

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 21st 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 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

Funutation Tekademy LLC

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

SAČNAS

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