

FIVE BIG IDEAS FOR IES: Speech at the *American Association of Colleges for Teacher Education (AACTE)* conference in Atlanta, Feb. 20

A few years ago, I was presenting research findings to Chicago administrators and principals who had been charged with a formidable goal: Increasing the number of high school students graduating with an ACT score of 20 or above—a score that would give students access to most public colleges in Illinois. About halfway through my presentation I flipped to a complex graph that demonstrated the likelihood of reaching 20 on the ACT given 8th grade state test scores. What I heard was a collective gasp. Here was a finding that revealed a yawning disconnect between elementary school standards and the demand on high schools to produce college-ready students. Here was a finding school administrators could use to meet this new policy goal.

Before I went to Washington eight months ago, I spent my entire career analyzing data, researching reform and school improvement efforts, and working with members of Chicago's education community to make those findings useful. Hearing a room full of school leaders gasp over a complex graph—well, that's a rare thrill for a researcher. But such experiences convinced me of this: Effective education research must be guided by the voice and interests of practitioners and policy makers. If researchers want their work to be relevant, we need to spend time in schools talking with administrators and

teachers about the challenges they face; we need to reach out to policymakers; we need to collaborate with researchers outside their 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, but here they are in a nutshell:

1: Make our research more relevant and useable.

2: Enhance this relevance and usability by shifting from a model of “dissemination” to a model of “facilitation.”

3: Create stronger links between research, development and innovation

4: Build the capacity of states and school districts to use their longitudinal data systems, conduct research and evaluate their programs.

5: Develop a greater understanding of schools as learning organizations.

Before I dig into what these goals mean, let me say this first: IES has done a fabulous job over its six-year 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. What does this look like on the federal level? I think it could look a lot like the work of NAGB, the Governing Board for the National Assessment of Educational Progress. With a wide range of voices at the table, this board has pushed to make NAEP more responsive and more useable. The NAEP reports present complex analysis and a mountain of data in really accessible ways that are attuned to the needs of practitioners and policymakers. That's the kind of a model we could bring to IES as we strive to become more relevant and produce knowledge that is widely used in schools. In this same 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: What looks especially promising and should be expanded? What looks problematic and should be watched carefully and curtailed if needed? We cannot squander this incredible opportunity to learn from these reform strategies. We aim to produce rigorous findings in a timely manner, promote continuous improvement, and help the broader field – states, local districts and researchers, too – learn from these experiences.

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 willing to adopt some of these findings. We've actually taken some small steps in this direction already—making our News Flashes easier to read and creating accessible report summaries. We're also asking practitioners for their advice in how to redesign the next generation of our Regional Education Labs – ten centers that work on the front lines to support applied research,

share school improvement practices widely, and provide technical assistance to state and local education agencies in their regions. These smaller steps are how we're going to launch this process of moving away from a strict dissemination model and toward a facilitation model.

The third big 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? I've been influenced by my former colleague, mentor and friend, Tony Bryk, who writes of R&D as a kind of engineering cycle. How can that influence our decisions about what to support and how we continue to build on what works? How can we encourage innovation, study it, and learn how to make it work better? To that end, I've begun a potentially fruitful conversation with Jim Shelton, over in the Department of Education's Office of Innovation and Improvement. I expect this partnership to deepen as we work together on shared goals.

The fourth 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 providing \$250 million in new grant dollars to support State Longitudinal Data Systems, on top of the \$250 million we've already committed. So there are increasingly robust and rich data systems out there that a lot of users simply don't know how to wrangle. 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. Many people in these systems have an abundance of questions that can be answered with descriptive data. They will have even more with the expansion of the state longitudinal data systems. My personal experience and research has demonstrated how powerful longitudinal data analysis can be, even when it's just good descriptive data. Good descriptive data can be very meaningful, but I wouldn't want us to stop there. I would also want us to help districts plan stronger evaluation and research designs that can answer meaningful questions.

My final 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 with 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, for making good decisions and for many changes, tweaks and revisions to their practices.

When I talk about this, I often refer to the work of Charles Payne, who wrote a book called *So Much Reform, So Little Change*, which explores why even the most promising interventions fail at dysfunctional urban schools. The analysis looks closely at schools in highly impoverished neighborhoods with too much student turnover and too few strong leaders and high-quality teachers. These schools tend to think they can solve their problems by buying new programs. You know, schools are inundated with salespeople who are selling programs, some of which have a good evidence base, but many of which do not. All too often, these “miracle” programs don’t produce a single miracle – because, as we have learned from all these depressing failures, you can’t string together a bunch of disconnected programs and call it a school improvement strategy. Dick Murnane, an economist at Harvard, also makes a compelling argument about the need to look at schools as learning organizations. He argues that yes, good programs and good curricula can help schools move up a notch. It can help them solve very specific problems. But it's not going to transform them into really good schools. Struggling

schools are transformed when they become learning organizations -- where leaders use data to make good decisions about how to improve student outcomes. Learning organizations understand how to implement promising programs in a way that insures 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. This means collecting data as we're going along and finding out: Is it working? Why or why not? Let's foster and develop schools as learning organizations and simultaneously study how this happens, where and under what conditions.