



NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS

July 25, 2014

The Honorable Jay Rockefeller
Committee on Commerce, Science, & Transportation
United States Senate
Washington, DC 20515
Transmitted via email to Ann_Zulkosky@commerce.senate.gov

Dear Chairman Rockefeller:

Thank you for your continued commitment to strong federal investments in research, discovery, and STEM Education. As you and your colleagues gather comments on the discussion draft of legislation to reauthorize the America COMPETES Act dated July 18, 2014, the National Council of Teachers of Mathematics thanks you for your leadership and looks forward to working with you and your staff as the legislative process proceeds.

NCTM and its nearly 80,000 individual members are most strongly invested in the “M” in STEM. A strong pre-K-12 mathematics education for all students is increasingly important to our nation’s economic stability, future national security, and workforce productivity. An economically competitive society recognizes the importance of mathematics learning and depends on citizens who are mathematically literate. NCTM believes that teachers and what they do in the classroom are at the heart of making this vision a reality. NCTM supports investing in teachers at every stage of their development, and further believes that research performed at the National Science Foundation (NSF) is crucial to fostering interest in teaching mathematics, improving teacher preparation and professional development and growing the knowledge of effective pedagogy and teaching strategies. We are pleased that your draft recognizes the important role NSF plays in improving the teaching and learning of mathematics and the need for sustained increases in support for the Foundation.

Broadly, NCTM supports efforts to encourage the federal government to better coordinate and assess its \$3 billion investment in programs that support STEM education. We are pleased that your discussion draft addresses this issue, but also values having mission agencies continue to support training and public outreach activities.



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

The provisions of the bill that most directly affect mathematics educators are those at the NSF. In Sec. 506 of the draft—STEM teacher training, the draft states that NSF should maintain robust investments in STEM education, including in teacher education at the K-12 and undergraduate levels, and in identifying and adapting promising STEM learning projects for broader use; it further states that the Director shall support activities to disseminate and catalyze the adoption of empirically-validated best practices in STEM education content and pedagogy. In conducting these activities, the Director shall, at a minimum,—

- (1) Identify those best practices that have been validated through peer-reviewed research efforts;
- (2) Establish collaborations with organizations involved in teacher training, to include other Federal science agencies, professional associations, institutions of higher education, and private sector entities, including informal education providers, as appropriate; and
- (3) Through collaboration with organizations involved in teacher training, transmit best practice information to educators.

While NCTM is supportive of this program, we ask that K-12 professional educator associations be explicitly added to the list in paragraph (2).

Further, we note that the Mathematics and Science Partnerships program is being renamed the “STEM and Computing Partnerships” program. While we are not opposed to this change, as it reflects the evolution of STEM education and disciplines, we are wary of its effect on awards. **We ask that there be some mechanism in the STEM and Computing Partnerships program to ensure a balanced investment across the STEM disciplines.**

NCTM is also pleased that the bill proposes the establishment of a “Teacher Science and Technology Enhancement Institute Program” at NIST. The new program would establish a teacher science and technology enhancement program to provide for professional development of mathematics and science teachers in elementary, middle, and secondary schools, including helping to increase the teachers’ understanding of science and the impact of science on commerce. Math educators would clearly benefit from such a program. **We’re also pleased that new STEM secondary schools could be established under the new grant program proposed as a partnership between NSF and the Department of Education.**



**NATIONAL COUNCIL OF
TEACHERS OF MATHEMATICS**

Given the importance of the programs addressed by this draft, we look forward to working with your staff on additional suggestions as the legislative process progresses. If you or your staff have any questions about these recommendations, NCTM, effective preparation and support of mathematics teachers and educators, please do not hesitate to contact NCTM Associate Executive Director for Communications Ken Krehbiel (703 620-9840, ext.2102, kkrehbiel@nctm.org). Thank you for your consideration of these recommendations.

Sincerely,

A handwritten signature in black ink that reads "Diane J. Briars".

Diane J. Briars
President

A handwritten signature in black ink that reads "Bob Doucette".

Bob Doucette
Executive Director