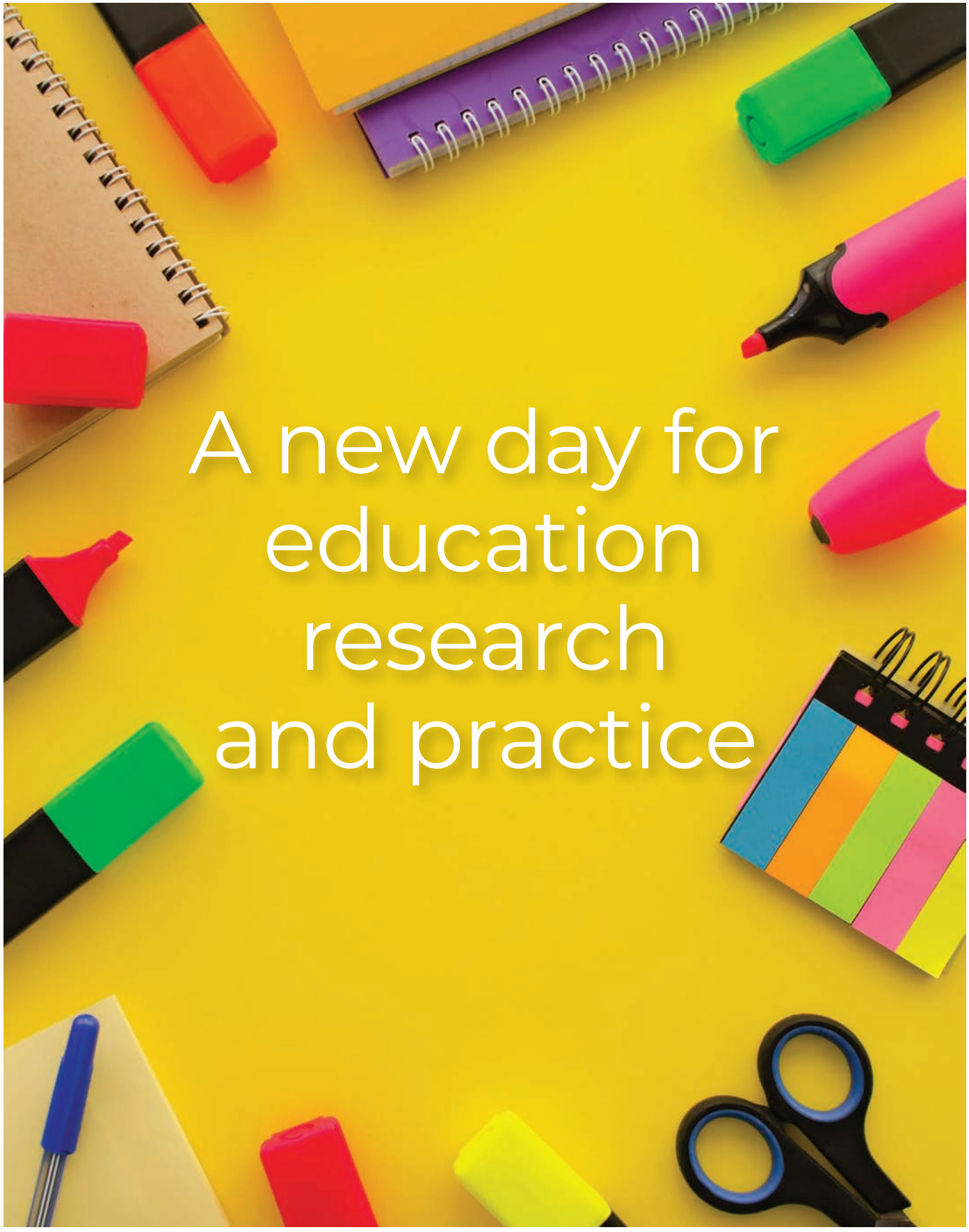

# A new day for education research and practice

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There's reason to believe that the long-standing gap between research and practice has begun to close.

**By Elizabeth N. Farley-Ripple**

For decades, education research and practice have had a frustrating and uneasy relationship. Long-standing narratives have lamented the quality and relevance of research and portrayed education decision makers and practitioners as having little interest in or the capacity to use research findings that might help them improve their schools. No doubt, both of these critiques have some truth to them. But they've been repeated so often as to create the unfortunate impression that things cannot improve. Like many of my colleagues, I am guilty of constantly invoking the metaphor of an unbridgeable "gap," suggesting that researchers and practitioners will never live up to their potential to come together in support of our schools, whether through the development and diffusion of effective practices, the more efficient use of resources, or the promotion of more equitable access to learning opportunities and outcomes.

But in recent years, many of us have become newly optimistic that the relationship between educational research and practice can and will improve. Over the past decade, as I argue below, a great deal of progress has been made to connect the work of researchers more directly to the needs of practitioners.

## It takes a village

There are several million educators in the United States, working in more than 18,000 school districts, as well as in charter schools and private schools. By comparison, the education research community may seem relatively small, but it is significant all the same, numbering in the tens of thousands nationwide. The American Educational Research Association alone has 25,000 members, many of whom focus on issues directly relevant to policy and practice, including research into perennial challenges (such as how to improve literacy instruction or reduce racial bias in schools) as well as research into emerging and newly urgent topics (such as social-emotional learning, digital literacy, and trauma-informed practice), with studies ranging widely not just in content but also in their methods and disciplinary perspectives. So, too, do researchers vary in where they choose to publish their findings — for instance, the federal government's Educational Research Information Center (ERIC) indexes research published in more than a thousand academic journals and more than 800 other sources.

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In short, efforts to bring research to bear on educational practice add up to an *enormous* enterprise. And while its size and variety give it great potential to address critical challenges facing our schools, that size and complexity can also make it difficult for practitioners, and researchers themselves, to navigate the terrain. Thus, the responsibility to link research and practice is not limited to education researchers and practitioners alone; it requires attention and engagement from a wide range of stakeholders.

Federal initiatives to promote research use burgeoned in the 1960s and 1970s with the creation of resources such as ERIC, the Regional Education Laboratories, and the National Diffusion Network, which were all meant to connect research to policy and practice. By the late 1980s, many federal policy makers had become skeptical of these programs and turned their attention to other priorities. Yet, they soon renewed their commitment to supporting the use of rigorous research and evaluation in public schooling. When Congress passed the No Child Left Behind Act in 2001 (and again in 2015 when it passed the Every Student Succeeds Act), it made clear that if states and districts want to be eligible for federal education dollars, they must commit to evidence-based school improvement strategies and decision making. Likewise, the 2002 Education Sciences Reform Act accelerated the production and dissemination of education research, in large part by creating the Institute for Education Sciences (IES), which has gone on to fund efforts to connect research and practice, including the What Works Clearinghouse and a pair of university-based knowledge utilization centers (including the Center for Research Use in Education, which I codirect).

However, federal policy making is only one part of the education ecosystem, and big and small shifts have occurred in all corners. Since 2013, for example, we've seen a

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grassroots effort to establish an annual research conference, ResearchEd, reflecting the increased demand for evidence-supported practice among teachers. The various professional associations that support educators have also scaled up their research agendas and given researchers a more prominent role in their convenings and publications. Leadership preparation programs have put much greater emphasis on the use of data and evidence to guide the work of school and district administrators (Firestone, Perry, & Leland, 2020). Publishers have developed new open-access platforms for sharing education research findings. And various philanthropic organizations, such as the William T. Grant Foundation and the Spencer Foundation, have supported projects that focus on improving the relationship between education research and practice.

This broad engagement from across the education system suggests that the challenge at hand isn't just to get more educators to use research, or to get researchers to produce more relevant work. Rather, building a stronger relationship between research and practice will take a collective and well-coordinated effort by a variety of important stakeholders. That work hasn't been fully realized yet. Already, though, the education community has put itself in a much better position to connect research and practice than ever before.

## Who uses research, and how?

Most conceptualizations of research use, including those often implied in federal policy, suggest a straightforward, linear process: Identify a pressing problem in K-12 education, turn to research to find an evidence-based solution, implement it, and, *voila, practice has been informed by research!*

But, in reality, things are rarely so simple (Farley-Ripple et al., 2018). To "use" research, educators first have to access and interpret the relevant findings, which are often inconsistent or even contradictory, as well as determine the extent to which those findings relate to the local context and the specific problems they hope to solve.

For example, imagine that a high school principal is working to address behavioral issues in their school and opts for a multitiered system of supports (MTSS) that is consistent with the school's approach to special education. MTSS is considered an evidence-based framework, but relatively little research has been done on its use at the high school level. Further, there are few evidence-based interventions for emotional and behavioral needs for secondary students. So, to select an intervention, the principal and their leadership team will need to draw on strong evidence from other contexts (e.g., elementary schools) or on less rigorous or conclusive evidence conducted in high schools. Perhaps not surprisingly, when scholars have studied how educators actually use research, they've found that these sorts of complexities create significant barriers to using research in the smooth and straightforward way policy makers envision.

Make no mistake, though. Even if it rarely follows a simple, clear-cut process, research use *does* happen in K-12 education. In fact, recent evidence from the National Center for Research, Policy, and Practice (NCRPP) — the other knowledge utilization center funded by IES — suggests that high levels of research use tend to be quite common in certain contexts: School district leaders often look to the available evidence to help inform decisions about changing the curriculum, directing resources to programs, adopting or eliminating programs, and designing professional development for teachers (Farrell et al., 2018). Similarly, a recent survey conducted by my center, which drew responses from nearly 5,000 educators across the country, found that about 25% of organizational decisions were influenced by external research, and nearly half were influenced by new research conducted locally.

Perhaps more important, those of us who study educators' use of research have come to see that they don't always do so *instrumentally*, to help them decide on a specific policy or practice. Actually, educators often look to research for *conceptual* guidance — for example, to challenge their assumptions about teaching and learning, give them another perspective on a problem and how to solve it, or provide a new theoretical framework to guide their practice (Farrell & Coburn, 2016). For example, in a local district, administrators recently came together to read a newly published book on unconscious bias and its impact on teaching and learning, and then they used the author's framework as discussion points in staff meetings.

Similarly, it has become increasingly clear that research findings often become *embedded* in educators' everyday routines, tools, and practices. For example, in a recent study, my colleagues and I observed that members of a school leadership team consulted the research literature on professional learning communities and then wove evidence-based concepts and practices into the materials they developed for their teachers (though the teachers themselves might not even realize that they did so).

In short, if we broaden our idea of what counts as "using research," then we can see the many ways in which research informs educational practice. Practitioners don't just make research-based decisions and implement research-based programs — they also look to research to help them reconceptualize their work and create new resources.

## How research gets shared

Researchers and practitioners rarely have the opportunity to interact directly with one another, Rather, other people and organizations tend to serve as go-betweens (or "brokers," as scholars call them), who summarize the research, tell educators about important new findings, and share information about evidence-based practices. Only in recent years has it become clear just how big of a role these brokers play in efforts to connect research and practice.

Educators themselves can be particularly influential brokers of research (Farley-Ripple & Grajeda, 2019). When new

information finds its way into schools and districts, it tends to spread among practitioners (with principals and district administrators doing most of the spreading, according to our survey). For example, let's say that some district leaders decide to create and implement a set of common assessments throughout their school system. So, to help local principals get up to speed on this topic, they send them a couple of good research articles. Later, some of the principals make copies of those articles and share them with the professional learning communities at their own schools. Within weeks, half of the educators in the district have read them.

It is not uncommon for practitioners to share information in this way, helping their colleagues access and make sense of new research findings. Further, school and district leaders don't just serve as brokers of research; given their decision-making power, they also tend to be well-positioned to embed that research in practice, by way of new policies and resources.

Organizations and media often play a critical role in connecting research to practitioners, as well (Malin, Brown, & Trubceac, 2018). For instance, our recent survey findings suggest that very few school practitioners maintain direct and regular ties to the research community (for example, by accessing peer-reviewed publications, meeting with researchers, or attending research presentations). However, when we conducted a number of case studies of research use in specific schools and districts, we observed that many of those practitioners relied on one or more organizations to translate, adapt, synthesize, and summarize research in useful ways, without forcing them to wade through technical jargon, paywalls, complex or conflicting findings, and studies that have no clear implications for practice. Often these are professional associations such as the American Federation of Teachers and National Education Association, publications like *Kappan*, or nonprofits such as Edutopia.

These brokers between research and practice can play an important role not only in moving research into practice, but also in moving ideas *from practice to research*. For example, the organization Digital Promise maintains an internet-based Challenge Map, which highlights the most critical research questions identified by staff at the various schools it supports, and links them to brief descriptions of relevant findings. Similarly, professional associations such as the International Literacy Association and National Council of Teachers of Mathematics create platforms for sharing critical issues of practice with research members and partners. Brokers, then, work in both directions.

But while it's clear that brokers matter for connecting research and practice, we don't yet know the extent to which their work influences practice. For instance, teachers may prefer to adopt new classroom practices when they've been recommended by a trusted source, such as a colleague, a teacher-curated website (e.g., Teachers Pay Teachers), or an organization that serves educators (e.g., a professional association), whether or not those practices are "research-based." Nor do we yet know very much about how *effectively* organizations connect research and practice, what kinds of research findings they tend to share, or whether they actually provide practitioners with an accurate understanding of the research and its implications (though scholars are now looking into these issues; Malin & Brown, 2019).

## Researchers are reaching out

Over the past decade, research groups have made efforts to reach out to practitioners, to figure out how best to disseminate their findings. For example, podcasts, such as *Research Minutes* from the Consortium for Policy Research in Education or *Connections Across Education* from the Metropolitan Education Research Consortium have sought to improve the visibility of researchers and their work nationally and locally (Naff, 2020). Research associations have created open-access versions of flagship publications, such as the American Educational Research Association's *AERAOpen*. Still others have turned to web-based tools and resources that feature evidence-based practice, such as the Harvard Graduate School of Education's site Usable Knowledge (Malin, Brown, & Trubceac, 2018). These are significant steps, given that most researchers have always shied away from publishing their findings in forums that are accessible to educators (since professional advancement depends almost entirely on publishing in peer-reviewed journals).

*"My Dad? Can I take a message? He's doing my homework."*

We've seen growing respect for the varied kinds of research, data, and evidence that can inform school and district improvement.

Yet, such steps offer only a partial solution to the challenge of bringing research and practice together. The dissemination of findings is a one-way process — in which researchers try to influence practitioners, but practitioners aren't expected to influence researchers — and that has often created problems of its own.

A centerpiece of the 2002 Education Sciences Reform Act was its emphasis on a specific kind of rigorously quantitative, "scientifically based" research, which many policy makers saw as the answer to long-standing critiques of the low quality and irrelevance of much education research. As a result, IES began to prioritize and fund only certain kinds of research, especially intervention studies that promised to identify "what works" in schools and classrooms. Presumably, if specific programs and teaching strategies have been shown (by rigorous studies) to be effective, then they can be scaled up and implemented in large numbers of schools.

However, while this narrow focus on certain kinds of research had some benefits, including the publication of some "gold standard" studies that offered confident endorsements of specific teaching practices, it soon became clear that such practices don't necessarily translate from one context to another, and such research findings are often irrelevant to the problems that local educators actually face.

Policy makers may engage in a lot of high-level discussions about which kind of reading program to implement statewide, for instance, or which approach to the teaching of algebra has the strongest evidence of being effective. But those discussions focus on only a few of the problems local school leaders tend to confront, and which research could help them solve. For example, a recent study found that school leaders most often look to research to help them design professional development, to support the implementation of programs, and to build political support for programs that have already been adopted (Penuel et al., 2018).

Similarly, according to a recent survey conducted by my center, the problems and decisions that weigh on the minds of local educators tend to be incredibly diverse, ranging from implementing 1:1 technology to creating a block schedule to overhauling the reading curriculum, and they demand equally diverse research-based solutions (Farley-Ripple et al., 2020). Not all of these needs can be met by searching a database for findings from large-scale research studies of specific classroom interventions and teaching strategies.

In short, not all educational research has to follow the narrow "what works" guidelines defined by the 2002 Education Sciences Reform Act to be useful for policy or practice. A broad range of research methods can be helpful, depending on the kinds of questions we want to answer, the challenges at hand, and the particular context.

In recent years, more and more attention has also come to focus on *how* research is produced, which moves away from a focus on dissemination as the most effective way to connect research and practice. Increasingly, researchers and practitioners have sought to collaborate with each other throughout the research process, from coming up with research questions to interpreting their results. This approach — sometimes called coproduction — fosters direct relationships between researchers and practitioners, which promises to make their research more relevant, timely, and accessible as well as shortening the time it takes to put research into practice.

In education, this trend has often taken the form of research-practice partnerships (RPPs), which are growing in popularity (thanks in part to the work of the National Network of Education Research-Practice Partnerships; https://nnerpp.rice.edu). RPPs are designed to meet the specific needs identified by local practitioners, and early studies have shown that they positively influence both the production of research and its use (Coburn, Penuel, & Geil, 2013; Farrell et al., 2018; and see the article by Coburn, Penuel, & Farrell in this issue). Instead of attempting to produce findings that address national or even global issues, prioritizing the generalizability of findings, RPPs tend to focus on the localized, immediate, and overlapping problems that practitioners actually face every day. And the hope is that the more educators participate in such research, the more they'll strengthen their capacity to make sense of the results and use them to inform and improve their practice.

Overall, these emerging approaches amount to a shift from emphasizing the *research* side of the research-practice relationship to putting more of the focus on *practice*. And they represent a sea change in assumptions about the forms of research and evidence that "count" the most to practitioners and policy makers.

## We're not there yet

In recent years, a lot has been done to strengthen the relationship between educational research and practice, but we still have a long way to go. For example, most researchers and practitioners continue to live in separate professional worlds, having few opportunities to interact, few communication channels that work in both directions, and few incentives to collaborate with each other. Within RPPs, we've seen growing respect for the varied kinds of research, data, and evidence that can inform school and district improvement, but such openness to methodological diversity has yet to spread across the wider research community. Most important, we

still lack answers to a number of critical questions, such as: What does it mean to use research well in local contexts? What are the most effective mechanisms for communicating among researchers and practitioners? How can we best leverage brokers to strengthen the connections between research and practice? How and when does connecting research and practice actually lead to improved educational outcomes? And is it feasible to scale up RPPs and other promising models of collaboration?

The good news is that more and more people and institutions are paying attention to these issues, working to answer these questions, and strengthening their understanding of what it will take to link research and practice, for the benefit of K-12 education. No matter your place in the educational ecosystem — whether you're a teacher, administrator, researcher, policy maker, publisher, funder, or play some other role — you have an opportunity to contribute to the work. Some of us may be advocates, others capacity builders, leaders, or investors, but all of us can help strengthen the relationship between research and practice. ■

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