Testimony of Diane Whitmore Schanzenbach
"Exploring Opportunities to Strengthen Education Research While Protecting Student Privacy"
U.S. House Committee on Education and the Workforce
Subcommittee on Early Childhood, Elementary, and Secondary Education
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Subcommittee Chair Rokita, Ranking Member Polis, and Members of the Committee, thank you for the opportunity to appear before you today to discuss opportunities to strengthen education research while protecting student privacy.

I am Dr. Diane Whitmore Schanzenbach, and I am Director of the Hamilton Project and a Senior Fellow in Economic Studies at the Brookings Institution. I am Professor of Education and Social Policy at Northwestern University, and conduct research on policies related to children, including education policy. At Northwestern, I serve as the director of the Multidisciplinary Program in Education Studies—a pre-doctoral training program sponsored by the federal Institute of Education Sciences. I am also a member a of national interdisciplinary network funded by the National Science Foundation and headed by my Northwestern colleague Dr. David Figlio, that includes scholars, policymakers and education administrators working together using longitudinal data to better inform research-based practice.

My testimony reflects my experience conducting research studies and engaging with practitioners for over 20 years, using federal education surveys collected by the National Center for Education Statistics, as well as longitudinal state and district data systems that have the capacity to follow students over time.

Our education system must continue to adapt and improve to ensure that our nation is prepared for the jobs of the future. This includes better educating an increasingly diverse population across all skill domains, and making more careful, efficient use of public resources. Rigorous and relevant education research on policy and practice are a critical component of an education system dedicated to continuous improvement.

Over the last 15 years, due in large part to the transformational efforts spearheaded by Dr. Russ Whitehurst as the first IES director, we have seen a welcome increase in the use of evidence to guide education policy. Smart federal investments have driven this trend by: increasing the supply of rigorous, relevant evidence by funding important research studies and improving the training of a new generation of scholars; supporting data systems that promote the highest-quality research; and providing incentives for productive collaborations between policymakers and practitioners, thereby ensuring that researchers are asking relevant questions and delivering results that are useful to practitioners. In recognition and support of the rigor and value of education research, when Congress authorized the Every Student Succeeds Act, you committed to high standards of evidence to drive improvements in student outcomes.

Federal investment in education is valuable

Investment in education research is a public good—it provides wide-ranging benefits to all Americans, and much of it would the not occur without support from government or philanthropy. This is because individual states and school districts do not have adequate incentives to invest in research on their own. Without appropriate federal investments, the country would end up with less research than is needed. Fortunately, smart federal investments have increased the amount of research being conducted, and schools and districts are using the knowledge gleaned through research to improve the efficiency and performance of our education system.

These investments have not been particularly costly, as the education sector spends relatively little on research and development. Overall, the U.S. allocates about 3 percent of its total expenditures to R&D. In education, however, only 0.2 percent of spending goes to R&D. Despite relatively modest spending on R&D, in recent years this investment has been highly leveraged to make a large impact on the field.

The Institute for Education Sciences: Investing in "What Works" in Education Research

Much of the impact research has had on improving education policy and practice is due to the work of the Institute of Education Sciences (IES) to increase the acceptable standards of rigor in education research. In recent years, it has also particularly emphasized improving the relevance and usability of research. IES has developed a system to communicate research quality clearly to users, through its "What Works Clearinghouse" and its categorization of research findings based on the quality of the underlying research design.

Providing access to and support of data collection is another key aspect of how IES improves our nation's education research. As you are aware, data collection comes in multiple forms ranging from nationally representative sample surveys to state and local longitudinal data systems. Through the National Center for Education Statistics, IES collects extremely important federal survey data, including the National Assessment of Education Progress (NAEP), also known as the "Nation's Report Card," which allows us to monitor progress in reading, math, and other subjects across states and over time. While the federal government supports states' longitudinal data systems, there are no student population-level data held by the federal government. However, there are limited and appropriate school-level censuses that are valuable to parents, educators, researchers, and policymakers in learning about education in America. One example of a Congressionally authorized, valuable, limited, and complete census of schools is the Civil Rights Data collection, which has shed light on the problem of chronic absenteeism. As a result of data publication and work done by myself and others, many schools have started to monitor chronic absenteeism more closely, and the majority of states have proposed including rates of chronic absenteeism as a new accountability metric in their ESSA plans. IES investments continue to yield significant gains toward supporting instruction, conducting evaluation and research, and monitoring return on investment due to IES funding

dedicated to help states develop infrastructure to use school administrative data through the Statewide Longitudinal Database Grant program funded by Congress.

IES has helped attract and develop a growing number of researchers with appropriate tools to conduct highly rigorous studies that have relevance to policy and practice. I have experienced this first-hand through the Institute for Education Sciences-funded pre-doctoral training program that I direct at Northwestern University, which is in the midst of training 24 doctoral candidates from different disciplines to pursue a range of careers in education research. As you may know, IES requires that we include a focus on training students on how to meaningfully engage key policy and practitioner stakeholders with usable research that will demonstrably improve our nation's education system. As a result of IES' investment in funding "what works" in education research, you will find similar programs are training researchers at other leading universities throughout the U.S, which have already produced remarkable education policy researchers.

In sum, IES has transformed education research by setting high standards for both rigor and relevance in research, and investing in development of both talent and infrastructure to further these goals. IES has never supported federal warehousing of individual student data and my understanding is that current proposals continue to ban the creation of this sort of data. In my opinion, in its short history, IES has been an unqualified success.

Concerns about data access and privacy

As a researcher with 3 children attending public elementary schools in Illinois, my husband and I both share concerns about student privacy and data confidentiality. We have found it useful to regularly monitor the data that our schools collect on our children, and the schools have been very cooperative in communicating with us as we monitor our kids' progress. And we appreciate the protections that the federal government, state, and school has implemented when we are inquiring about an individual child. For example, we have a tutor for one of our sons, and we want her to be able to exchange information and coordinate with our son's classroom teachers. We have to sign a document explicitly giving permission to the teachers to provide this information. We are glad that there are privacy protections like this in place, and also glad that there is a way to grant permission to facilitate the exchange of information needed to make sure our investments in his education are as productive as possible.

Any time individual student data are shared outside of the school walls—for example, with researchers such as myself—there are risks that are important to manage and minimize through appropriate protocols and procedures. At the same time, there are also immense and demonstrable benefits that can be derived from researchers' access to data. The key is to ensure that we mitigate any potential risks without foregoing the desperately needed progress and benefits that this research can have not only on our children's education, but ultimately outside of the classroom – on postsecondary access and success, career outcomes, and quality of life.

Fortunately, I know first-hand from my experience as a researcher and a parent that individual students' data can be appropriately safeguarded, while simultaneously being productively used to assess and improve education. To this end, I am optimistic that during today's hearing we will be able to address some of the key misconceptions regarding what data are made available to researchers, and how the data are used. I am going to speak briefly to how a researcher doing work with secure student-level data must handle data by law.

First, it is important to keep in mind that before access to data is granted, there are detailed memorandums of agreement between the researcher and the district or state partner. These agreements always include instructions on who may have access to the data and how the data may be accessed and maintained (e.g. only on a particular secure server, or an encrypted computer, or only on a standalone computer that cannot access the internet that must be kept in a locked safe when not in use). I apply to use the data for a specific project, and no longer have access to the data when the project is complete.

While these data have information about individual students, the research itself is never about individual students. As a researcher, when my colleagues and I use data like this, we conduct statistical analyses of trends, averages, and other aggregate patterns. While we need access to individual-level data to conduct the analysis, the point is never to hone in on one individual, but instead to use a large number of individuals' data to understand broader trends. In fact, if there is a chance that an analysis of aggregate data about a particular subgroup of students might inadvertently lead to the identification of a student, I am not permitted to publish these results. Education research is a fundamentally different use of data than my earlier example about our teacher and tutor exchanging data about my son specifically.

In my experience, when data from state or district longitudinal data systems are shared with external researchers, they do not contain identifying information such as names or addresses, and often times contain an anonymized student number. What is included is basic demographic information, enrollment information, test scores, attendance rates, and other administrative records that are necessary for research.

As an additional safeguard, researchers are subject to civil and criminal penalties for the misuse of data—which underscores both the government' and research sector's commitment to ensuring that student privacy is not compromised.

What have we learned from the resulting research?

The emphasis on rigorous, relevant research, together with the concerted effort to expand the pipeline of well-trained researchers and an increasing access to administrative datasets, has led to a dramatic expansion of valuable insights. While the success stories are seemingly immeasurable, I will highlight a few, recent studies that have already yielded demonstrable results and significant impact. These studies include, but are not limited to:

- Using state data systems, researchers have helped us understand under what circumstances low-performing schools can be turned around and improved, and the impacts of closing persistently underperforming schools.

- Enabling researchers to measure the diversity of impacts of charter schools on student achievement, the impact of the small high schools movement, and the spillover effects of school voucher programs on children in regular public schools—that is, as regular public schools and private schools compete for students, the result of this competition can benefit all children regardless of which type of school they choose.

- Allowing researchers to quantify the value of class size reduction, of certain types of professional development, and of small-group tutoring, so that districts are informed about costs and benefits as they decide how to allocate their limited resources.

- Leveraging longitudinal data from Chicago, researchers discovered early warning indicators that predict high school dropout. Based on this research, they developed a simple "Freshman On-Track" indicator based on 9th grade credit completion and course failures, and found that on-track students are almost four times as likely to go on to graduate from high school than off-track students. Armed with new information from research about what to look for, individual schools now monitor their own students' progress on this measure, and can intervene early, to get specific 9th and 10th graders at higher risk of dropping out back on track and improve their likelihood of graduating. School districts across the country, including New York City, Dallas, Albuquerque, Omaha and Philadelphia have adopted this approach to improve their graduation rates as well.

Another local example comes from work we are doing in conjunction with the high school district in Evanston, Illinois, under Northwestern's IES training grant. The district had several research questions of interest, but did not have the internal resources to answer them. For example, they offer many different types of academic support service to their students, and wanted an assessment of which combination of them were most effective for various subgroups of students. Another question they had was whether there are systematic differences in student outcomes from taking Advanced Placement vs. regular biology class for students who were academically prepared to take either option. Our PhD candidates worked in groups to research these questions, and presented their findings to district officials. It was a real win-win: our students got real-world experience conducting policy-relevant research, and the district got needed help to answer important questions of direct relevance to practice.

While the success stories are seemingly endless, one factor remains constant: investments in data systems that support cutting-edge research offer an impactful mechanism to leverage state, federal and philanthropic funding to improve our education system and quality of life for millions of American children and their families.

Recommendations/Summary

We have seen significant improvements in education policy and practice spurred by rigorous, relevant research. To be economically competitive in a rapidly evolving world market, it is imperative that we continue to improve the U.S. education system, and increase the system's return on investment. Additional research will be key to driving these needed improvements. Along with the strong benefits of research, however, comes the need to protect student privacy and data confidentiality. Both goals can be achieved by helping states adopt best practices to protect confidentiality while still partnering with researchers.