalition  
 Association of Science Materials Centers  
 Association of Science-Technology Centers  
 Automation Federation  
 Baltimore Washington Corridor Chamber  
 Beaver County STEM Education Advocacy Coalition  
 Biomedical Engineering Society (BMES)  
 C-54 Productions, LLC  
 California Healthcare Institute  
 Center for Excellence in Education (CEE)  
 Center for STEM Education at the University of North  
 Carolina  
 Center for Teaching and Learning  
 Council of State Science Supervisors  
 Delaware Foundation for Science and Mathematics  
 Education  
 EAST Initiative  
 Engineers Without Borders – USA  
 Entertainment Industries Council, Inc.  
 ETA/Cuisenaire  
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 Girls Inc.  
 In Reach, Inc.  
 Institute of Industrial Engineers  
 International Technology and Engineering Educators  
 Association (ITEEA)  
 International Technology and Engineering Educators  
 Association Council for Supervision and Leadership  
 (ITEEA-CSL)  
 Iowa Mathematics & Science Education Partnership  
 KDSL-Know Do Serve Learn  
 Knowledge Alliance  
 Maryland Academy of Sciences at The Maryland  
 Science Center  
 McGraw-Hill Education  
 Michigan Mathematics and Science Center Network  
 Minnesota High Tech Association  
 MITS, Inc  
 Muses3, LLC  
 National Association for Gifted Children  
 National Center for Science Education  
 National Commission on Teaching and America's  
 Future

National Council for Advanced Manufacturing  
 National Council of Structural Engineers Associations  
 National Council of Supervisors of Mathematics  
 National Defense Industrial Association  
 National Institute of Building Sciences  
 National Science Education Leadership Association  
 National Wildlife Federation  
 New York Hall of Science  
 Northrop Grumman Corporation  
 NV STEM Education Coalition  
 Pathways into Science  
 Payson Unified School District #10  
 Project Exploration  
 SACNAS  
 School Management and Revitalize Training Group  
 School Science and Mathematics Association (SSMA)  
 Scientifically Connected Communities (SC2) at New  
 Mexico State University  
 SkillsNET Corporation  
 South Carolina's Coalition for Mathematics & Science  
 SparkFun Electronics  
 SPIE, the International Society for Optics and  
 Photonics  
 STEM Education Center, University of Minnesota  
 Students 2 Science, Inc.  
 Technology Student Association  
 The 21st Century Partnership for STEM Education  
 The American Institute of Aeronautics and  
 Astronautics (AIAA)  
 The AWE Project (Assessing Women and Men in  
 Engineering)  
 The Council of Presidential Awardees in Mathematics  
 The Laboratory School for Science and Technology  
 The National Society of Professional Engineers  
 The Ohio Academy of Science  
 The Optical Society  
 Triangle Coalition  
 Urban STEM Strategy Group  
 Vernier Software & Technology  
 Wings of Eagles Discover Center

STEM Education Coalition

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[www.stemedcoalition.org](http://www.stemedcoalition.org)