AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

January 21, 2016

Ms. Deborah Spitz
U.S. Department of Education
400 Maryland Ave. SW Room 3E306
Washington, DC 20202

Re: Request for Information ED-2015-OESE-0130 Implementing Programs under Title I of the Elementary and Secondary Education Act

Dear Ms. Spitz:

The American Educational Research Association (AERA) appreciates the opportunity to provide written comments regarding the implementation of programs under Title I of the Elementary and Secondary Education Act. AERA is the major national scientific association of 25,000 faculty, researchers, graduate students, and other distinguished professionals dedicated to advancing knowledge about education, encouraging scholarly inquiry related to education, and promoting the use of research to improve education and serve the public good. This association is deeply committed to the highest standard of research practice in terms of research integrity, transparency, ethics, and peer review.

AERA has a longstanding commitment to education policy based on evidence and rigorous science. Accordingly, these comments are focused on the implementation of the research components of the *Every Student Succeeds Act* (ESSA) with the goal to most effectively encourage and enable the use of rigorous evidence to best inform policy and practice decisions.

The ESSA sends a strong message: The evidence base is an important consideration in evaluating and assessing the potential success of a program. We believe that much could be accomplished by strong guidance and may not require additional regulation. Nonetheless, clear and useful guidance will be critical to supporting, what AERA understands to be the Congressional intent of the research language, the use of the most rigorous scientific data available.

Tiers of Evidence-based Research

The definition of 'scientifically valid research' in *No Child Left Behind* was extremely narrow in scope, referring strictly to randomized control trials (RCTs). While randomized control trials are considered the gold standard for evaluating the efficacy of many forms

of interventions, alone they can be quite limited in explaining the complex dynamics that may mediate effects. Also, they are not necessarily feasible or appropriate for addressing the numerous and varied questions of education practitioners and policy makers. Therefore without in any sense diminishing the value of RCTs, the choice of appropriate scientific method needs to reflect the contexts and issues being examined.

In 2008, in response to a bi-partisan request from congressional staff, AERA Council issued a more robust definition of scientifically based research than set forth in *No Child Left Behind*, consonant with requirements for transparent and well-warranted research. (See attached.)

We are most pleased to see that the new definition of 'evidence-based' research in ESSA offers a useful framing compatible with AERA's scientific guidance from a number of years ago. The ESSA definition includes tiered levels of rigor, grounded in scientific standards and principles and provides a more realistic standard by which to judge research and to align research with programmatic purposes and goals.

The new tiered-definition strikes an important balance—aiming to use the most scientifically valid research while addressing a wide variety of circumstances facing schools and the dynamic needs of our students. We still lack reliable research in important areas. Nevertheless, the new definition can foster an appreciation of why evidence is essential under varying conditions and circumstances.

A meaningful and useful definition is an important step forward. Effective implementation of mandated requirements also depends on the capacity of Local Education Agencies (LEAs) and State Education Agencies (SEAs) to differentiate between reliable research and not-so reliable research. Such expertise would presumably vary widely across state agencies. It is here that the U.S. Department of Education's Institute of Education Sciences (IES) has the capacity, commitment, and expertise to help.

A particularly useful resource developed by IES in conjunction with the National Science Foundation is the *Common Guidelines for Education Research and Development* (http://ies.ed.gov/pdf/CommonGuidelines.pdf). In addition to encouraging useful resources for SEAs, AERA encourages the department to carefully consider how it will monitor the efforts and success of educational entities to refer to the most rigorous science available rather than studies falling in the lower tiers of the definition. By no means would AERA want to burden educational entities with cumbersome reporting requirements. Yet, we think that it is essential that the intent remains clear—entities need to incorporate the most rigorous research appropriate to the task.

Supports use of "reasonably available" evidence

Language in ESSA permits SEAs to determine if relevant evidence is "reasonably available." The Department of Education will need to carefully consider how this

judgment will be made and how it will be evaluated and reviewed. How, without being overly burdensome, will SEAs and LEAs verify the lack of availability? Lacking specific measures or verification could weaken the impact of the language in the law.

While already trying to make the evidence base accessible and usable, IES and specifically the What Works Clearinghouse and the Regional Education Labs can be significant resources to education entities across the country as they access and interpret rigorous research to make the very best education policy and practice decisions.

Thank you for the opportunity to comment on the possible implementation of these important research provisions of ESSA. We would welcome the chance to be a resource as the department advances this historic education legislation.

Sincerely,

Felice J. Levine, Ph.D.
Executive Director
flevine@aera.net

Definition of Scientifically Based Research

The following definition of scientifically based research (SBR) was developed by an expert working group convened by the American Educational Research Association (AERA) in June 2008. The SBR definition set forth below was supported by the AERA Council as a framework that offers sound guidance to members of Congress seeking to include such language in legislation. AERA provided this definition in response to congressional staff requests for an SBR definition that was grounded in scientific standards and principles. The request derived from an interest in averting the inconsistencies and at times narrowness of other SBR definitions used in legislation in recent years.

Alternate Definition of Scientifically Based Research (SBR)
Supported by AERA Council, July 11, 2008

I. The term "principles of scientific research" means the use of rigorous, systematic, and objective methodologies to obtain reliable and valid knowledge. Specifically, such research requires:
   A. development of a logical, evidence-based chain of reasoning;
   B. methods appropriate to the questions posed;
   C. observational or experimental designs and instruments that provide reliable
      and generalizable findings;
   D. data and analysis adequate to support findings;
   E. explication of procedures and results clearly and in detail, including specification of the population to which the findings can be generalized;
   F. adherence to professional norms of peer review;
   G. dissemination of findings to contribute to scientific knowledge; and
   H. access to data for reanalysis, replication, and the opportunity to build on findings.

I. The examination of causal questions requires experimental designs using random assignment or quasi-experimental or other designs that substantially reduce plausible competing explanations for the obtained results. These include, but are not limited to, longitudinal designs, case control methods, statistical matching, or time series analyses. This standard applies especially to studies evaluating the impacts of policies and programs on educational outcomes.

II. The term "scientifically based research" includes basic research, applied research, and evaluation research in which the rationale, design, and interpretation are developed in accordance with the scientific principles laid out above. The term applies to all mechanisms of federal research support, whether field-initiated or directed.