From Research to Policy

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How do you cull through various—and often contradictory—findings to decide what works best in your district?

When using education research, school board members, superintendents, and district leaders are in a sometimes frustrating position. They are implored, or even required by law, to make "scientifically based" decisions. They are inundated with research findings; a Google search on merit pay, for instance, yields more than a half-million hits. But they do not have the resources to sift through various studies and determine which are most promising for their districts.

Making matters especially difficult is talk of "data-driven decision making" and "scientifically based research." These phrases imply that translating research into policy and practice is a relatively straightforward matter of latching onto the right solutions and making them work.

If only it were that simple.

Being smart about education research requires thinking about what it actually shows, when and where the findings apply, and how the implications are being explained and promoted. The hard truth is that research is produced and disseminated by researchers, public officials, education groups, journalists, and advocacy organizations—all of whom inevitably have their own views, incentives, and biases. Even well-intentioned efforts to promote the use of rigorous research may flounder if officials pay insufficient regard to the way these forces affect the marketing of findings and recommendations.

Drawing from the book *When Research Matters*, here are some suggestions that district leaders can use as they negotiate the thorny challenges of turning research into useful policy.

The instructive case of class size

Most research findings are equivocal, and even those that aren't should be handled with due caution when crafting policy solutions. The well-known case of class size, billed as a sure-fire reform by researchers, the media, and advocates for nearly two decades, is an instructive example.

According to University of Wisconsin professor Doug Harris, 88 percent of parents support class size reduction and teachers endorse it by a similar margin. In a 2003 policy brief, the American Educational Research Association advised that reducing class size should be a top funding priority among school initiatives. Far from groundless, these endorsements rest on some prominent experimental research.

The best-known class size experiment conducted to date may well be the Student Teacher Achievement Ratio project, or Project STAR. From 1985 to 1989, $12 million was spent on STAR in Tennessee to examine the impact of class size on student learning. Researchers found significant achievement gains for students in small kindergarten classes and additional gains in first grade, especially for African-American students. These gains persisted as students moved through middle school.

The STAR results suggested that a crowd-pleasing reform that eased teachers' working conditions could also boost student achievement. Not surprisingly, the research quickly found favor and was trumpeted by teachers unions and advocates for increased school spending.

The researchers' findings were famously and recklessly applied in California, with no attention to constraints or to the cautions implicit in the study. California legislators adopted a class size reduction program in 1996 that cost $771 million in its first year and $1.7 billion annually by 2005. The only major evaluation of California's program, conducted by the American Institutes of Research and the RAND Corp., found no evidence that student achievement had improved.

What happened?

Along the way, California's would-be reformers seemed to forget the subtleties of the STAR findings. STAR was motivated by the theory of Gene Glass and Mary Lee Smith, who believed that class size would need to be reduced to 15 or fewer students.

California's initiative created an incentive for districts to place first- and second-graders (and, soon after, kindergartners and third-graders) in classes of no more than 20 students. However, these classes were substantially larger and the strategy was applied to a different age population than that in Project STAR.

Project STAR also was a pilot program—externally funded and directed to a limited population—and reformers did not account for the changed context. Resources for smaller classes were redirected from other potential reforms, such as teacher raises or investing in research, curricula, or assessment. More significantly, the benefits of reducing class size appear much harder to capture when the strategy is embraced by multiple schools that must draw from a limited teacher pool.

In practice, the convincing findings from a heralded experiment turned out to be a far less useful guide for state and local policymakers than many hoped. Yet, apart from the STAR Project, research on the merits of reducing class size has shown mixed results.

In 1999, Stanford economist Eric Hanushek reported that 277 studies of student performance had examined how class size or student–teacher ratios affect achievement. Of those, 15 percent found statistically significant positive effects and 13 percent statistically significant negative effects—offering little reason to believe that class size investments offer a consistent pay off. Numerous states, including Utah, Nevada, and Florida, have pursued similar initiatives in recent years, despite uncertain evidence as to whether the benefits correspond with the costs.

How findings get explained

Why is class size reduction so popular if its merits appear so mixed?

Research does not simply become policy. In a democratic system, elected and appointed officials make policy, which is the product of many competing interests. An emphasis on technical questions has obscured the reality that research's impact on policy has as much to do with political behavior as with research design.

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Research can and should factor into policymakers' decisions, but its influence is conditional and takes place through a variety of forces. The class size experience is instructive on numerous counts—particularly with regard to the role of advocacy groups, the media, and the research community.

Membership and advocacy organizations claim otherwise, but most have reason to care more about policy outcomes than research rigor. Attention from high-profile new studies can encourage organizations that depend on visibility for fundraising and influence to promote a greater volume of research without being overly scrupulous about technical considerations.

These groups inhabit a murky space, exerting enormous influence as they operate in of unexamined ways. A researcher whose work is helpful to the agendas of influential interests can win visibility, contacts, access, and funding. Research that serves the interest of no organized constituency is likely to attract less notice and yield fewer professional rewards.

The media also play a dual role, informing policy decisions while making headlines. Confronted with enormous variation in the quality of research, journalists often rely on proxies to sort through the conflicting findings reported by diverse institutions, but they can lose sight of more substantial and technical considerations. For instance, reporters note that they often are more comfortable highlighting work that draws on federal data because they feel confident about its origin. But experience has shown that findings derived from using federal data or the policy implications drawn from such research can be just as problematic as findings that use privately collected data.

Meanwhile, in seeking cues as to a researcher's possible agenda, reporters typically focus on personalities, funding, reputations, and politics rather than arid technical debates. This potentially gives readers a distorted picture of the scholarly debate and fuels doubts about the reliability of the research exercise.

Incentives for researchers, inside and outside of university settings, can create tensions that impede their ability to approach issues in a dispassionate or disengaged fashion. A researcher whose work is embraced by the teachers unions, advocates for early childhood education, or the charter school community has incentives to depict his work in ways that the organizations will use and remain quiet if they

stretch findings or recommendations in their efforts. Researchers perceived as "friendly" may face informal pressures from funders and allies if later work points to different policy implications.

Rather than decrying the behavior of intermediaries or journalists and the necessary roles they play, the more fruitful course is for policymakers to understand their role in disseminating and explaining research findings—and then to proceed accordingly.

Lessons for you

What does this mean for school boards and district leaders? Consider the following lessons:

First, look past simple claims about what is "scientifically proven" and ask, "How likely is it that this will work as advertised in our community, in our schools, and with our students and faculty?"

This is not just a technical challenge. As the class size illustration makes clear, it's about understanding the limits of research and how implementation and design affect the success of policies in particular contexts.

Second, recognize the two types of interventions in education. The first involves limited, relatively specific pedagogical and curricular interventions—such as particular reading programs or math instruction models—designed to improve individual students' development, knowledge, and skills. Research on such interventions is readily susceptible to randomized field trials, can be helpful in determining whether reforms are working, and can frequently serve as the basis for prescriptive policymaking.

The other kind of reform includes measures related to governance, management, compensation, and deregulation. These are broad changes intended to improve organizational effectiveness. Research on this type of intervention is rarely precise, does not take place in controlled circumstances, and is not administered to discrete subjects.

Moreover, under a given label—whether it is charter schools, class size reduction, or merit pay—one can routinely find programs with an enormous array of different designs and parameters. The fact that one version of merit pay or class size reduction does (or doesn't) work in Locale A doesn't necessarily say much about whether a differently configured program would succeed in Locale A—much less Locale B. Expecting research to conclusively confirm these policies is asking more than research can plausibly deliver.

Third, districts must address the dearth of local resources and expertise. Consider investing in internal research and evaluation capability or, in the case of small districts, forming a consortium that can provide the requisite scale. For models, look at how the Los Angeles Unified School District has built a substantial internal research presence or what the Consortium on Chicago School Research has done in partnership with—but outside the district hierarchy of—the Chicago Public Schools.

In either case, the trick is to balance the relationship between district officials and research professionals employed by the external organization. When analysts are on your payroll or have a symbiotic relationship with the district, it is important to encourage frankness and ensure the opportunity for unpopular feedback and advice.

Developing the right relationship

Another course is to develop relationships with independent scholars and analysts who can offer measured guidance on interpreting and adopting research. Consider cultivating relationships with local scholars and universities, taking advantage of national networks, or capitalizing on the personal relationships of staff members.

There is a concern that these partners may be timid or defer to you to maintain the relationship, but the greater need is to ensure that the district and researcher are sufficiently close and the researcher is in a position to offer no-holds-barred guidance.

Finally, don't forget that members of the "research-solution complex" have their own vested interests in devising and marketing new remedies, and be appropriately wary. Scholars and advocates have expertise, time, and funds to develop deep familiarity with their preferred solutions, as well as strong incentives to believe and push them, while district leaders and their staffs typically lack the same luxury. This often leaves you at a disadvantage, and requires you to learn to respond appropriately.

Advocacy groups—whether conservative or progressive, national or state-based—have their own agendas and biases. Recognize how these groups approach questions and what they seek to promote, knowing that none are unbiased or disinterested observers. If you can do this, then their energetic efforts to produce accessible and forceful analyses can provide crucial assistance in assessing the strengths and weaknesses of various proposals.

Research has a vital role to play in democratic policy debate. That role is not to dictate outcomes but to ensure that decision making is informed by the facts, insights, and analyses that science can provide. Providing direction and policymaking that will improve our schools and school districts is not simply a question of getting the research right. Ultimately, in a democratic nation, the craft of marrying research to policy matters means as much as the technical merits of research and the desire of policymakers to be guided by compelling findings. ■

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