



February 10, 2012

The Honorable John Kline
Chairman, Committee on Education and the Workforce
U.S. House of Representatives
2181 Rayburn House Office Building
Washington DC 20515-6100

Dear Chairman Kline:

As members of the Science, Technology, Engineering, and Mathematics (STEM) Education Coalition, we are writing in response to the two bills you recently introduced that would reauthorize major portions of the Elementary and Secondary Education Act (ESEA), otherwise known as the No Child Left Behind Act. We appreciate this opportunity to offer our feedback in response to the *Student Success Act* and the *Encouraging Innovation and Effective Teachers Act*.

An extensive array of economic data has continued to point to the close connections between a strong STEM education and a student's future success in competing for the best jobs of today and the future. The Georgetown University's Center on Education and the Workforce recently concluded that:

The STEM workforce will remain central to our economic vitality well into the future, contributing to innovation, technological growth, and economic development. Capable STEM students, from K-12 all the way through the postgraduate level, will be needed in the pipeline for careers that utilize STEM competencies and increase our innovative capacities. We cannot win the future without recognizing the growing need for STEM competencies across the economy.

In short, **education reforms that are strongly focused on the STEM subjects are reforms that are strongly focused on jobs and economic recovery.** Our specific recommendations:

Retain Science Testing, Alongside Math and Reading

We respectfully disagree with the *Student Success Act's* removal of the requirement for states to test students in science. **Removing the existing requirement for testing in science while maintaining testing in math and reading sends a powerful, negative, and unambiguous signal to U.S. schools and the public that science – along with all of its related subdisciplines - is no longer a national priority.** If the requirement for science testing is eliminated, schools will shift their limited resources away from science classes, less time will be devoted to science, and professional development for science educators will suffer.

While we appreciate your interest in providing more flexibility to states, if a future version of the ESEA will continue to establish national priorities – as the *Student Success Act* clearly does for reading and math – it is critical that science testing be retained.

A Strong Federal Focus on STEM Education is Essential to a Strong U.S. Workforce, Economy

The *Encouraging Innovation and Effective Teachers Act* would eliminate the U.S. Department of Education’s only existing dedicated STEM education-focused program – the Math and Science Partnerships program (Title II, Part B). While we recognize the bill’s goal of streamlining a myriad of education programs, **we disagree with the absence of any strong STEM education focus for Title II grants or any significant linkage between Title II activities and workforce needs.**

We support a provision in the bipartisan Harkin-Enzi Senate ESEA draft bill that addresses STEM-specific education needs through a single competitive grant program (Sec. 4103) that would require state applicants to demonstrate that their proposals had robust input from the business community and other workforce stakeholders. Our Coalition also strongly supports the underlying stand-alone bill (S. 1675) introduced by Sen. Merkley upon which Sec. 4013 is based as a balanced approach of competitive and formula-based funding dedicated to meet the STEM-specific needs of U.S. schools.

The STEM Education Coalition also aggressively supports comprehensive efforts to coordinate, evaluate, and review all federal STEM programs on a regular basis to ensure that effective programs are scaled up and that underperforming programs are improved or eliminated.

STEM and the Definition of Core Academic Subjects

While we appreciate that math and science are included in the *Student Success Act*’s definition of “core academic subjects,” we feel that this definition is overly narrow and static, excluding many areas of study that are **essential** to the needs of the economy and workforce. Instead, the broader “STEM subjects” should be listed as a core subject area, with a provision for defining STEM education in a broad and inclusive manner that embraces each STEM discipline and its unique needs.

Given the strong connections between STEM skills and the job success of American workers, a strong focus on the STEM-specific needs of students, schools, and educators is essential to the practical success of education reforms.

In conclusion, while we agree with you that “we can’t wait” for education reform, we also cannot “win the future” without maintaining STEM education as a national priority. We look forward to working closely with you and your colleagues in both parties on the Committee as you reauthorize this critical law. If we may offer any additional assistance, please contact us through James Brown, our Coalition’s Executive Director at jfbrown@stemedcoalition.org or (202) 223-1187. Thank you.

Sincerely,

*American Chemical Society
American Society for Biochemistry and
Molecular Biology
American Society of Agronomy
American Society of Civil Engineers
American Society for Engineering Education
ASME
Association for Computing Machinery
ASTRA, Alliance for Science and
Technology Research in America*

*Campaign for Environmental Literacy
Crop Science Society of America
Education Development Center, Inc.
Hands on Science Partnership
IEEE-USA
National Council of Teachers of
Mathematics
National Science Teachers Association
Soil Science Society of America*

*American Geophysical Union
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American Physical Society
American Statistical Association
Arc Capital Development, LLC
Association of Science Materials Centers
BSCS
California STEM Learning Network
Chicago Educational Publishing Company, LLC
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EAST Initiative
Ecocad Design Group, LLP
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Funutation Tekademy LLC
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Society of Women Engineers
South Carolina's Coalition for Mathematics & Science
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