Title:
The influence (or not) of educational effectiveness research on school-based decisions about policy and practice.

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Abstract Body

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Background / Context:

Beginning with the No Child Left Behind Act of 2001 (NCLB) and reinforced by the Education Sciences Reform Act of 2002 (ESRA), the federal government established explicit expectations for the role of research in informing decisions about education programs, policies, and practice, and it also specified new expectations for what constituted research knowledge that was worth using. NCLB legislation went so far as to include in its definition of scientifically-based research “a preference for random-assignment experiments” in impact evaluations of programs or policies. Following this, ESRA established the Institute of Education Sciences (IES) which began pushing the research community (i.e., through grants and contracts) to do more randomized experiments (Viadero, 2004). In 2002, IES established the What Works Clearinghouse (WWC), which reviews, critiques, and synthesizes evidence of impacts of education interventions. Although the WWC got off to a slow start (Viadero, 2006), it now includes hundreds of Intervention Reports and Practice Guides based on reviews of more than 10,000 studies. Now, IES is 15 years into its effort to transform education research, and there are clear indications that the education research produced today is quite different from that of twenty years ago (NBES, 2008; IES, 2017). Unfortunately, we don’t know much about whether these changes have actually led schools and individual educators to make better and more frequent use of research to inform their decisions.

Purpose / Objective:

This paper documents early results from a nation-wide study of when and how educators use research in decisions about policy and practice. To motivate new approaches to increasing research use and evidence-based decision-making in schools, our team is conducting a series of research studies, the first of which involves developing and validating a survey to measure depth of research use by schools and teachers through collection of multilevel data from district staff, school administrators, and classroom teachers. In this paper, we present results from the first pilot of this survey with over 500 educators from 32 schools. The results presented in this paper focus on the influence of scientifically-based research and IES-funded supports for research use (e.g., WWC, RELs) on school-wide and classroom-level decisions about practice.

Setting:

In spring 2017, a large-scale pilot of the survey was conducted with administrators and instructional staff from 32 schools in two states (i.e., one mid-Atlantic and one New England).

Population / Participants:

The sampling frame included 1,513 people who were either instructional staff (e.g., teachers, coaches) or responsible for supervising instruction (e.g., principals). A total of 580 people responded to the survey (for an overall response rate of 38%) including 25 school administrators, 12 district staff, 51 instructional coaches/specialists, 79 special education teachers, 344 additional classroom teachers, and 69 other instructional staff (e.g., ESL teachers).

Research Design:

This is a large-scale survey research study with three phases. The first two phases involve piloting the survey in separate samples of 30-schools. A nationally-representative field test will
be conducted in 2018-19 involving 300 schools. The data for this paper will be augmented with data from the second pilot prior to presenting at SREE in spring 2018.

The survey included two paths, with the path for each respondent determined by whether they stated substantial familiarity with a specific organizational decision (Path-A; see Figure 1 on Appendix page A2). Those who did not have such familiarity were routed to an alternative path in which the questions focused on the evidence and information used to select and implement a specific “strategy” to support student learning (Path-B; see Figure 2 on Appendix page A3). Metaphorically, the instrument was a ‘choose-your-own adventure’ survey in which responses to prior questions determined the wording and sequence of questions that appeared next.

Data Collection and Analysis:

Data were collected through online administration of the survey using the Qualtrics platform. Analyses presented here involve simple descriptive statistics (i.e., frequency counts).

Findings / Results:

Based on the data from our first pilot, the majority of school administrators (78%) and about half of the instructional coaches/specialists (49%) followed Path A, answering questions about a school-wide organizational decision that they described via an open-ended question (see Figure 1). Within the other respondent groups, between 20% and 29% also followed Path A. The remaining respondents were routed to Path B, and answered questions about “a key strategy they have used to support students’ progress” (see Figure 2). In total, there were 155 responses to the survey items about evidence influencing organizational decisions, and there were 308 responses to the survey items about evidence influencing individuals’ decisions.

The figures on Appendix page A4 present bar charts showing frequency of responses to individual survey items for Path A (i.e., focused on school-wide organizational decisions). Results suggest that the majority of organizational decisions relied moderately or heavily on “a claim about the impact of a program or policy,” and that the majority of respondents believed that the decision was informed by scientifically-based research. However, the WWC, RELs, and Federal/State Departments of Education almost never informed these decisions.

Similar figures on Appendix page A5 present bar charts showing frequency of responses to individual survey items for Path B (i.e., focused on individual educators’ selection of strategies). Results suggest that the majority of strategies relied moderately or heavily on “a claim about the impact of a program or policy,” and that the majority of respondents believed that the strategy is supported by scientifically-based research. In comparison to the results for organizational decisions, the WWC and RELs exhibited even weaker influence on selection of strategies. Additional data included in our presentation will show just which sources practitioners rely on most.

Conclusions:

There are many reasons why research highlighted by the WWC, RELs, and DOEs might have infrequent and limited influence on decisions in schools and classrooms. This paper serves to highlight the likely scope and severity of the apparent divide between educators’ decisions and the effectiveness research intended inform those decisions. We hope that our presentation at SREE would promote conversations about the research↔practice divide, and how we might address it.
Appendices
Not included in page/word count.

References


Figure 1. Path-A routing question about an organizational decision.

The following question focuses on organizational decisions, which are decisions about policy and practice made at the school or district level that affect a significant number of teachers and/or students. For example, some organizational decisions a school district might make include (a) adopting or discontinuing a program or intervention, (b) adopting a new curriculum, and (c) providing specific PD training to teachers.

Please think of a major organizational decision related to student outcomes that was made by your school or district during this school year or the previous school year. Please describe this decision in a few sentences addressing the following points:

Q5_1. What was the problem that the decision was intended to address?

[Answer: Improve retention of new teachers.]

What was the decision (i.e., what was changed or introduced/what actions were taken)?

[Answer: The district implemented an induction program for new teachers.]
Because your responses suggest you are not deeply familiar with an organizational decision, we would like to ask you instead about key strategies you have decided to use in your own practice.

Please identify a key strategy or approach that you have used recently to support students’ progress during this school year or the previous school year. Please describe this strategy or approach in a few sentences addressing the following points:

What was the strategy or approach?

What was the purpose or goal of this strategy/approach?
Figures showing frequency of responses to individual survey items for Path A (i.e., focused on school-wide organizational decisions).

Five Randomly-Selected Responses to “What was the decision (i.e., what was changed or introduced/what actions were taken)?”

- It was approved to move forward with all day kindergarten throughout the district.
- We implemented the use of new resources within our reading support classrooms
- To make the school year start sooner
- A completely overhauled district report card specifically tailored for individual grade levels.
- adopting a new curriculum

To what degree did the information that informed this decision rely on... a claim about the impact of a program or policy (i.e., “Did it work?”)

Which of the following sources provided information, and to what extent did the information influence the decision? ...

A Regional Education Lab or Comprehensive Center

- Provided No Information
- I Don’t Know/Remember
- Provided information that had little or no influence
- Provided information that had some influence
- Provided information that heavily influenced the decision
Five randomly selected responses to the survey question, “What was the strategy or approach?”

- I use a lot of modeling with concrete objects
- When working with students who are English Language Learners (ELLs), I use the approach of providing the students the opportunity, when possible, to make connections with their own culture/language and share those connections with the rest of the students in the small group (most of whom are not ELLs).
- I use differentiated instruction to meet the needs of my students.
- Having special education students more included into general education specials and classes.
- Flexible group instruction for math

To what degree did the research that supports the use of this strategy rely on...

- A scientifically-based research study

Where did you get information to support your use of this strategy/approach?

- The What Works Clearinghouse
- A Regional Education Lab or Comprehensive Center
- Guidance from federal or state departments of education