IES, the Continuous Improvement Initiative, and Having Research Matter

John Q. Easton, Presentation at the AERA Annual Meeting, Sunday, April 28, 10:35 to 12:05; Hilton Union Square, Ballroom Level – Continental 8

According to the AERA program, the topic for today's session is very broad: the Institute of Education Sciences, the Continuous Improvement Initiative (a new research topic at IES that we call CIRE) and Having Research Matter. When I was asked to participate in this session I recall the topic being more specific, just the new initiative, CIRE. But it seems to have spread, so I am going to take advantage of that. Any discussion of CIRE needs to consider the broader organizational context of IES, some of its history and our goals moving forward at IES. I'm going to be a little self-indulgent and talk more broadly about IES, where we've been and where we are going.

Let me begin by talking about the context for CIRE and a few other new efforts at IES and the major issues we are trying to address with these new research programs. I am looking forward to a productive discussion among the panelists, all of whom are very familiar with IES. Both Tony Bryk and Susanna Loeb are IES grantees and members of the National Board of Education Sciences; Catherine Snow is very involved with several major research grants, including Reading for Understanding, and David Pearson, our chair, has a long history as a researcher and reviewer for IES and as a member of the NAEP Validity Panel. Tony and Catherine are going to provide very specific descriptions of projects that provide principles of continuous improvement, Susanna is going to conclude with some wrap up comments and David will facilitate quesstions.

I'm sure that this is not new to you, but let me review a little IES history. The Institute of Education Sciences was established in 2002 by Congress in the Educational Science Reform Act, ESRA. In the few previous years prior to the legislation we had seen a number of influential publications questioning the quality of education research (for example, Ellen Condliffe Lageman's *An elusive science: The troubling history of education research*); several examples of legislation defining the meaning of rigorous scientific education research; and an important publication, *Scientific research in education*, by a committee of the National Research Council chaired by Rich Shavelson.

The use of the word "science" throughout is a symbolic nod to the seriousness of these endeavors and a deliberate attempt to elevate the status and stature of education research.

As you know, Russ Whitehurst, then assistant secretary for the Office of Education Research and Innovation, became IES's first director, and served for a full six year term. Russ built IES, and rigor became its mantra, and the randomized controlled trial became its gold standard. Throughout Russ's tenure, IES funded a considerable amount of exploratory, developmental, and design research, and methodological and psychometric analysis, yet the hallmark for IES became the experimental method, where randomization controlled for both observed and unobserved characteristics of study subjects. As has been documented, the methods for these studies have improved dramatically since IES began promoting RCTs.

Many of you know my background. I came to IES almost four years ago in June, 2009 nearly at the beginning of the Obama administration, from Chicago where I had spent my entire career either working for or with the Chicago Public Schools. For the last twelve of my many years in Chicago I worked at the Consortium on Chicago School Research, first as its deputy director (from 1997 to 2002) and then as executive director (from 2002 to 2009). I was also part of the Consortium from the very early days, first as a member of its Steering Committee and then as a Co-Director.

I loved that work. I enjoyed the research itself (I think that being a social scientist is part of my essence), but I particularly loved being part of a broad civic community that wanted to help make the Chicago Public Schools better for students, their families and for their teachers. From the earliest days, we researchers at CCSR – Tony, Penny Sebring and many others – wanted our research to matter, and importantly, we believed that it could. Under Tony Bryk's leadership, we created a number of formal structures and a set of professional and social norms to enable that to happen.

I brought my Chicago experiences with me to Washington. Very early on I began talking about the need for more relevant and useful research. In general, people responded to this message positively, although there were some skeptics, and some whisperings about going back to the "bad old days," with a retreat on "rigor" and less emphasis at IES on randomized controlled trials.

I might have fueled some of these fears, because in all of my early talks, I cited Charles Payne's book *So Much Reform, So Little Change*. Charles described low performing, very poor schools in Chicago, ones that we later called "truly disadvantaged." Following the 1989 decentralization of authority these schools gained considerable financial resources to fund school improvement efforts and they were besieged by sales representatives trying to sell their "proven" practices, materials, and curricula. Few of these interventions succeeded or even took hold. The schools lacked the basic human capital resources to implement, to monitor, or even to ensure coherence or consistency across programs.

I also talked often about a wonderful paper by Murnane and Nelson, called Improving the Performance of the Education Sector: The Valuable, Challenging, and Limited Role of Random Assignment Evaluations. Dick and his coauthor argue that RCTs are great for validating interventions that can address and ameliorate very specific problems in schools. But low performing schools don't become high performing schools by implementing proven interventions. They become great schools by becoming learning organizations that chose carefully, monitor, discuss, analyze, adapt and refine.

I wanted IES to think differently about school improvement and to expand beyond its traditional model of first, develop an intervention, second, test it on a small scale, third, test it on a bigger scale, and then, fourth, implement it with fidelity.

Talk is cheap and easy though. Concrete actions are harder and slower to come by. But we now have in place several initiatives to move IES toward more research that matters more. I want to highlight a couple of new programs in the last few years that have specifically addressed relevance and usability. First, the new Regional Education Laboratory contracts, awarded in January of 2012, required RELs to create Research Alliances composed of a range of stakeholders and researchers that would address a specific topic of concern to practitioners. There are nearly 70 of these alliances across the country and I am hopeful and optimistic that many of these will succeed and conduct research that will provide meaningful direction to the members of the alliances. Last fiscal year we competed a new research program called Research-Practitioner Partnerships and received over 70 proposals, many more than we expected. We have not formally announced our funding slate, but we are funding several of these proposals. They are relatively small grants – up to \$400,000 over two years – but they provide the opportunity for practitioners to work on equal footing with researchers on a problem that they identify. These studies are often exploratory and descriptive in nature. In many ways, they resemble planning or start-up grants. We hope that the partnerships will take root and continue to develop and that both the researchers and the practitioners in the partnership see the value of working together and enhance each other's work over time. Both the alliances and the researcher-practitioner partnership grants are predicated on the belief that when practitioners are involved in planning

research and interpreting findings that they are more likely to take some action as a result.

Last October, we posted a short prospectus on a proposed new research topic called Continuous Improvement Research in Education. The posting was up for about three months and we received over two dozen comments. Our board discussed the concepts and plans at a regular meeting on October 5, 2012. We got some attention in EdWeek, with two blog postings by Sarah Sparks in *Inside School Research*. The notice announcing the competition appeared in the Federal Register last Tuesday (April 23, 2013), and the Requests for Applications will be posted on our website later this week (May 2, 2013). Application packages will be available on June 6 and proposals due on September 4.

The RFA for CIRE is deliberately broad and agnostic about specific design models. In preparing this, we read across the literature of improvement science, design-based implementation research, design research, and quality improvement. There are many people in this room who know and understand this work better than I do. Rather than choosing a particular brand, we are leaving that up to the applicant. We are also leaving the topic of interest up to the applicant and not limiting proposals to just a few areas as I originally proposed. There is some risk involved in being so broad, but we plan to learn from the first set of applications and grants and improve the RFA next year as needed.

Let me be very specific and tie CIRE back to my references to Charles Payne and Dick Murnane. This research program is specifically designed to help practitioners thoughtfully and carefully adapt promising practices in their schools or districts. It is about them monitoring, measuring, responding, refining and adapting. It is not about implementing a proven practice, although there may indeed be instances where teams choose to adapt an intervention from the What Works Clearinghouse or combine a suite of interventions. It is about iterative, multi-method research and our hope to help build new R&D models.

The basic idea of CIRE is that researchers and practitioners who have some prior experience working together will jointly and on equal footing execute a new program, intervention, or regimen of activities or tools that have shown some evidence of promise elsewhere. This is not about discovering what works nor is it about building something new from scratch. It's about learning "how to make it work," a phrase that I've heard Tony Bryk use. The partners will adapt and revise the strategies by applying continuous improvement methods of frequent measurement of implementation strategies and proximal outcomes, rapidly analyzing those measures and making changes based on the results of this analysis. One implicit goal of this research program is to build a stronger culture around the use of evidence and stronger analytic capacity to measure, check, adapt and change. We are not turning our backs on rigor:

we are encouraging embedded experiments and trying to build a more robust R &D model.

We also expect them to identify weaknesses in the systems that support practices and adjust them as well.

We expect that by the fourth year of the project the team should have developed a fairly robust prototype continuous improvement process that can be tested. We are not expecting a rigorous evaluation design, although if that should be feasible we would welcome them. Investigators may propose single-case designs or quasi-experimental studies. We are also asking investigators to track the progress of the partnership itself and its success and assess the degree it increased capacity among the members of the partnership.

I want to mention an additional new effort at IES that will also be announced in the RFA later this week. We discussed this is in a public board meeting last February and it is noted in the Federal Register notice. This is a new Research and Development Center on Knowledge Utilization that will have three main goals. First is to develop tools for observing and measuring research utilization in schools, districts and agencies.

Second is to understand the conditions under which research is used and factors that promote or inhibit research use. And third, we want to identify skills or practices that researchers can adopt that will optimize the likelihood that research is used. Unlike other IES R&D centers, we will not be asking for large scale experimental studies, but

imagine more case study work and syntheses of current work in this field. You may know that the WT Grant Foundation has sponsored some excellent research in this field and that both Bob Granger and Vivian Tseng have written about it.

Our R&D centers also play an important role that we call "national leadership," which includes communicating, convening and distributing findings. Like the CIRE request for applications, this one will be quite broad to encourage maximum latitude from proposal writers.

As I said at the beginning of this talk, I have been at IES for almost four years. My term is two-thirds over and ends in two years. I came in to IES talking about relevance and usability on day one, and now four years later, we are making substantial progress in that direction. Obviously there is a long way to go. These new initiatives are just getting off the ground and there are many other important ones that we should be undertaking.

I have a short list of three high priority goals for my last two years. I would like to end by sharing these with you. First and foremost is to conduct and sponsor more useful and relevant research, the topic of today's conversation. The means may include partnership grants, the RELs, or through other means including our national evaluations, which we are trying to make more timely and report findings more frequently. Second is to build a real communication and outreach strategy that includes our website, ERIC, WWC, our RELs, our written materials, and most challenging, how our funded

researchers communicate their work to practitioner constituents. Finally, I have some specific internal goals for IES. Like many large bureaucracies, we still need better internal coordination and we need formal structures in place to become the kind of continuous improvement learning organization that we are trying to promote elsewhere.

Thanks for giving me the opportunity to put our new Continuous Research in Education program in the broader IES context.