June 9, 2015

The Honorable Lamar Alexander,
Chairman of the Committee on Health, Education, Labor, and Pensions

United States Senate

The Honorable John Kline
Chairman of the Education and the Workforce Committee
United States House of Representatives

Chairman Alexander and Chairman Kline:

As one of over 2000 signatories of the recent Open Letter to Congress and the Obama Administration from Educational Researchers Nationwide, the Association for Science Teacher Education (ASTE) fully supports moving away from an almost singular focus on test-driven reforms and towards policies and funding mechanisms that promote broad educational quality, provide targeted support for poverty-stricken schools and districts, and enhance the professionalism of our nation’s teachers.

We are hopeful that discussions among Congressional education leadership will continue to address our concerns about the deleterious effects of federal policies on education in general and, more specifically, on science education and related fields.

ASTE is dedicated to the education and ongoing professional development of all teachers engaged in the teaching of science and related STEM disciplines. Our organization’s efforts promote effective science teaching practices that lead to robust understanding of fundamental science ideas and practices which, ultimately, prepares students for science careers and informed citizenship. Policymakers and science educators agree on these goals and must work together on initiatives that promote them.

Based on decades of research and our interactions with scientists and science educators across the PK-16 spectrum, we agree with the conclusions of the Open Letter from the National Education Policy Center. The overemphasis on testing in the most recent reauthorization of the Elementary and Secondary Education Act (No Child Left Behind, NCLB) and which persists in the Race to the Top federal grant program, has diminished student and teacher creativity, to focus on only a narrow range of academic disciplines and easily testable skills, and to deprofessionalize teaching at all levels.

In the over one decade since NCLB was enacted, we have seen less open-ended, inquiry-based science being taught in our regions. Class time for science (as well as art, music, and social studies) is frequently reduced to provide more instructional time for the two most tested subjects – English language arts and mathematics. Such curriculum narrowing does a disservice to a student’s ability to
compete globally and to foster a student’s overall education to be a productive citizen.

The NCLB waivers that some states have received have not improved these circumstances. In fact, many teacher evaluation systems that states have instituted remain largely based on student test scores as the primary component of a teacher’s and school’s “value.” Therefore, in some ways teacher and school performance are being solely judged on ill-conceived data influenced by the context (e.g., social and economic issues).

As educators of current and future science teachers, we at ASTE have also seen tangible, negative consequences of the current policy environment. We find that students are less prepared for university-level coursework. State departments of education often lower standards for science competency for future science teachers. The deprofessionalizing of teaching deters highly qualified individuals from choosing science teaching as a career and this is reflected in the recent enrollment trends in secondary science teacher education programs. These trends are at odds with both educators and policymakers’ desire to attract the best and the brightest students into the science teaching profession.

As you work to reauthorize the Elementary and Secondary Education Act, we urge you to take seriously our concerns that are corroborated by educational researchers nationwide. Please call upon us with questions you may have about science teacher education, as we are the leading organization representing those who prepare effective science teachers.

Respectfully,

Dr. Lisa Martin-Hansen  
President, ASTE

Dr. Joseph W. Shane  
ASTE Forum on Policy and Government Relations

Dr. Joanne K. Olson  
Past President, ASTE

Dr. Ian C. Binns  
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Advancing scholarship, collaboration and innovation in science teacher education