

Research-Based Practices Symposium
Math Facilitated Discussion Session
October 6, 2009

Facilitator: David Molina

Researcher: Ed Fuller

Overarching Questions

Is it possible for research to be:

- Useful? – How can we make it useful to us?
- Useable?

Issues for Discussion

- Conditions of Research (populations, who funded research)
- Measure of Effectiveness
- Impact/Quality/Quantity of Research
- Attribution
- Causation v. Association

Overall Key Points and Questions

We must be critical when concluding the effectiveness of research in student outcomes.

The facilitator asked participants to look at the Math Consumer Report. Participants were asked to think about what questions were raised by these ratings. Most questions revolved around the following key issues:

- Conditions of Research: Populations (students and teachers), research funders (what is the agenda of the researchers?), time span of studies
- Program ratings: Was there overlap among the studies reviewed?
- Measures of Effectiveness: What does a positive effect mean? What are the criteria for effectiveness? Did they measure fidelity? Do we measure just student outcomes on tests?
- Impact/Quality/Quantity of Research: Is there a preponderance of evidence? David Molina suggested that school districts look for a mix of qualitative and quantitative research when selecting programs.
- Attribution: How do you know results were caused by what you did? How do you attribute a certain result to a particular cause?
- Causation v. Association

How districts make decisions about implementing new curriculum is based on some of these same questions that were raised in looking at established research.

Participants shared that they look at a variety of issues and questions about a new curriculum, including: program components and alignment with standards; resources -- how much time and money is this program going to take; effectiveness and how individual school districts will define positive effects; philosophy and mission – does this program fit our mission?

The participants decided upon some key action steps for moving forward, which were primarily focused around how to better share resources among school districts within the region.

There was consensus around strategic collaboration: to subdivide into sub-groups, such as elementary Math coordinators, to share best practices and set research agendas. Participants discussed using research-informed practice rather than research-based decisions. They saw the role of the E³ Alliance as a “hub” or a convener of these sub-groups, either in-person or through an online forum. There was also discussion about using graduate students to conduct research, again so that practice informs research rather than research informing practice.

Participants identified some action steps that must be taken for the collaboration among sub-groups to be effective.

There must be buy-in from the superintendents that such efforts are necessary for closing some of the gaps among students. School districts must also be more open to allowing others to come in and be critical in their evaluation of model programs. They should “share and not hoard what’s working.” This is especially urgent given the mobility of students and teachers between districts in the same region. Collaboration must also look vertically, to include the higher-education community (both 2- and 4-year institutions), and must increase community and parental involvement. Participants saw the E³ Alliance as playing a key role in “closing these gaps.”

Parking Lot Issues

One question was whether visiting other school districts is useful in providing schools with good evidence of what’s working (variability in student populations, level of fidelity, etc.) The other major issue that arose centered around the role of human capital in program/curriculum implementation – how important is the quality of the teacher? How do different teachers respond to new curriculum implementation – is it better for equipping new teachers with concrete tools? Anecdotally, we know more experienced teachers may be less faithful to the prescribed curriculum because they have a bigger “toolbox” of strategies. How does this affect the effectiveness of the specific program?