

Survey of Evidence in Education for Researchers (SEE-R) Technical/Descriptive Report

Executive Summary

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About the Center

The Center for Research Use in Education is an Institute for Education Sciences-funded knowledge utilization center focused on rethinking research for schools (R4S). Our mission is to expand the study of research use and produce a more holistic picture of what drives it, from the production of knowledge by researchers to the application of research in schools. We also seek to identify strategies that can make research more meaningful to classroom practice.

At our center, we believe that education research is an important part of the educational process. We further believe that rigorous evidence, whether qualitative or quantitative, can foster better opportunities and outcomes for children by empowering educators, families, and communities with additional knowledge to inform better decision–making. For this reason, we seek to support strong ties between research and practice.

To learn more about our center, visit www.research4schools.org or follow us on X at @rsrch4schls.

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Executive Summary

In the face of growing interest in using educational research to improve learning outcomes, there has been much more attention paid to the kinds of research that is produced and how it can be synthesized and applied in education settings. There has been a gulf between education researchers and education practitioners that has contributed to education research, and scholars have long argued that there needs to be more coordination between education research and the needs of practitioners (Bulterman–Bos, 2008). In this research study we sought to investigate the production of education research and how researchers made their findings relevant and accessible to practitioners.

We explored these questions in our cross-sectional study of researchers who are engaged in education research: 1) What kinds of research evidence did researchers produce in education research studies?, 2) Who do researchers engage as participants in different stages of the research process?, 3) How do researchers disseminate the findings of their research studies?, 4) How do researchers intend for their findings to be used in different stages of the decision-making process?, 5) What are researchers' perspectives and assumptions about research and how do they compare to those of practitioners?, 6) How do researchers connect with the community of educational practitioners?, 7) How confident are researchers in our sample about engaging with practitioners and connecting research and practice?, and 8) To what degree do researchers engage in research brokering activities?

We answer these questions using survey data from administration of the Survey of Evidence in Education for Researchers (SEE-R), including responses from 341 education researchers.

Conceptual Framework and Methods

Conceptual Framework

The Center for Research Use in Education (CRUE) investigates the conditions that increase the likelihood that practitioners can use research to inform their practice. The Center examines these conditions from the perspectives of both researchers and practitioners and adopts a framework that includes both perspectives, for research use cannot be framed only as a question of whether school-based practitioners do or do not use research (see Farley-Ripple et al., 2018). The types of research products that researchers disseminate, how those products are disseminated, and how much those products make connections to practice are some of the factors that can influence the likelihood that research is used.

The work of CRUE is guided by a conceptual framework that informs our research about the connections between the researcher and practitioners communities to better understand the conditions under which research can inform educational practice. Thus, our conceptual framework includes the perspectives and assumptions of both researchers and practitioners, and the more

that these perspectives and assumptions are aligned, the more we believe that it is possible for research to be used by practitioners. Our conceptual framework also outlines two constructs: Depth of Use and Depth of Production. We conceptualize Depth of Use as a construct that represents the multiple ways that practitioners can meaningfully interact with research in the educational decision-making process. Research can play a role in different stages in the process of school-based practitioners, from the initial search for information related to a decision to selecting an evidence-based strategy. The more that practitioners interact with and use research, the greater the Depth of Use. Similarly, Depth of Production is a concept related to how much researchers engage in activities that make their research relevant to practice and accessible to practitioners. We assume the perspective that a greater Depth of Production is important for research informing not only the scientific community but also the practitioner community.

Method

The items for the SEE-R survey were developed through an iterative process of ensuring that the items about producing research reflected the different aspects of the conceptual framework. Not only did the survey include items about how the researchers designed the research studies that produced the findings, but also items about researchers' perspectives and assumptions about research, their participation in networks, training and experiences in connecting with practitioners, and brokerage activities. Many of the survey items about perspectives and assumptions about research matched the items on the SEE-S to enable us to draw comparisons between responses by researchers and practitioners. The survey was refined through multiple rounds of testing (for details about item development and rounds of testing see Van Horne et al., 2024).

We recruited researchers for this study from academic departments of education, IES-funded researchers who had received research funding between 2012 and 2019, National Science Foundation-funded researchers who had received research funding between 2012 and 2019, researchers from Regional Education Laboratories, and a group of researchers in an augmentation sample. Our final sample included 341 respondents for a 31.6% response rate.

The following sections of this executive summary are organized in terms of our overarching research questions and the sub-questions that pertain to the dimensions of our conceptual framework. Each section presents primary findings as headers, followed by the supporting evidence underlying each claim. Each section will include the key takeaways, including implications. Finally, this summary will conclude with overarching conclusions that integrate findings from across the full study.

Findings

1. What kinds of research evidence did researchers produce in the research studies? We asked researchers to identify a research study that they had conducted and then to answer a series of items about the research methods, how the findings were produced through different analytical methods, and how the findings were disseminated. We found that researchers tended to leverage both quantitative and qualitative research methods or to only use quantitative research methods. The preponderance of quantitative research methods reflects that priorities that stakeholders have often placed on research that can, for example, compare the effectiveness of an educational intervention with a "business as usual" condition. An "impact evaluation of a program

or policy" was the most often cited methodological approach for the research studies. The research studies that the respondents cited also tended to be based on samples from a single school or district (or from a specific kind of locale) and also tended to involve analyses of individual, student-level data. The significance of this is that, often, education researchers are more often examining aspects of the educational process in localized environments rather than in multiple groups of populations simultaneously. Nationally-representative samples involve broader sampling techniques and may require considerable resources, so education researchers who are looking to conduct research in a school setting may be more likely to turn to the schools and districts in their local communities.

2. Who do researchers engage as participants in different stages of the research process?

The SEE-R research study included a section of items about how researchers collaborated with community stakeholders (both those in schools and school districts and other people from the broader community) to develop and carry out their research studies. Because our conceptual framework focuses on maximizing the alignment between researchers and the environments they may hope to inform with their research, it was vital to collect data about how researchers engage different kinds of stakeholders in the research process.

We found that researchers typically engaged school-based practitioners and district-level administrators in the research process while less often engaging members of the broader community (including funders). In terms of which stages of the research process involved collaboration, we found that researchers more often engaged school-based practitioners, for example, in "problem identification" and "conducting research." Similarly, when district-level administrators were participants in the research, researchers reported more often engaging with them in the "problem identification" stage. In general, we found that researchers did not as often engage with community stakeholders in the "reporting and disseminating results" stage as often as they did in stages related to identifying problems and conducting the research. This is significant because it suggests that researchers may be less often collaborating with stakeholders about how to effectively disseminate research or synthesize their findings for specific audiences. There is potential for democratizing the ways in which researchers identify problems and conduct research that can benefit school-based practitioners.

3. How do researchers disseminate the findings of their research studies? Part of our conceptual framework of research use includes how researchers disseminate research findings to relevant audiences that can make use of the research. However, we recognize that academic researchers do not only have an interest in producing actionable research but also in publishing findings in academic journals so that they can achieve promotion and tenure. It is unsurprising, then, that we found that researchers typically published their findings in academic journals and presented their findings at academic gatherings. Researchers also often reported sharing their findings at conferences targeted towards a practitioner audience. Also, researchers more often reported that their findings were intended to inform a national audience rather than a local one, so even though researchers conducted research with localized samples, they envision their work as being relevant to and having implications for a much larger audience.

The SEE-R also included items about how others could access the findings of the research study, and a majority of respondents indicated that the findings were accessible through a simple web search. However, researchers were less likely to report that their findings were available through intermediaries, such as professional organizations, publishers, or advocacy groups. The significance of this finding is that while members of the public can use web searches to find research, they may not be able to navigate a search interface to find a specific study that addresses an educational topic they want to research. Although intermediaries can synthesize research and help translate it for a practitioner audience, our work suggests that this type of knowledge translation can be expanded.

4. How do researchers intend for their findings to be used in different stages of the decision-making process?

Our conceptual framework emphasizes that research is more likely to be used when there is alignment between the research enterprise and the needs of school-based practitioners. Thus, the SEE-R included a series of items about how researchers intended for practitioners to use the findings of the research studies. The only stage that was selected by more than half of the researchers in our study was "Identify multiple potential strategies for addressing the problem." This suggests that practitioners are more often trying to access and use research when they need a new strategy or solution for a question or situation they need help with. Interestingly, a significant portion of researchers indicated that they perceived their research to have an "Other" use. These intended uses for the research findings included informing policy makers or contributing to methodological advances. Thus, while some researchers see their research as potentially benefiting the decision processes of school-based practitioners, others perceive a different audience for their research that is not specifically in the realm of the decisions that practitioners make in schools.

5. What are researchers' perspectives and assumptions about research and how do they compare with practitioners'?

The SEE-R survey included items to gather information about researchers' perspectives and assumptions about research. Many of these items were also used on the SEE-S, which enabled us to compare practitioner and researcher responses.

Researchers indicated that they produced research products for practitioners and overwhelmingly believed that these products should be easy to access and understand. We found that researchers tended to emphasize the importance of research products being easy to access even more than practitioners did, underscoring how much researchers believe it's important to make research products easy to find and easy to use. Still, researchers overwhelmingly perceive that publishing in peer-review journals is vital for a research study's trustworthiness. So even though researchers desire that the products of research be accessible and useable, they still value the imprimatur of the peer-review process. So it may be unsurprising, then, that we found that researchers generally believe that research is relevant to educational practice even though it is not produced quickly enough for practitioners to make use of it. Researchers, also, reported that it was important for them to make connections with practitioners. However, we found that researchers varied in how much they believed that their institutions support work that involves helping practitioners to integrate research into their practice. The results suggest that researchers feel a strong sense of

responsibility to actively connect with practitioners even though many researchers reported that their organizations do not allocate time for communicating with practitioners about their research.

- 6. How do researchers connect with the community of educational practitioners? The results suggest that researchers are strongly interested in connecting with practitioners and that they know how to do so. The results also suggest that researchers are more confident in knowing how to connect with practitioners than practitioners are in making connections with researchers. This finding complements our finding from the previous section about how researchers tended to feel that it was important for them to make connections with practitioners to help them use research. Researchers may need greater frequency of contact if they are collaborating with practitioners on research studies—after all, researchers generally reported using local samples for their research and so would need regular communication with practitioners for that process. Practitioners, also, may not require frequent contact with researchers if they regularly receive research through some kind of intermediary.
- 7. How confident are researchers in our sample about engaging with practitioners and connecting research and practice?

Researchers are generally confident in their ability to engage in knowledge-mobilization efforts. Researchers were especially confident in communicating with practitioners and with helping practitioners adapt research to their specific contexts. The dimension of knowledge mobilization that researchers were perhaps less confident about was their capacity to disseminate information, demonstrating some uncertainty about how to derive materials for practitioners that are based on research and where to place such materials where practitioners can locate and use them. We believe results like this one underscore the need for intermediaries whose primary focus is on connecting practitioners to research that they can readily adapt and use in their own practice.

8. To what degree do researchers in our sample engage in research brokerage activities?

Researchers in our sample often reported engaging in brokerage activities and were more likely to report sharing actual research products rather than analyses of school- or district-wide data. Because researchers are active in their respective research communities it is expected that they would share and have access to research more often than they would local reports based on analysis of school or district data. When sharing research, researchers reported often engaging in brokerage activities such as evaluating the quality of research prior to sharing it, and they most frequently reported activities related to dissemination of research rather than the development of practitioner-focused materials that could assist with the translation of research into practice. Compared with practitioners, researchers were more likely to report that sharing research with practitioners was an expectation in their current roles. The significance of this finding is that while researchers may emphasize the sharing of research products, there is potential for improving the variety of materials that researchers share that can enable practitioners to apply research findings to their practice.

Lessons Learned about Production of Research

This report investigated the ways in which researchers implement education research, how they disseminate their findings, and the perspectives and assumptions they hold about research. The report also, where it was possible, investigated how practitioners' activities or perceptions were similar to or different from those of practitioners who completed the SEE-S. Looking across the findings from SEE-R, we highlight some key lessons that emerge in this work.

Different types of research are necessary to support practitioners' needs.

One valuable finding pertains to the importance of generating different types of research that address different types of questions and delivers different types of answers. While impact evaluations and randomized controlled designs remain the 'gold standard' for evaluating effectiveness, practitioners also have questions about the feasibility of adopting new strategies in their own context. Education practitioners pose numerous inquiries about effective interventions that extend beyond mere effectiveness. Thus, while studies like randomized controlled trials are critical to advancing the science of education, it is paramount that researchers address questions related to implementation and also adopt frameworks that include the perspectives of communities that have a stake in the area of research (Chambers & Emmons, 2024). Practitioners tend to want to comprehend the intricacies of adopting an intervention, such as potential challenges, unforeseen complications, and the nuances of adverse effects when rolling out an implementation in schools. Qualitative studies, expert opinions, and surveys offer invaluable insights for those seeking to answer these and other questions about why interventions work in real-world contexts. In addition, specific research trials that determine the conditions necessary for effective adoption are essential to ensuring that practitioners can use evidence-based strategies in their contexts (Smith et al., 2020) Therefore, in agreement with Petticrew and Roberts (2003), we believe that diverse research questions are best addressed by distinct types of evidence and that prioritizing the relevance of the question being posed holds more significance than engaging in debates over the "best" method.

Research-production practices and conditions vary widely.

One of our key findings is that dissemination, communication, and brokering practices vary across education researchers. While this report does not explore the sources of the variability, our findings related to researchers' capacity development and organizational supports offer potential insights on how to improve practices in these areas. Across organizations, researchers reported that engaging with practitioners was expected of them, but we also found variability in conditions related to institutional structures, processes, and incentives available to researchers to support their efforts in connecting with practitioners. These varying organizational conditions likely contribute to the different practices of researchers (Jacobson et al., 2004). This suggests that research organizations need to go beyond a rhetorical commitment and take a leadership role in promoting research and practice connections. This may include making changes to promotion and tenure practices, resources and funding, structures, and policies and mandates to encourage and reward connections between research and practice communities (e.g., Frenk, 1992; Wingens, 1990). Relatedly, research organizations and other system-level actors (e.g., funders) can develop

capacity-building opportunities for researchers seeking to learn more about how to disseminate, communicate, and broker to and for education practitioners. Findings from this study suggest that professional development focused on how to disseminate research findings to practitioner audiences may be particularly helpful to education researchers.

Intermediary organizations offer a realistic means of addressing gaps between research and practice communities.

We note that the limited and infrequent direct interaction between research and practice documented here and in the *SEE-S* descriptive report (Farley-Ripple et al., 2022b) points to the potential of intermediary organizations to create, enhance, and support connections among schools, researchers, and other community partners to achieve research-use goals. These organizations have resources and skills for facilitating connections among diverse stakeholders, increasing awareness of the empirical evidence on a topic, increasing the accessibility of research by tailoring products, supporting research use in schools, and facilitating professional learning and skill development around knowledge mobilization and research use (Cooper, 2014; Neal et al., 2022; Rycroft-Smith, 2022). While we encourage researchers to personally engage in dissemination, communication, and brokering strategies to support the movement of their work into practice communities, we also recognize the limits of researchers' roles in this process. Reiterating our suggestion from the *SEE-S*, we believe that researchers would benefit from more information about how to engage the intermediary space to better communicate research and produce better informed research.

The study of the education research enterprise at scale presents opportunities and limitations.

Our findings are unique in that they shed light on the complexity of the research practices and conditions surrounding the U.S. research enterprise *at scale*. The findings offer a system-wide view of the structures and practices that encourage engagement between the research and practice communities. Our findings demonstrate widespread production of (certain types of) research evidence, and perceived rhetorical commitments to connecting with practice communities in many research organizations. They also highlight variability in practices and conditions, as well as an unequal distribution of capacity for mobilizing research findings, which, unchecked, will perpetuate the gap between research and practice and serve as a barrier to system-wide improvement. Our findings point to potential levels as well as opportunities for improvement, among them enabling connections to practice at research institutions, preparing researchers to mobilize research findings, and leveraging intermediary organizations to encourage research use.

However, it is important to acknowledge the limitations of this study. Firstly, our objectives were solely descriptive, and future steps involve exploring the connections between conditions and practices, as well as elucidating variations across research organizations. Secondly, our findings rely on self-reports, offering perspectives on research-production practices more than actual behaviors. Additionally, some items are based on recall, potentially compromising the accuracy of reports on decision processes. Thirdly, adopting a large-scale perspective sacrifices a nuanced understanding of how these practices and conditions manifest in real-world situations. Although we partially address this in our mixed-methods multiple-case study on the knowledge

mobilization practices of researchers (Farley-Ripple et al., 2022a), our ability to draw comparisons and conduct in-depth observations over extended periods is limited. Finally, nevertheless, the examination of research production in education is still limited (for examples of literature on this topic see Cooper et al., 2018; Fischman et al., 2018; Zuiker et al., 2018), making this contribution a valuable complement to other research in the field.

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