

Easton welcome remarks at *Improving Middle School Science Instruction Using Cognitive Science* conference, sponsored by the National Research and Development Center on Cognition and Science Instruction; May 21, 2013

Thanks, Joe (Merlino) and thanks to you and your many colleagues for your fine work at your Center, where you have worked diligently to embed learning principles into widely available science curriculum. And thanks to Liz Albro and Christina Chhin for their work in developing and supporting this Center.

It looks like you have an exciting and full day ahead of you, where you will describe more about findings from this large and ambitious study. From the teasers I've heard, some of these are unexpected, some complex and as Joe said "some are counter-intuitive."

Over the past year or so, I have been hearing more and more urgent cries from practitioners and policy makers for help from the education research community. At the request of the Congress, in anticipation of reauthorizing ESRA, GAO, the Government Accountability Office has been preparing a report on IES. They've interviewed all of us, reviewed documents, and interviewed numerous researchers and educators. It is very clear that they will be judging IES on the relevance and utility of our research. The good news is that we have reached the wonderful point where the rigor and quality of our work is taken for granted, thanks to people like you and the staff here

at IES. What we've got to demonstrate now is that we can and we are helping real people solve real problems.

Daily we hear reports of practitioners and policy makers struggling with the implementation of higher and more demanding standards for students. What's the best professional development for teachers to help them meet these new challenges? How can we build formative assessments to support student learning? And most critical, how do teachers learn the instructional strategies that will bring more students to higher levels. Tom Brock, our new commissioner at the National Center for Education Research, is taking this challenge to heart and with help from many at the Center is convening a group of leading researchers to help us develop a research agenda around this topic. One issue that they will grapple with is building a balanced agenda: what are short-term questions that need addressing quickly, what are the mid-term issues, and what are long-term questions that we should answer for the next generation of educators.

Last week, the White House sponsored a one-day conference on promoting growth mindsets in students and adults across the country. The White House itself is looking to researchers for help and guidance. How can educators apply at a large scale what researchers have learned about the power and promise of teaching students that their brains can grow?

You may know that I have called for relevance and usability in my four years at IES. I never give a talk without stressing these themes. We have promoted partnerships between researchers and practitioners and policy makers as one means toward this end. We have several grant competitions that support these partnerships, including one to evaluate state and local programs and policies, and a new topic called “researcher practitioners partnerships.” Last week we awarded several new grants in this topic. Our premise is that when researchers and practitioners are working as equal partners in defining a problem, designing a study and interpreting findings, the practitioners will be more likely to take up the findings. We recently announced a new competition called Continuous Improvement Research in Education, which also requires researcher and practitioner partnerships. That competition will fund work not unlike the work that you in the Center on Cognition and Science have been doing: figuring out how to apply principles derived from research into actual school settings.

Going forward, IES needs to focus on the end goal: improving student learning – both cognitive skills as well as social, emotional and psychological ones and on making schools stronger organizations where teachers and students thrive together.

To get there, we still need to address a wide range of research questions with a wide range of methods. We have to continue to strive to understand how students process information and how to package and present that information. We have to learn how teachers can best engage students in challenging material, how to promote

oral language development, how to develop resiliency and growth mindsets and how to measure them. There are dozens of important questions like these that we need to continue to address. My job is to keep reminding and sometime keep prodding education researchers to keep the end goal in mind: improving schools and teaching and learning. The National Center on Cognition and Science Instruction has definitely been doing this. Today we get to hear more about this.