

2015 Executive Committee

Lisa Martin-Hansen, Ph.D.
ASTE President
California State University
Long Beach
L.MartinHansen@csulb.edu

Joanne Olson, Ph.D.
ASTE Past President
Iowa State University
jkolson@iastate.edu

Malcolm B. Butler, Ph.D.
ASTE President-Elect
University of Central Florida
Malcolm.Butler@ucf.edu

Patricia Morrell, Ph.D.
ASTE Senior Director-at-Large
University of Portland
Morrell@up.edu

Gillian Roehrig, Ph.D..
ASTE Senior Director-at-Large
University of Minnesota
roehr013@umn.edu

David Crowther, Ph.D.
ASTE Senior Regional
Representative
University of Nevada Reno
Crowther@unr.edu

Executive Office

Robert E. Hollon, Ph.D.
Executive Director
9324 27th Ave
Eau Claire, WI 54703
executivedirector@theaste.org
<http://TheASTE.org>

John Rhea, MFA
Director of Electronic Services
Webmaster@theaste.org

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Docket ID ED-2014-OPE-0057

The Honorable Arne Duncan
Secretary, U.S. Department of Education
400 Maryland Ave, SW
Washington, DC 20202

Dear Secretary Duncan:

We write this letter on behalf of the Association for Science Teacher Education (ASTE) in response to the U.S. Department of Education's proposed regulations for teacher preparation programs released in the Federal Register on December 3, 2014. ASTE is an organization with more than 700 members who are directly involved in the preparation of science teachers, and who conduct research on science teacher education. We are committed to rigorous, research-based teacher preparation programs that serve the needs of the nation's children, families, and the greater public good. Because of this commitment, we strongly oppose the proposed regulations due to four fundamental flaws: problems with validity/reliability, dangerously simplistic assumptions of teaching and educational outcomes, gross underestimation of cost and implementation burden, and disproportionate harm to those who serve poor and marginalized populations.

- No evidence exists to support the assumption that children's performance on subject-matter tests is a valid or reliable measure of the performance of a teacher education program. Recent attempts to evaluate teacher performance based on children's test performance, even with "value-added" factors included, has been shown to be highly problematic to the point that it is considered "scientifically discredited" (Kumashiro, 2014). This is because the relationship between the quality of the teacher and the performance of children on a test is confounded by many other variables (National Academy of Education, 2013). A teacher education program is even further removed from the children's classroom, making claims about a teacher education program from test scores lacking in validity. Teacher preparation programs have no control over the following: where graduates choose to teach, the working conditions in those schools, the powerful socialization that occurs to teachers through mentoring programs that push teachers toward low-level testing, the socioeconomic status of the community of the school, whether the teacher is forced to teach out of field or in an area outside of the primary endorsement, the number of students in the class, the home environment of the children in those schools, the physical and mental health of those students,

their readiness to learn, access to professional development in the teacher's content area, the presence of knowledgeable colleagues, the quality of the administrator, quality of professional development, quality of curriculum materials, etc. The proposed legislation assumes a one-to-one relationship of causality between the teacher preparation program and children's test scores. This assumption is completely flawed.

- The legislation relies upon dangerously simplistic assumptions of teaching and educational outcomes. To create an educated public, schools teach toward a number of goals that are difficult to quantify, but are fundamentally important to a functional democracy: critical thinking, social skills, creativity, problem solving, effective communication and use of resources, valuing self/others/the environment, healthy decision-making, in addition to fundamental concepts in a variety of subject matter disciplines. How well do test items measure valued educational outcomes? This system reduces schooling and teacher preparation to those practices that will boost test scores rather than promote more noble ends of education. This dehumanizes the educational process.
- Even if the proposed system were valid and reliable and reflected meaningful goals of education, the implementation is enormously costly, burdensome, and raises practical and ethical questions. Large systems would have to be put in place to track all teachers and their children's test scores, linking both to teacher education programs, raising issues of student privacy and data management security issues. Who pays for this and where are such data gathered and stored? What rights do children, parents, and families have over children's test scores and their dissemination? Where are the valid and reliable tests for every subject area and every grade level? How many years into a teaching career are claims on the teacher education program to be made? For example, if a teacher has been in the profession for one year, or twenty years, to what extent are children's test scores correlated to the quality of the teacher education program? Clearly, teacher education has some impact on teachers. And clearly, teachers have some impact on children. However, the percentage of variance in test scores that is caused by the teacher, and then caused by the teacher education program is still unknown, and this number would be expected to change over time, as working conditions, school expectations and constraints, professional development, and other factors increase their influence on a teacher the longer he/she is in the profession. The proposed legislation assumes these factors do not exist, yet their actual influence may be very high.
- The proposed legislation will have a negative impact on programs whose graduates are committed to teaching children in poverty. Over half of America's school children now live in poverty, and we know that poverty has profound effects on students' achievement. The negative consequences associated with the proposed legislation could easily cause teacher education programs to dissuade their graduates from teaching in high-need schools. This goes against the very commitment of the Department of Education to recruit and support STEM teachers in high-needs schools.

ASTE is the largest professional association in the United States that is dedicated to the preparation and development of pK-12 science teachers. For the above reasons, we cannot support the proposed legislation. We, like the Association for Mathematics

Teacher Education, are concerned that these regulations would neither serve teacher education candidates in their selection of a teacher education program, nor would they serve teacher education programs in having valid and reliable data that could be used for program improvement. Like AMTE, we also stand with the American Association of Colleges of Teacher Education and our other teacher education partners in questioning the wisdom of the proposed federal regulations. We encourage you to revisit these proposed changes, and when doing so, to utilize the expertise of professionals in the field of teacher preparation. In addition, we encourage you to reject the “test and punish” systems of “accountability” that have been shown to be highly problematic in design and implementation. We are deeply committed to ensuring that every child has well-prepared teachers. If we can be of assistance to you in your efforts to revise the regulations, we are prepared to work with you to meet our shared goal of strong teacher preparation programs.

Sincerely yours, and on behalf of the ASTE Executive Board and members,

Dr. Lisa Martin-Hansen, President
Dr. Joanne Olson, Past President
Dr. Malcolm B. Butler, President-Elect

Association for Science Teacher Education (ASTE)