

CONNECTING RESEARCH, POLICY AND PRACTICE: New Goals and Strategies at the Institute of Education Sciences.

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A few years ago, I was presenting research findings to a group of senior 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 showed 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 that illuminated the nature of a major problem in a new way and gave these school administrators a better sense of how to meet their new policy goal.

Before I went to Washington ten 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, which I believe we do, 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 our 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 for the remainder of my term. So how are we going to make that happen? Right now I have five big goals, many of which are reflected in a list of proposed new research priorities I just presented to our oversight board, the National Board for Education Sciences. 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 in states and school districts to use their longitudinal data systems, conduct research and evaluate their programs.

5: Develop a greater understanding of schools as organizations and how they can become *learning organizations*.

During this talk, I will explain what these goals mean and how they were shaped and informed by a model of engaged research and partnership we created at the University of Chicago, with my colleagues at both the Consortium on Chicago School Research and the Chicago Public Schools. During some of the Consortium's most productive years, we worked closely with Arne Duncan, who was Chicago's school chief for more than seven years until he left last year to become secretary of education. Some of the most important reforms in Chicago were a direct result of that partnership – helping to fine tune the controversial policy for ending social promotions; keeping freshman on track and trying to dramatically raise graduation rates; tracking college enrollment and retention; developing achievement growth models; and thinking very differently about how to turn around under-performing schools. What Arne asked of me then is what he asks of me now: to be a critical friend, “to tell us the cold, hard truth, without regard to ideology or politics.” (*arne speech to ies, 2009*)

I also have some take-home ideas about how graduate-level researchers could contribute to the process of educational reform, at both the policy and practice level – and that is going to take a fundamental shift in how our universities train and create incentives for our promising young researchers.

But 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 could 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 one 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?

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.

The third big idea is one we're still trying to wrap our 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?

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, which we will be announcing soon, 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 use best. 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. Educators 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. And we shouldn't stop there. I 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.

Last month we announced a new grant program that attempts to dig deeper at this very question -- the organization and management of schools and districts. Researchers are being encouraged to study the organizational factors, such as the coherence of the instructional program, the degree of trust in a school, or how much teachers learn from one another, that contribute to successful schools.

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 effective teachers. These schools often think they can solve their problems by buying new programs. But 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. I recently heard Michael Fullan say “it is people, practices and processes that improve schools, not programs.”

Dick Murnane, an economist at Harvard, also makes a compelling argument about the need to think about schools as learning organizations. He argues that yes, good programs and good curricula can help schools move up a notch. But it's not going to transform them into really good schools. Struggling schools are transformed when they become learning organizations -- schools that have learned 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 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.

Let me conclude by saying a few words about how I think we researchers could be rethinking our roles – and the role graduate students can help lead this change. Far too much education research – including much that is done in universities – is driven by the interests and theories of the researchers' themselves and not the needs and problems of practice. I want think this should change.

I recently attended a meeting of representatives from several research partnerships and consortia who work directly with school districts across the country. They gathered in Washington to discuss their commonalities and differences in their work and their research and development agendas. Although there are differences among the organizations themselves—one commonality was clear: the type of researchers they attract and develop. Researchers in these organizations play roles that are very different from the normative role of the university-based researcher and they have special skill sets.

- These (action-oriented) researchers seek to both generate longer-term knowledge while also providing short or long-term service to districts.
- They use their technical skills to help design studies and refine research questions rather than to create questions.
- They begin their work with powerful descriptive data to explicate current practices and outcomes in new and useful ways, building a theory of action around the topic of concern.
- They use their complex communication skills to talk with practitioners and policy makers.
- They recognize the interconnectedness of classroom-level, building-level and district-level functioning so as not to create interventions that ignore these relationships.

In my first week on the job last summer, Secretary Duncan spoke to a convening of IES funded researchers and urged us to think deeply about how to communicate our work to the folks working on the ground in schools -- the folks who don't live and breathe regression models, effect sizes, and clustered RCTs. He wanted IES to do what others have done well -- to take these complicated ideas and make them understandable. He said: "That is the only way that good ideas can lead to action and not just remain on a shelf somewhere."

So what role can IES play in this change? I want to ask more from a new generation of researchers, particularly through our pre-and post-doctoral training programs. We recently issued 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.

Thanks for your time. I will be happy to take your questions.