Guest Editorial

Trustworthiness, Useability, and Accessibility of Educational Research

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Educational researchers often think that the target of reform is the school. What this perspective overlooks is that those in power over school reform will increasingly wield power over educational researchers. At the July Project Directors' Meeting for the Office of Special Education Programs, Professor Cuban asked this question about power: "Whose standards will count? When national, state, and district policy makers place their weight behind reforms, authoritative legitimacy in making design changes rests with those at the top of the organization, not those at the bottom." I would submit that the political standards of policy makers is becoming the most important standard of all. Professor Cuban continued, "Without formal organizational channels to make modifications during implementation, teachers are stuck."

Researchers also can end up being stuck, in terms of the valuing and use of research, the level of funding for research, and the flexibility in devising a program of research. The challenge facing researchers is how to promote an effectiveness standard to prevent complete domination by political standards. Funding for general education research has not fared well under either effectiveness or political standards, now funded at about 50% of what it was 20 years ago. Special education research has fared better, though the future is uncertain.

TRUSTWORTHINESS

Bridging the gap between research and practice is critical in promoting the effectiveness standard. But there is not just one gap, rather three: trust-

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worthiness, useability, and accessibility. Trustworthiness has to do with the confidence with which a given set of findings can be acted upon by practitioners. Trustworthy findings are based on replicated, well-designed, and executed studies with clear specification of suitable contexts and students. In terms of trustworthiness, the special education research community has much to be proud of in the Division of Innovation and Development (DID).

> . . . DID was singled out by the National Academy of Education in its report *Research and the Renewal of Education.* The Academy recognized the DID program as "an example of the type of consensus building and priority setting" that would benefit the research goals of all education programs (McKenna, 1992, p. 27).

DID research, by statute and accomplishment, provides an important knowledge base about how to serve individuals with disabilities. But the verdict on educational research in general is not so glowing, as reflected in this quote:

> . . . the prestigious National Research Council of the National Academy of Sciences issued a scathing report condemning the field's penchant for "methodologically weak research, trivial studies, an infatuation with jargon, and a tendency toward fads." Without "high-quality and credible evaluations," it warned, "school districts will never be able to choose wisely among available innovations" (Marshall, 1993, p. 102).

Special education researchers share some of those problems (Durrant, 1994).

What can be done about the trustworthiness gap? Dissertation advisors, grant review panels, and journal advisory boards can begin working to improve their criteria for adequate research. For example, McEwen (1992) has synthesized several sets of recommendations for improving research studies. I also have my pet concerns about intervention/prevention research, in terms of:

  (a) specifying the actual components of interventions;
  (b) aligning the measures and the content of interventions;
  (c) ensuring comparable amounts of time spent on interventions (or reporting differences when times are not comparable);
  (d) reporting student engagement and success levels; and
  (e) providing sufficient and appropriate professional development for interventions.

Others in special education have addressed the problem of better descriptions of subjects, e.g., CLD Research Committee (1994).

It is not necessary that a dissertation, grant application, or journal article meets every criteria. But researchers should be aware of the criteria and be able to explain why a certain criterion was not met. Gradually, ex-

pectations can be raised. But first, the criteria must be agreed to and made explicit.

USEABILITY

The second gap is use and usefulness. Useability has to do with the demands required to implement a set of research findings. The demands have to be reasonable in terms of current time and expertise availability *and* in terms of support that can increase the available time and expertise of practitioners. The National Academy of Science carried out a study of federally funded educational research.

> . . . the question of use and usefulness was repeatedly raised by the key staffers we spoke to in the U.S. Senate and House as we began the study. Several said bluntly that all other questions about the enterprise [of research] are of little interest to Congress until these two are answered in a satisfactory manner (Bick & Jackson, 1992, p. 8).

Bridging the useability gap requires more than exhorting teachers to adopt research-based practices. For example, some research-based practices turn out to be impractical. But even greater attention to the feasibility of interventions and improving them in other ways will not be sufficient to bridge the useability gap. At least some special education research should identify, study, and disseminate successful schools and special education systems. The problems are too many, the needs are too great, and the money is too scarce to focus solely on individual interventions. We should continue to work forward from isolated interventions toward successful schools, but we should also work backward from successful schools and special education systems to identify and understand these complex interventions as well as their context; i.e., part to whole and whole to part. If we are to respond to our charge as researchers in a professional school, directed by policy makers, and funded by the public, part of our work must be to seek out and understand these socially valued successes.

Policy makers and communities don't really care about research in the professions, unless it leads to valued results. Civil engineers would be in big trouble if their research was on how to make a bridge last two months rather than one month. Successful research that came up with a two-month bridge would not be appreciated by policy makers and the public.

In education, what is valued most are successful schools and special education systems. Policy makers and the public don't care much about educational policies, practices, or procedures. They care about the net effect of schooling. Their perception about this effect defines the useability gap.

I realize that overcoming the useability gap is difficult and complex, as noted by one of the 700 participants in the electronic discussion about the federal education research agenda: "I would suggest case studies of effective schools (don't ask me how to find them—ABC News doesn't have any trouble)" (Glass, p. 19). The experience that drove home the importance of the useability gap was a meeting with William Raspberry, the Washington Post columnist, and several faculty at the University of Oregon. He asked, "How much time have education researchers spent studying the work of Jamie Escalante with disadvantaged Latino high school students learning AP calculus? Or Marva Collins' work with disadvantaged African-American elementary students?" I could not think of a reasonable explanation for why researchers in a profession ignore success. There are equally impressive success stories from special education systems. I've come across a district in Idaho and one in Washington where elementary students in special education had mean scores above general education students.

There are many advantages from studying successful schools and special education systems or, if you will, translating successful practice into research.

1. Researchers can begin to identify the context variables that are necessary for complex, effective interventions to be properly implemented and institutionalized.
2. Researchers can begin to answer the question, "How can teachers learn to handle the interactions among multiple interventions?"
3. Researchers can offer policy makers and the public examples of success that they will recognize and value.
4. Researchers can begin to talk intelligently and responsibly about standards, which at present are now largely a Christmas shopping list from every national curriculum organization. Successful schools validate high yet reasonable standards.

It is important to differentiate this research from demonstration projects, action research, and typical evaluation research. Grant competitions to create demonstrations too often end up being unsuccessful demonstrations. Because successful practitioners are almost never grant writers, successful practitioners typically do not apply for demonstration grants. Besides, educational researchers do not necessarily have the expertise and experience to create such successful schools and systems. In physics, successful theoreticians and successful experimentalists are not the same people. In education, the practitioners who develop an exemplary school or special education system are rarely researchers.

Similarly, action research, where a researcher and teachers decide on questions to investigate, won't necessarily help bridge the useability gap.

For example, in Richardson's (1994) recent article, the emphasis is away from effective practice toward understanding and possibly storytelling: "Research on the practice of teaching has recently shifted from a focus on effective behaviors toward the hermeneutic purpose of understanding how teachers make sense of teaching and learning" (p. 5). ". . . there are some discussions of teacher research that border on suggesting that teacher research, at least in the form of stories, is the only valid form of teaching research . . . " (p. 5).

Finally, I'm not suggesting evaluation research that merely sorts out schools as winners and losers. The point is to find successful schools and special education systems so that researchers can learn from them and spread that success. Researchers could study successful schools and special education systems, then design, implement, and evaluate a dissemination plan for replicating those successful schools and systems.

ACCESSIBILITY

The third gap has to do with accessing research, the ease and quickness by which practitioners can obtain research findings related to a certain goal. This gap is best illustrated with an example. There is possibly more research, in terms of quality and quantity, on teaching beginning reading than on any other topic in education. I recently worked with several teachers in Washington and California to conduct a small, informal survey to determine whether teachers could access this information in a usable, trustworthy form, as other professionals, such as physicians using Medline. The question the teachers asked was this: "What information do you have about research-based practices for teaching beginning reading?"

National Level

The federally funded ERIC system had 222 references on beginning reading of which 47 were research syntheses. These syntheses did not deal extensively with practical implications. Obtaining these lists would take about three hours for an experienced ERIC user. I would estimate that less than one half of one percent of teachers are experienced ERIC users.

The International Reading Association sent references for six studies from their publications. Each dealt with a small aspect of beginning reading. None gave a comprehensive response.

The National Education Association referred the question to the National Center for Educational Statistics. The call to that Center was trans-

ferred to a number which had a recorded message stating that it was an unassigned number, that no one was there, try back later.

The American Federation of Teachers has a well-put-together research synthesis, but practical applications have to be devised by the teacher.

State Level

California

A receptionist asked if research-based practices in teaching beginning reading was the name of a book. She then said that a consultant was needed to answer the question and one would call. No call back yet.

Washington

The Language Arts Specialist said the Department could not afford to maintain a research library but she did offer the following sources: Yette Goodman, Marie Clay, annual IRA publication on research, and the IRA handbook. Only one of these could be found in the Washington Library System catalog, but it was not available at Evergreen College where the search was conducted. One IRA publication was found at the College— Effective Teaching of Reading: Research and Practice. This publication did not include any experimental evaluations, only case studies.

Local Level

California

The teacher called on her lunch break and was told that the central administrator who might be able to answer the question was at lunch.

Washington

There was no one in the district for the teacher to ask.

Publishers

California

A district administrator asked publishers for student achievement data resulting from the use of specific reading programs. Only one out of eight publishers sent data.

CONCLUSION

My contention is that research is under-utilized because of the shortcomings described in this article and because practitioners do not routinely look to research when they make decisions (Carnine, 1995). Researchers must take responsibility not only for systematically remedying these shortcomings but also for trying to influence practitioners to make research findings an integral part of their decision-making process (Carnine, in press, a, b, c, d, e).

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