
Thanks so much for giving me the opportunity to speak today to this distinguished group of educators and researchers who are so committed to improving the educational opportunities of children with disabilities. You know, one of the thrilling aspects of my becoming director at the Institute of Education Sciences is the opportunity to enrich my understanding of certain research specialties. Delving into the work of our National Center for Special Education Research has been a great chance to learn more about the issues that most affect special education teachers and students. I hope to rely on the collective wisdom of organizations such as HECSE as we continue to develop this aspect of our work at IES.

Now, you’ve asked me to cover a lot of ground in this speech—and I want to allow plenty of time for your questions. So I’m going to spend a little time talking about my overall goals at IES. Then I would like to give you an update on some of the exciting work underway at NCSER. Finally, I’d like to discuss how my broad goals for IES might influence the work and future direction of NCSER.

Before I came to Washington eight months ago, I devoted my entire career to analyzing data, researching reform and school improvement efforts, and working with members of Chicago’s education community to make those findings useful. I spent 12 years at the University of Chicago, directing the work of the Consortium on Chicago School Research. This consortium’s national reputation was built on the strength of a deep bench of top-notch researchers, who are committed to a very different model of education research. These Chicago researchers are not content to just publish reports and disseminate findings; they help principals, teachers and district leaders understand how to use the research to improve their schools.

We did some groundbreaking work around creating an indicator called the “freshman on-track rate” that helped schools track and intervene with students most at risk of dropping out. But we also faced a great deal of pressure from the special education community because we weren’t doing enough of this kind of research about students with disabilities—until recently, that is. The Consortium
just released a research report that you all might be very interested in--What Matters for Staying On-Track and Graduating in Chicago Public Schools: A Focus on Students with Disabilities. This report looks at the factors-- absences, course failures, course credits and GPA--that accurately predict whether ninth-graders with disabilities will graduate from high school. It found that only 50 percent of Chicago students with disabilities graduate in five years, compared with 70 percent of CPS students without disabilities, and students with emotional disturbances graduate at the alarmingly low rate of 24 percent in five years. This work, which began before I left Chicago, was born of these ongoing conversations with principals and teachers, who needed actionable research they could use to help their most vulnerable students succeed.

My work in Chicago convinced me that effective education research must be guided by the voice and interests of practitioners and policy makers. If researchers want their work to be relevant, they need to spend time in schools talking with administrators and teachers about the challenges they face; they need to reach out to policymakers; they need to collaborate with researchers outside their own expertise.

It is this commitment – supporting top-notch education research that matters to schools and improves educational outcomes for children – that will drive our work at the Institute of Education Sciences over the next six years. So how are we going to make that happen? Right now I have five “big ideas.” Eventually these will translate into priorities and research topics, but at the moment, they're much broader. I’m going to go over each one in detail, but here they are in a nutshell:

- **Make our research more relevant and useable.**
- **Enhance this relevance and usability by shifting from a model of “dissemination” to a model of “facilitation.”**
- **Develop a greater understanding of schools as learning organizations.**
- **Create stronger links between research, development and innovation**
• **Build the capacity of states and school districts to use their longitudinal data systems, conduct research and evaluate their programs.**

Before I dig into what these goals mean, let me say this first: IES has done a fabulous job over its history in increasing the scientific rigor of our work, by demanding stronger methodologies and a greater capacity to make causal inferences, and by training researchers across the nation in these rigorous standards. By doing so, it raised the bar for all education research and evaluation nationwide. We got the “rigor” part right. I am not retreating from that.

• But now it’s time to focus on relevance and usability. We've got to bring the same determination, the same effort, the same energy, to making sure that our work matters to schools. One of the key ways to do that is to truly engage practitioners and policymakers in our work at the ground level -- not when it's done and we want it to be translated, or we want it to be applied, but as we envision it, as we plan it. In this vein, we’re very excited to move forward with a major new initiative for us -- evaluating the impact of ARRA, the federal stimulus funds for education. With this project, we are really putting our money where our mouth is, because this is going to be a test for us. We want IES to be a key player in learning more about school improvement and communicating our findings in a compelling fashion to those who need to hear from us the most.

• Our second big idea is an outgrowth of this push toward relevancy. I want to shift the conversation away from disseminating research findings to facilitating the use of research. The key to this difference is, again, a closer partnership with practitioners and policy makers, and the commitment on the part of researchers to assist in school improvement efforts. That means we're not just dropping research findings on schools and saying, “Here's good stuff that you need to use.” Rather, we invite practitioners and policy makers to the table from the beginning, so we're studying the right problems of practice, and so research is not something we're doing to them. They're at the table, so they understand the work and are more able and invested in adopting some of these findings.
• The third big idea represents a real shift in emphasis for IES, which has concentrated on developing and then validating programs or interventions. IES needs to develop a stronger understanding of schools as learning organizations and a focus on how schools and districts improve. I am not at all convinced that good schools are simply accretions of discrete programs, practices and interventions – no matter how innovative. Instead, they are learning organizations that use data for continuous improvement, where leaders understand how to implement promising programs in a way that ensures they can be embraced by staff and sustained over time. We know from six years of research here at IES how critical that implementation is in achieving positive results. So we need to dig deeper in understanding how school leaders and staffs strengthen or thwart the implementation of these programs we are studying.

• The fourth idea is one I’m still trying to wrap my arms around. We need to build stronger and more rigorous, iterative R&D processes that address problems of practice. We need to understand how research, development and innovation are linked and how we can better support this process. Education researchers know how to validate fully developed concepts with rigorous methodology, but perhaps we can learn from our colleagues across government who better understand the development side of things; for example, the folks at the National Science Foundation. How do we build an infrastructure that brings rigorous methodology to the development end, not just to the validation end? How can we encourage innovation, study it, and learn how to make it work better?

• My final idea is one where we can harness our vast resources and experience, particularly with data systems. We can help states make productive use of the ocean of data in which they are now swimming … or drowning, as the case may be. IES this year is offering $250 million in new grant dollars to support State Longitudinal Data Systems, on top of the $250 million we’ve already pledged to states. So there are increasingly robust and rich data systems out there that a lot of users simply don't know how to exploit. We can play a big role in developing partnerships -- perhaps through
training grants or our Regional Labs—with district and state data experts that will support their efforts to provide timely descriptive and analytic feedback to their schools and district and state leadership.

So, now I’ve talked broadly about where we hope to go as an Institute. Let me back up a bit and highlight some of the progress we’ve seen at NCSER, and the ambitious body of work we’ve been funding in this field.

Since 2006, we have made more than 100 research grants in special education, for a total investment of more than $200 million. This represents a 25% increase in number of applications received and a 30% increase in number of applications funded from 2006-2009. Indeed, these are the same kinds of increases in grant applications we’re seeing Institute-wide.

Most of the research NCSER funds is aimed at developing new interventions or assessments; about one-fourth of the research projects are to evaluate interventions; the majority covers development and innovation. NCSER funds research on low-incidence as well as high-incidence disabilities across all of our special education research programs, including research using single-case designs, which we’ll talk more about in a bit. As you all know, our work straddles 10 research programs, so I’d like to highlight a few where our body of work is the most robust or has advanced the most in recent years.

- One of our fastest growing areas of research is in Early Intervention and Early Childhood Special Education, with 27 active grants. A large percentage of projects are focused on language and literacy or social and emotional outcomes. In one noteworthy study, Deb Simmons (Texas A&M) is evaluating the efficacy of the Early Reading Intervention, a commercial program that is designed for kindergarten children at risk of reading difficulty and used in more than 4,000 school districts in all 50 states. Initial results indicate significant positive impact of the ERI on measures of student letter knowledge, phonemic awareness, and word attack skills.
• **Social and Behavioral Outcomes to Support Learning**, with 23 funded grants, remains one of our strongest programs. As you all are well aware, students who exhibit problem behaviors also are likely to have poor academic performance. Research indicates that there are promising approaches to recognizing, preventing, and intervening early with students with or at risk for developing behavior disorders; however, rigorous experimental evaluations of these programs is often lacking. IES is supporting the evaluation of established programs, and also examining whether interventions that work in a clinical setting can be adapted to a school setting. Preliminary results of these projects indicate that behavioral interventions can make a positive impact on students’ behavioral performance in schools; thus far however, impact on academic performance has been mixed. Positive results can be seen on some non-standardized assessments of academics (e.g., academic engaged time), but minimal improvement is being detected on academics as measured by standardized academic assessments. Hill Walker (University of Oregon) found some positive effects in his study of the *First Step to Success* program, an intervention designed to help young students develop behaviors and learning approaches that will lead to school success. The program also works with parents to reinforce at home the skills and behaviors their children are learning at school.

• In **Reading, Writing, and Language Development**, we’ve funded 13 grants. This is an important focus for us, given findings that suggest as many as 30% of young elementary aged children are thought to be at risk for reading disability or difficulties. Research on improving reading for students with or at risk for developing disabilities has focused in two general areas: (1) identifying children at risk for reading disabilities or difficulties early, reliably, and accurately; and (2) developing and evaluating interventions for improving these children’s reading outcomes. Most of the work in this area focuses on the development of language and literacy skills, with a limited focus on writing skills. Four research teams are developing and evaluating different interventions that promote reading skills (e.g., phonics/word level, fluency, and comprehension) for students with mild, moderate, and severe intellectual disabilities. A major contribution of these
studies is that they are demonstrating that students with intellectual disability can learn to read, and can read at much higher levels than what has been previously assumed.

- An area that’s getting a great deal of attention in the policy arena is Teacher Quality, a program under which we’ve funded 10 grants. Most of these grants are aimed at developing interventions for teachers of students with disabilities. There are projects focusing on progress monitoring in Algebra, instructional coaching for special education teachers, professional development in literacy instruction, and the development of a collaborative teacher network.

- Nearly 50 grants are spread across six of our remaining programs….in special education policy, math and science, high school transition outcomes, autism spectrum disorders, and two relatively new areas for us -- cognition and student learning, and services provided by specialists such as speech therapists and social workers.

- The work of our research and development centers continues as we ramp up for new competitions in the coming year. This year, we’re looking to deepen our work on assessment and accountability with a new center that identifies academic growth trajectories for students with disabilities, and develops and tests practical and relevant methods of measuring that growth. Math instruction is another area where we want to develop and test innovative teaching approaches.

- A new center to be announced next week will build on one of our growing research priorities, autism spectrum disorder, which affects 1 out of every 110 children, according to the most recent data from CDC. Our current body of work is focused on developing and evaluating comprehensive school-based interventions addressing multiple outcomes for these students, much of it centered on the preschool and primary school years. With this new center, we hope to create the same kind of research program, but this one targeting older students in middle and high school.

So, this should give you a good idea of what’s been keeping us busy in NCSER in recent years. Now, in looking forward, I’d like to explore how these broader goals for IES—relevancy, engaging practitioners, new models of R & D, using data,
and studying schools as “learning organizations” — change the way we think about the work of NCSER.

Well, one way I hope to build the capacity for change is by asking more from a new generation of researchers, particularly through our pre-and post-doctoral training programs. We will soon be issuing a funding announcement for our post-doc programs. We will continue to seek candidates who are prepared to conduct rigorous studies grounded in the best science. But we also want to push these young researchers to start asking more of the relevant questions that really matter to schools. We want to find researchers who are interested in advancing knowledge for the benefit of their discipline, but at the same time are eager to engage schools and practitioners and build long-term collaborations with school leaders that lead to lasting, meaningful improvement in student outcomes. IES also has 18 predoctoral training programs, interdisciplinary programs that involve faculty across several departments—seven of these include special education faculty.

Another way in which we can strengthen our ties to the world of practice is to maintain regular collaboration with practice experts both out in the schools and here in the department. As part of our goal around facilitation, we want to deepen our outreach to the special education community — advocacy and research groups engaged in promoting evidence-based practice and improving the R & D cycle. This also means strengthening our partnership with new leadership at the department’s Office of Special Education Programs. Ongoing conversations with OSEP have proven productive — one of these discussions led to the creation of our newly released proposal for the Autism Center I mentioned earlier. WWC Practice Guides are used by OSEP Centers, and NCSER grantees are often involved with OSEP Centers as well.

When special education research was moved out of OSEP and into IES in 2004, the idea was this would better integrate special education research with general education research. And indeed, we’re beginning to see more examples of general education researchers examining parallel issues in special education. One example is a study funded under our teacher quality priority. Economists Tim Sass and Li Feng (Florida State) used five years of student-level achievement data from Florida to show that achievement for students with disabilities improved significantly
when taught by teachers certified in special education—regardless of whether the student was enrolled in regular education or special education courses. The Cognition and Math Center now being competed by NCSER has attracted applications that represent collaborations between general and special education researchers.

We’re also looking to broaden our methodological base beyond RCTs. At NCSER, we’ve stated this explicitly in soliciting proposals for low-incidence disability research, where RCTs are rarely feasible. We recognize that single-case research plays an important role in studying low-incidence disabilities, so we are funding projects aimed at improving the design and analysis in these studies. We sponsored a two-day institute to train researchers on how to conduct rigorous special education research using single-case methodologies that incorporate quantitative analyses. Just the other week we convened a technical working group on this topic, which I attended. More broadly, we have hosted grant writing workshops to researchers interested in low-incidence disabilities.

Outside of our grantee work, IES has plenty of projects informing special education research and practice. IES is currently conducting four evaluation studies of IDEA. The What Works Clearinghouse will soon release evidence standards for single case research to be included in the WWC Procedures and Standards Handbook. We’ve published three WWC Practice Guides – two on Response to Intervention, and one focused on reducing behavior problems in elementary classrooms.

Although all this activity is keeping us plenty busy, we still have holes we need to fill:

- Our work in early childhood is indeed growing, but there is a dearth of research focused on infants and toddlers. We keep asking for work in this area, but we haven’t received a lot of applications.

- As I mentioned earlier, we are doing what we can to solve some of the methodological and training roadblocks in the area around low-incidence disabilities. But we still need more research on visual impairments, hearing impairments and others.
• We need to improve both the quality and quantity of research around transitions. We need to understand how high schools can help their students make a successful transition into college, or the workplace, or independent living. This need is critical for students with behavior disorders, because their outcomes are so dire. We are going to push through events like one we just announced this week – seeking applicants interested in a 3-day advanced studies seminar in April on the use of the National Longitudinal Transition Study 2 database.

• And now, the most obvious: We need a permanent commissioner. I’m looking for recommendations, so please feel free to reach out to me with your ideas, after this meeting or via email.

Let me conclude by circling back to one of my main points about schools as organizations. Yes, of course it makes sense to develop and validate interventions for special needs students; these are students for whom certain programs are not only needed but required by their learning plans. But we can’t lose sight of the fact that these programs operate within schools and are implemented by teachers who must work collectively with their colleagues. Schools are complex organizations where leadership, trust among adults and between adults and students, adult cooperative relationships, and attention to data are critically important – in fact, these factors can make or break the success of even the most promising interventions. Special needs students have the best shot at success when they are attending schools where the leadership is focused on instruction across all levels, where there is coherence and alignment across grades and subjects, where teachers work collaboratively with parents and colleagues across disciplines to improve learning, and where students are safe, welcomed and nurtured. Figuring out how to build this kind of school environment is critical for all -- but especially for our most vulnerable children.

Well, this about covers it. Are there any questions?