cBoston University School of Education

Indiana University School of Education

Iowa State University College of Human Sciences

Michigan State University College of Education

New York University Steinhardt School of Culture, Education, and Human Development

Purdue University College of Education

Penn State University College of Education

Rutgers University Graduate School of Education

Syracuse University School of Education

Texas A&M University College of Education and Human Development

The Ohio State University College of Education and Human Ecology

University of California – Irvine School of Education

University of California – Santa Barbara Gevirtz Graduate School of Education

University of Florida College of Education

University of Illinois Urbana-Champaign improvements. College of Education

University of Iowa College of Education

University of Kansas School of Education

University of Maryland College Park College of Education

University of Minnesota College of Education and Human Development

University of Missouri College of Education and Human Development

University of Pittsburgh School of Education

University of Southern California Rossier School of Education

University of Washington College of Education

Vanderbilt University Peabody College of Education and Human Development



Learning and Education Academic Research Network Advancing the Sciences of Teaching and Learning

Testimony of the LEARN Coalition

Senate Appropriations Committee Hearing on "Driving Innovation through Federal Investments"

Submitted by the Co-Chairs of the LEARN Coalition: Dean Gerardo Gonzalez (Indiana University, School of Education) Dean Donald E. Heller (Michigan State University, College of Education) Dean Donna L. Wiseman (University of Maryland, College of Education)

April 29, 2014

The LEARN Coalition, a coalition of Deans of leading research colleges of education, is pleased to submit testimony on how the federal investment in research and development across multiple agencies is helping spur innovation and improvements in our education system. Federal funding for education research at the Department of Education and the Institute of Education Sciences (IES), the National Institute of Child Health and Human Development (NICHD), the National Institute of Mental Health (NIMH), and the National Science Foundation (NSF) is critical to advance the scientific understanding of learning and development, and to provide an evidence base for practice and policy improvements.

LEARN Coalition institutions are currently working on federally-funded research projects, some of which are described in this testimony, that will provide the evidence base for innovation in the education system. Many of the projects are happening in collaboration with education leaders and practitioners in the education field. The research coming out of these projects addresses critical needs of local, state, and federal education leaders and policymakers. However, recent budget constraints to federal R&D programs across multiple agencies have constrained the research being done.

The Department of Education's Institute of Education Sciences is the primary federal agency charged with supporting education research and identifying what works and what doesn't through basic and applied educational research and rigorous evaluation of programs. IES programs are a key resource for educational leaders in choosing the highest-quality evidence-based programs to implement in their own schools. As school districts and schools face tough budget decisions, it is more important than ever that they have a reliable source of information on what educational innovations will best meet the needs of their students and how



to implement those innovations successfully in order to improve academic and learning outcomes for their students.

One example of an IES investment at work is Vanderbilt University's Peabody College's National Center on Scaling Up Effective Schools (NCSU), one of IES' national research and development (R&D) centers. Each R&D center conducts a focused program of education research in its topic area and provides national leadership in advancing evidence-based practice and policy within its topic area. NCSU is working collaboratively with education support providers and two large urban districts to identify the combination of essential components and the programs, practices, processes and policies that make some high schools in large urban districts particularly effective with low-income students, minority students, and English language learners. In order to foster the dissemination of best practices, NCSU is also working with both teachers as well as school and district leaders to develop processes to share these practices with less-effective schools in the district.

New York University's Steinhardt School of Culture, Education, and Human Development, in partnership with the University of Michigan, received an IES grant to support an evaluation of the universal Prekindergarten program in Boston Public Schools. The findings included the largest impacts to date on vocabulary and math skills of any public prekindergarten evaluation in the U.S., reductions in disparities in kindergarten reading and math skills and a demonstration of how quality can be achieved at scale through the implementation of evidence-based curricula combined with weekly/biweekly coaching in the classroom. The findings resulted in briefings to the Senate Health, Education, Labor and Pensions Committee, the House Education and the Workforce Committee, the Health Services Research Administration and Education Secretary Arne Duncan. The researchers also briefed the Seattle and New York City Councils on preschool, which fed into the development of recent proposals in those cities. The researchers recently received a new IES grant for long-term follow-up to the study.

NSF also provides critical support to advance research on learning in science, technology, engineering and mathematics (STEM). NSF's Education and Human Resources (EHR) Directorate in particular supports research that establishes effective methodologies for teaching and learning STEM subjects and contributes significantly to the educational research that is needed to better prepare students to enter a workforce that is in increasing need of highly-skilled workers in technical and scientific fields. NSF's Social, Behavioral & Economic Sciences Directorate (SBE) is the sole source of federal funding for research on human cognition, behavior, social structures, and social interaction and the intellectual and social contexts that govern the development and use of science and technology.

Purdue University's College of Education is involved in several NSF grants that are addressing new and critical issues and needs in the education system. The Science Learning through Engineering Design (SLED) project is a five-year NSF Math Science Partnership project, which involves work with four participating Indiana school districts. The project uses professional development and curriculum development to implement engineering design-based activities in the classroom in grades 3 through 6. It is one of the first projects nationally to address new science education standards that call for the integration of engineering concepts and practices in



science teaching and learning. Purdue's College of Education has also partnered with nonprofit Project Lead the Way for an NSF-funded project to address the urgent need for computer science education in our nation's schools. Purdue and Project Lead the Way are developing a highquality professional development approach for teaching computer science which will be implemented in hundreds of schools and reach thousands of students in the Project Lead the Way network.

Education research programs at the National Institutes of Health (NIH) are other examples of federal investments that are leading to advances in understanding teaching, learning and human development. Research funded by NICHD examines brain functions and the impact of different educational services on learning and development. This work is a valuable resource for educators in knowing what works best to treat developmental disorders and also leads to new researchbased strategies to improve learning and development. NIMH addresses learning and development as well, through research on the mind, brain and behavior and helps provide an evidence-base for interventions to reduce the burden of mental and behavioral disorders.

Researchers at the University of Washington and Vanderbilt University recently received a grant from NIH's National Institute for Deafness and Other Communication Disorders to study communication interventions for younger siblings of children with Autism Spectrum Disorder (ASD). This research will address findings from a recent study that showed that forty percent of later-born siblings of children with ASD had either ASD or language delay by the age of 3. The researchers will identify a treatment that targets skills to support social and linguistic communication development.

Funding decreases and cuts due to sequestration have limited the amount of resources available for education research in the past few years. While the President's FY15 budget request does recommend a small increase for IES R&D, the EHR Directorate at NSF, NIMH and NICHD, and the National Center on Special Education Research (NCSER) at IES have not been restored to pre-sequester levels.

These cuts to research funding have limited the amount of research done at these agencies. For example, IES Director Dr. John Easton stated at a National Board for Education Sciences meeting in June 2013¹ that sequestration removed about \$2.5 million from the NCSER research budget, and NCSER had a budget reduction two years prior to that. As a result, although NCSER received forty-five applications that were deemed excellent or outstanding, only eighteen were funded. NCSER Commissioner Dr. Deborah Speece added that these budget constraints led to the decision not to hold a new round of competition in FY 2014 but rather to use whatever grant funding was available in FY 2014 to support proposals from FY 2013. Dr. Speece said she believed the approach was the fiscally responsible thing to do, but it was a blow to an organization that is supposed to be doing more to fund new knowledge for children with disabilities. One of the projects that was unable to be funded during this time was an application from researchers at Boston University and the University of Florida, which proposed to conduct the first ever study to look at teacher evaluation in special education. A researcher at Michigan

¹ http://ies.ed.gov/director/board/minutes/minutes06_03_13.asp



State University planned to apply for a NCSER grant to create a comprehensive early reading program for children with moderate to severe ASD. The project hoped to address very low reading achievement levels for this sub-group, of which there are only two other research teams in the world researching this issue. The MSU researcher was not able to submit the project proposal to NCSER as there was not a new competition in FY 2014.

Budget cuts had similar effects on the general research activities at IES under the National Center for Education Research (NCER). Dr. John Easton remarked at the same National Board for Education Sciences meeting that because of fiscal limitations, funding for new grants at NCER was cut by about \$10 million in 2013, and only forty-nine of the eighty eligible applications that were deemed outstanding or excellent by peer reviewers were funded.

Federal investments in education research are at work now at the local, state and national level to address pressing problems and needs in our educational system. As we have shown, recent budget constraints have slowed the amount of research being produced on these pressing education issues. The LEARN Coalition urges the Committee to consider increased support for these programs, at least to restore them to their pre-sequester funding levels, to ensure that these agencies have the capacity to continue to support high-quality research and evidence-based programs that will lead to better schools, more effective teachers and higher student achievement.