Building Capacity for Evidence-Informed Improvement: *Supporting State and Local Education Agencies*

Final Report

October 2022

State education agencies (SEAs) and local education agencies (LEAs) are critical levers for strengthening the educational system's capacity to generate and use evidence for continuous improvement. However, the work of evidence generation and use is not well-understood within these agencies, nor is there a strong understanding of how the larger educational ecosystem influences this aspect of agency work. This report summarizes two convenings with state and local agency research office leaders, organized by members of the broader education community to create a space to share and to learn about the evidence-related work of educational agencies. More than 60 participants joined these convenings to share perspectives on the factors that support the work as well as the challenges they face, offering recommendations for how the larger educational system can support and benefit from their efforts to generate, elevate and facilitate the use of evidence.

Organizers
Elizabeth Farley-Ripple, *University of Delaware*
Norma Ming, *San Francisco Unified School District*
Dan Goldhaber, *University of Washington & the American Institutes for Research*
Akisha Osei Sarfo, *Council of the Great City Schools*
Paula Arce-Trigatti, *National Network of Education Research Practice-Partnerships*

With thanks to Mia Seibold for her support hosting the convenings and producing this report.

Building capacity for evidence-informed improvement

Education can be a powerful vehicle for increasing economic opportunity and upward mobility. But the ability of the education system to serve students well depends fundamentally on making sound educational decisions and investments. Evidence often plays a role in educational decision-making, albeit not always in straightforward, easily-documentable ways (e.g., see Tseng and Coburn, 2019). At the same time, the recognized value of using evidence has increased significantly over the last two decades. Indeed, when Congress reauthorized the Elementary and Secondary Education Act as the Every Student Succeeds Act (ESSA) of 2015, it emphasized using evidence to justify educational decisions.

Evidence, of course, can take many forms, from randomized controlled trials to anecdotes about how teachers or students feel about a policy or practice. There are also clear differences in the ability to generate and draw causal conclusions from different types of evidence. Yet, while education agencies recognize there are clear standards for what constitutes statistical significance and causal inference, the statisticians' standard of research evidence is often not a standard for practical significance that is appropriate to use when faced with a decision. Moreover, it is arguably not a standard that is often met in practice given costs associated with evidence generation and use (Conaway, 2020; Conaway and Goldhaber, 2020; Ming & Goldenberg, 2021). Education agencies find that all forms of evidence can be valuable and rely on the best available evidence when making empirically-based decisions, thus, the fundamental question is: how do we improve the generation and use of research evidence and elevate its role amongst the myriad issues that factor into debates about policy and practice?

Before we get into this issue it is useful to be more precise about what we mean as terms like *evidence* and *research* often get used interchangeably and the distinction between these terms is often a subject of debate. In what follows, we define "research evidence" as evidence that is generated from "the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (a definition consistent with what has been used in federal law) and use the term "evidence" alone to constitute broader forms of information gathering about programs or policies.[1]

The importance of educational agencies

Scholars and advocates have noted the important roles that state education agencies (SEAs) and local education agencies (LEAs) play in strengthening the educational system's capacity to

[1] See Tseng (2012) for more discussion about the use of these terms.

generate and use evidence for continuous improvement. These can include, for instance, creating clear lists of evidence-based interventions; building local capacity to find, evaluate, and use research to support improvement planning and implementation; building data and other systems that enable stakeholders' use of evidence; and generating local evidence (including via collaborative research with partners) (Yoshizawa, 2021; Kochanek, et al, 2015; Results for America, 2017; Goertz, et al, 2013; Shewchuk & Farley-Ripple, 2020; Conaway, et al, 2015; Data Quality Campaign, 2016; Farley-Ripple, et al, 2017).

SEAs and LEAs have varying appetites and capacities for this work. In some school districts and states there are explicit commitments to generating and using evidence, because the agency has either a specific unit tasked with those activities (e.g. a research office (RO)) or individuals whose job responsibilities focus on evidence building. But the role of evidence generation and use within these agencies is not well understood, nor is there a strong understanding of how the larger educational ecosystem influences this aspect of agency work. Further, ROs exist in only a small percentage of districts, generally larger and urban districts, and there is similar variation in capacity at the SEA level. Yet, even in agencies that do not have an RO or personnel responsible for evidence generation and use, there will still be calls to bring research and other forms of evidence to bear in decision-making. Thus, while some of the issues that we discuss are centered on the role of ROs, the underlying issues that arise when considering how to generate, elevate or facilitate the use of evidence cut across all school districts and states.

Why now?

There are at least two reasons why considering the role of educational agencies in making decisions is especially important at this time.

First, the recent National Academies of Science, Engineering, and Medicine report (2022) commissioned by the Institute of Education Sciences (IES) to advise on the future of education research calls for greater attention in national research priorities to supporting the needs of, collaborating with, and mobilizing knowledge within LEAs. The development of this report served as a backdrop for several other conversations within the education community. For example, in August 2021, motivated by the opportunity to offer feedback to IES about the directions for its next 20 years, Carrie Conaway (Harvard University) wrote a blog post about funding research that is *useful* and *used*. Cara Jackson (Abt Associates) then tweeted out a poll based on those ideas, where the most voted-upon recommendation was to fund researchers embedded in educational agencies. Still yet, a small group of individuals began a social media dialogue about the use of research by school districts and through those discussions two provocative ideas emerged: the idea that accountability functions can *hijack* the resources inside a research office in an education agency, and the idea that partnering with external researchers and evaluators can *cannibalize* the limited time, energy and resources for those internal research offices to do their work. These conversations crystallize a tension for the field. We have a backdrop of demand for evidence use in educational agencies coupled with significant challenges faced in generating and using evidence.

The convenings

In order to develop a deeper understanding of how to support the generation and use of evidence in educational agencies, we invited current and former staff at state and district agency research offices to share their experiences. Given their proximity to practice and policy decisions, these research offices are poised to have a large influence in how and what types of evidence get taken up in their respective organizations. But, as noted above, little is known about how best to leverage this potential, including how to staff these departments, what responsibilities they should (or should not) take on, and how to enhance their work.[2]

On March 3, 2022, we hosted a convening of education agency research office leaders to hear from them about their work and what is needed to fully leverage their contribution to evidence-informed improvement across the education system. It was attended by 44 individuals with diverse backgrounds: 30 represented school districts, 3 came from state departments of education, and the rest of the participants came from research institutions, university affiliated organizations, and other independent agencies, many of whom had prior roles in research offices in SEAs or LEAs and were invited to contribute from this perspective. This group represented a range of roles and careers, with the most common job titles being Senior Researcher, Senior Associate, Senior Data Strategist, Senior Director of Research & Evaluation, Senior lecturer, Senior Research Associate, Senior Researcher, and Senior Executive Director of Data, Assessment, and Accountability. These participants were in varying stages of their careers with individuals being in their positions ranging from 30 days to 25 years and at their organizations ranging from 1.5 months to 28 years.

On June 10, 2022, we hosted a follow-up convening with 41 stakeholders, including many of those that attended the first convening, as well as external stakeholders representing federal and philanthropic funders, non-profits, Regional Educational Laboratories, higher education

[2] Importantly, we recognize that ROs are not the sole place from which evidence emerges in SEAs or LEAs, and that agencies vary in how they organize and develop evidence-related work. At the same time, staff in these offices are intentional and identifiable in their roles of producing and driving the use of evidence as well as a helpful starting point for opening up a conversation about supporting internal capacity for evidence generation and use.

institutions, and policy advocacy organizations. During this conversation, we discussed a draft of this report and discussed key questions that would strengthen its content and impact:

1. How can research offices and staff, as well as education agencies, better organize and coordinate evidence production and use?
2. In what ways can SEAs or LEAs collaborate or coordinate work to enhance capacity for evidence production or use?
3. What current initiatives and supports exist to support the evidence use and production activities of districts? How can we ensure access to these resources, particularly for agencies with the greatest need for additional capacity?
4. What else might external organizations, networks, and governing bodies do to strengthen and support the work of education agency research staff?
5. How do agencies without designated offices or staff manage demands for the production and use of evidence? To what extent do the ideas captured here fit with their needs and goals?

About this report

This report is an *initial step* in elevating the voices of those tasked with leading the generation and use of evidence, to be shared with a broader set of stakeholders – representing policy, practice, and research – with the intent to inform systemwide efforts to address the challenges and needs that surfaced during the conversation. We recognize there are missing voices from the conversation - for example, those responsible for evidence generation and use outside of designated ROs as well as districts that do not have ROs. Our hope is that iterations of this conversation continue with additional representatives in these spaces in the future.

That said, our goal was to build knowledge with the intention of sharing it not only among those that attended, but with others across the educational system, and to develop an understanding of how research offices collectively and other organizations can support this work and these activities.

The report is organized as follows. First, we introduce the work of research offices as background to understanding the outcomes of the conversation on March 3 (*What does the work look like?)*. Second, we summarize conversations about the *strengths, weaknesses, opportunities, and threats* which research office staff reported, organized by the parts of the education system that shape their work (*What shapes the work?)*. Third, we conclude with *preliminary* recommendations for and lingering questions about better supporting education agency research offices, informed by the conversation with a broader set of educational stakeholders on June 10 (*How can we support the work?)*.

What does the work look like?

We first describe a few key aspects of the evidence-related work of research offices and research staff in LEAs and SEAs. These descriptions of course do not address all aspects of their work and may not apply to all agencies. Nonetheless, we intend this as a high-level overview to orient those who may not be familiar with the evidence-work of these individuals and offices.

Accountability reporting

Much of the accountability work of internal research offices focuses on compliance with state and federal (ESSA) accountability reporting requirements including the tracking of student academic performance as measured through assessments, attendance, discipline or graduation rates as well as completing mandated surveys. Some districts may also develop and track local accountability measures, likely tied to school or even teacher performance, or help monitor and track performance related to their district's strategic plan goals. Yet, accountability work within these offices can also extend to cover ad-hoc data reporting for other district departments or school board members, or responding to public records requests and media inquiries.

While accountability work is centered around state and federal reporting requirements, accountability leads often assist with evaluating related programming and summarizing results to report out to both internal and community stakeholders. These reports or presentations help inform stakeholders of the progress students are making towards accountability related goals and help guide district or school programming or strategies targeted towards reaching these goals.

With COVID-19, district offices have seen an increase in reporting requirements. For example, data collection requirements under ESSER (Elementary and Secondary School Emergency Relief), which are designed to create a national database on district level expenditures and district level staffing, are estimated to cost districts 2 million hours of new data collection, increasing school district burden from 5 to 140 hours to complete (Council of the Great City Schools, 2022). With decreasing capacity and limited resources, increases in accountability and data reporting requirements have stretched internal research offices' abilities to be responsive.

Local evaluation and analyses

Before and beyond reporting summarized data to external governing bodies, local and state education agencies also engage in additional analysis and research to inform internal decision-making. This ranges from analyzing existing data or research evidence to seeking out additional data and research for further insights or to provide local evidence.

Analyses of existing data can include descriptive summaries of data beyond what was required for mandatory reporting, possibly through additional metrics, time points, or disaggregations. For example, schools and districts may be interested in exploring course grades using different calculations for grade point average or at different thresholds (C's and above vs. passing), or in examining attendance over shorter time intervals (class period vs. full-day; six-week cycle vs. semester or year). Disaggregations could also entail closer examinations of various student subgroups, requiring different definitions of race and ethnicity, or intersections of race/ethnicity with socioeconomic status, or of English proficiency with home language.

Further analyses can zoom in to the individual or zoom out to broader aggregate patterns. Individual-level analyses involve identifying specific students or schools meeting pre-defined criteria for providing differentiated services (e.g., readiness or on-track indicators; school funding tiers). Descriptive analyses include longitudinal trends and time series; cross-sectional comparisons across school sites; or statistical identification of unusual patterns and outliers. Correlational analyses examine relationships between outcomes (e.g., socioemotional learning and academics) or between inputs (e.g., teacher characteristics, school funding) and outcomes (e.g., school climate, academic performance). Predictive analyses include modeling student growth on academic and other outcomes based on various inputs, constructing leading indicators and their thresholds for differentiating tiers of supports, or proposing potential improvement targets.

Beyond mandatory data collection and reporting, local education agencies may also seek to gather information from additional measures, such as district-level interim assessments or surveys of students, families, and staff. Evaluating specific programs and policies can motivate more narrowly targeted data collection, potentially including observations, interviews, and focus groups. Data collection for evaluations is often guided by prior collaboration in articulating the program logic model or theory of action, identifying measures aligned to that theory, developing instruments and measures, and planning the evaluation design along with a sensible sampling strategy. All of this requires coordination and management of various administration processes.[3]

---

[3] This can include administering assessments and surveys, as well as organizing the databases, maintaining codebooks with data definitions, coordinating and linking data across different systems, creating reports or dashboards to visualize the data, and supporting staff in interpreting these data.

External research partnerships

Research staff or offices at educational agencies may also seek to enhance the research capacity of the agency through engagement with external (to the agency) researchers at universities, research institutions, independent consultants, and/or non-profit agencies. In some cases, agency-external researcher relationships may take the form of a research-practice partnership (RPP), which typically involves a long-term relationship between research and practice institutions that collaboratively identify and jointly work on high priority research-based challenges from the world of education practice. In other cases, the relationship may take on the form of a consultant-client agreement in which the external research entity is contracted to complete a specified project(s) under a more transactional than relational arrangement.

A growing number of external research partnerships in LEAs and SEAs are characterized as RPPs. There is a great deal of variation in how RPPs are structured, in who is represented in the core partnership team, and in the types of research and research-based activities that are undertaken (Farrell, et al., 2021; Arce-Trigatti, Chukhray, and López Turley, 2018). For example, some RPPs may conduct programmatic evaluations of agency-led implementation, while other RPPs may work closely with the agency to conduct exploratory analyses that might inform broader policy decisions. Some education agencies may be able to support multiple RPP-based projects while other agencies may wish to focus on a singular one. Related, some agencies may also have multiple RPPs associated with their organization, and as such, may work with several external organizations on various projects. Other RPPs may consist of one practice-facing agency and one research-based agency.

A key feature of partnership work is that *it is done in collaboration* with the agencies that are focused on the connection between research and practice. In theory, this is critical to producing the kinds of research or research-based products that will be of great value. But this also requires careful facilitation and navigation, as there may be different timelines, incentives, and political contexts that may meaningfully impact how the collaboration plays out. The building of trust across partners is very important as is the development of a shared vision for working with external partners.

A partnership broker, intermediary, or boundary spanner (i.e., one that works at and across the boundaries of education research and practice) can be especially helpful in supporting this kind of joint work given their ability to translate and connect as needed. Research staff in education agencies are particularly well-suited for this kind of role given their expertise of both research and practice.

Brokering and facilitating use of evidence

As suggested above, a key role for research staff is as knowledge broker, which includes a wide range of activities such as leading, conducting, and reporting research to less visible tasks associated with negotiating internal and external politics around using the results of research and evaluation (Neal, et al., 2021; Rycroft-Smith, 2022; Shewchuk & Farley-Ripple, 2020). Other tasks may include finding or conducting reviews of relevant external research, whether to provide insights on effective practices to consider, or to offer benchmarks for comparison with other education agencies.

Research staff are often involved in building the agency's capacity for evidence generation and use. This can include work that focuses on developing the research and data literacy of school and district staff as well as other stakeholders, through professional learning, workshops, or other forms of technical assistance. Capacity-building also includes developing systems and processes that facilitate the generation and use of evidence - including developing research agendas, strengthening data systems, creating legal agreements for data sharing, and developing routines to ensure that programs are evaluated and that the evidence is used to guide decisions. These outcomes are important enabling conditions for other aspects of the evidence use work of LEAs and SEAs.

Another component of knowledge broker work among research staff entails facilitating and negotiating evidence use. This means not merely generating evidence described above (e.g. accountability reporting, evaluation, external research), but also helping stakeholders to understand its meaning, its relevance to local needs and issues, and its implications for policies and practices. Through this work, research staff can help agency staff to develop more meaningful questions about the evidence they need, help them to better understand the value of evidence and their work (and also demand for it), and ensure appropriate use of that evidence in making decisions that support teaching and learning. Facilitating use requires that research staff navigate the politics of education: understanding when and how to communicate evidence that is "bad news" or doesn't fit with current priorities, managing power dynamics within the central office and between internal and external partners, and understanding policy windows for driving evidence-informed change. These roles demand deep knowledge of the organization and local context.

At the core of this work is building and maintaining relationships with both internal and external stakeholders. Whether conducting local evaluations, building partnerships with external researchers, or reporting to the school board, research staff need to develop strong and trusting relationships. Relationships are important for accessing relevant information, from finding external research to inform local work to learning about initiatives in other units or departments. In turn, strong relationships enable the research office or staff to be a source of information and support to others, which facilitates their capacity building and evidence use work. Relationships with internal (e.g. district leadership, other departments) and external (e.g. community members, researchers, vendors, state/federal agencies, other networks) individuals and organizations enable collaborative work that helps develop and achieve the agency's evidence objectives.

Collaborative work is likely to be particularly important for smaller LEAs. This is both because smaller LEAs will have more limited numbers to work with (in terms of sample sizes of teachers and students) when trying to draw inferences, and because they may lack financial support or research capacity. This suggests the importance of cooperation between smaller LEAs and a key coordination role of SEAs.

What shapes the work?

At the heart of the March 3rd convening were small group conversations in which participants engaged in a strengths-weaknesses-opportunities-threats (SWOT) analysis of their work. Participants self-selected into groups with different starting points - external partnerships, local evaluation, assessment and accountability reporting, and a fourth group that was open to all - but were not limited to talking about those issues, and were encouraged to discuss and post to a jamboard to share their ideas. We synthesized these remarks and summarized them here as strengths and challenges, organized by the multiple levels of the education system that influence their work.

Education Agency Research Offices and Staff

Within education agencies, the primary responsibilities for facilitating the generation and use of evidence may be concentrated within an internal research office or distributed across personnel who also hold other responsibilities. Here we describe the strengths and challenges they report facing due to their positionality of working within the agency, whether in a dedicated research office or in other offices.

Strengths include relationships with key decision-makers, local knowledge of context, and access to data. Close relationships with agency leaders facilitate timely access to sometimes-sensitive knowledge as well as opportunities to influence decisions, not just during narrow policy windows but also across multiple leaders in a range of formal and informal decision-making spaces. These relationships may build on a foundation of awareness of the kinds of evidence which specific individuals are likely to understand and appreciate, as well as their prior knowledge, beliefs, and values. Such relationships enable gathering valuable information for generating more useful evidence in response to agency needs, as well as brokering better use of data and evidence.

Access to knowledge and data arises both from interpersonal relationships and from institutional embedding. Local knowledge may encompass factual details about implementation, relevant history and context, and related initiatives, as well as familiarity with norms, values, and the culture of the agency and community. Due to institutional barriers to protect security and privacy, data access is much easier from within the agency than through external data-sharing agreements, resulting in access to sensitive fields or levels of disaggregation which are not available to outside partners.

Potential strengths in future opportunities range from making better use of available internal and external resources, to engaging in the work more strategically. Some possible adaptations to the work address data management and analysis, such as improving processes and systems for organizing and sharing data, analyzing existing longitudinal data, using data to reveal current conditions, conducting more timely and actionable analyses, planning evaluations before the work begins, applying continuous improvement methods, and studying implementation before impact. Other opportunities focus on relationships, such as strengthening connections with decision-makers, expanding participatory approaches to reach a broader range of interest holders, and developing more proactive partnerships, whether with those who seek data or with those who seek change. Additional opportunities for capitalizing on external resources to build capacity within the organization include pursuing training in evaluation methods, partnering with outside researchers to develop new skills, taking on interns or research fellows, and rebuilding internal research and data teams.

Challenges include weaknesses internal to the structures and resources for research offices and research staff, as well as external threats coming from elsewhere in the agency or beyond. Internal weaknesses include political vulnerability resulting from within-agency positionality, as well as a range of constraints associated with limited resources and capacity for education agencies to engage with data and evidence. Political vulnerability complicates sharing both unfavorable and favorable findings, with agency staff being hindered from presenting unfavorable results or encountering distrust by outside audiences when presenting favorable results.

Resource and capacity limitations emerge at both the institutional and individual levels. The limited resources in local education agencies are typically prioritized for directly serving students and schools, with minimal allocations for research and data infrastructure. Agency research staff thus may lack access to academic libraries, institutional review boards, survey platforms, grant support, funding to support data collection, and graphic design and dissemination resources. Further, agencies may be unable to invest either in the technical systems for robust data, knowledge management, and project management systems, or in the staff and training required to maintain these systems and ensure consistent practices for their use. Of the small number of staff with research skills, the need to address a wide range of education issues demands them to become generalists rather than maintaining up-to-date methodological or content expertise. Small team sizes also limit opportunities for advancement, which may lead talented staff to go elsewhere for further career development. With upper management positions potentially requiring board approval amidst politically uncertain environments, research staff may prefer the stability and leadership opportunities in other organizations. The additional managerial and political demands associated with these positions may also be unappealing to research staff who feel that those expectations compromise their time or freedom to conduct rigorous analysis and maintain their connections to the research community.

External challenges include unreliable resources, staff turnover, competing demands, and unrealistic expectations. Budget cuts and dependence on soft money pose challenges to stability. Such reduced resources, along with political fluctuations in governing leadership, may hasten staff turnover. Competing demands on limited time and resources arise from tensions in responding to multiple interest holders, multiple purposes for data, and shifting priorities. In addition to managing other responsibilities, internal agency research staff may be asked to provide data and analyses for other departments, board officials, external funders, public records requests, and media inquiries. Tensions arise between using data for internal improvement and releasing data for public accountability, especially when high-visibility requests are both urgent and unexpected. Given limited capacity, such requests may displace conducting and sharing other analyses which may have greater potential for informing improvement of policy and practice. Finally, unrealistic expectations for data emerge when interest holders demand immediate results, when the desired outcomes are not aligned with program activities or locus of control, or when political agendas become embedded in the requested analyses.

Education Agencies More Broadly

Research offices or staff exist within larger agencies with broad goals and responsibilities for educational opportunities and outcomes of the communities they serve. These contexts are an important and influential backdrop to the evidence work of these individuals. Below, we share participants' perspectives on how their larger agency shapes their work.

Among the **strengths** that agencies afford is their continued use of locally relevant data, research, and evaluation in decision-making. Agencies' interest in data and research has increased tremendously with the pandemic in terms of their need to understand the impact of COVID on student learning, to determine where to allocate additional funding received due to the pandemic, to identify students who need additional supports due to unfinished learning, and their desire to understand the impact of pandemic-related instructional strategies intended to accelerate learning missed during the pandemic.

At the same time, there are various ways that agencies pose **challenges** for the evidence work of research offices and staff. Agency leadership may not fully understand that the role of research offices in agencies has expanded outside of typical data or research requests to include producing reports to help inform stakeholders on how students have experienced learning throughout the pandemic; measuring students' unfinished learning; and developing evidence-based plans to recover student learning, among other things. Meeting these demands and requests has become even more challenging over the last couple of years, particularly with education becoming a battleground in an increasingly political climate and among families' growing dissatisfaction and anxieties about their children's schooling during the pandemic. Yet, education agencies may lessen the opportunity for the production and use of evidence from research offices through a weak data culture, poor communication with public stakeholders about how to interpret data in published reports, misalignment of research and evaluation timelines with district budget and policy decision making, inconsistent coordination between departments about anticipated data requests, and understaffed research departments. Faced with urgent needs to staff schools, districts may deprioritize hiring for research departments and other central offices. Staffing policies developed for other education agency roles also may not align with the standards of the field for education researchers, making it more difficult to attract and retain staff with research skills within education agencies.

These agencies have opportunities to develop and promote a positive and strong data culture among their staff and in the community, which is critical for research offices to leverage the production and use of data and research. Strong data cultures that properly invest in and support the brokering and use of evidence are built on a sound understanding of the work of research offices and allow time and flexibility for research offices to work strategically. Investing in and developing strong data cultures within education agencies and their communities can also reduce the misuse or misunderstanding of data and research in decision making and in public discourse. This is also important for protecting the time and energy of research staff, for whom spurious data requests may become a source of frustration or otherwise “hijack” their capacities away from longer-term analytical projects.

Another challenge of education agencies is the need to align work and timelines as well as a lack of stakeholder buy-in to research processes. Oftentimes, the work of internal research offices does not align with the work of collaborating departments, where they are not included in the development of theories of action and useful or sensible logic models, in clearly defining what is being evaluated, and setting overall expectations for research and evaluation products. Involvement in these early conversations is critical to supporting proper program development and implementation and allows programs to be set up properly for evaluation. Data collection and research processes also require buy-in from all stakeholders, both at the leadership level and throughout the agency. Not only does buy-in from stakeholders support sufficient data collection, it builds capacity for data use in classrooms and schools and allows for the best use of evidence throughout the agency. While research offices may need to work independently to complete some research and evaluation processes, they truly benefit from coordinated and collaborative efforts across districts to collect and share evidence. Finally, the work of internal research offices often does not align with or lacks coordination between producing research or evaluation reports and making policy decisions. Ensuring alignment of timelines allows for budget and policy decisions to be grounded in evidence.

The work of internal research offices is often driven by agency leadership and governance. Leadership tends to have their own philosophies around data and that shifts with changes in leadership. Changes in board policies or agencies with other governing priorities may also add or change requirements or requests around data collection and reporting.

Agencies sometimes bring in external research partners to add capacity and talent to research offices or when there is mistrust among internal research offices. While external research partners may prove beneficial, their inclusion often requires additional management work and data collecting for research offices and can also diminish the hard work and capabilities of internal research staff.

External governing bodies

The conversation among participants sometimes reflected the ways in which external governing bodies can indirectly influence the work of research offices and staff in LEAs and SEAs.

One way external governance may **strengthen** their work is through ESSER funding, which became available to SEAs and LEAs in 2020 to assist in addressing the needs of students and communities during and after the COVID-19 pandemic. As noted above, the need for academic recovery and ESSER requirements themselves have the potential to increase demand for rigorous evidence as SEAs and LEAs look to strategically target resources to improve student learning. Funds can also be used to build a research office or research team's much-needed capacity as demand for evidence grows. Last, ESSER increases the visibility of the research office by drawing attention to evaluation and reporting needs and contributions to the work of the system.

An ongoing **challenge** for the work of research staff and research offices is shifting accountability requirements. Changes to test policies, optional testing initiatives, changing or removing graduation requirements all demand shifts in the data, accountability, and evaluation work, which strains already-thin resources and draws attention away from the strategic work of research staff. Additionally, accountability policies emphasize student outcomes and teacher qualifications and less often systems and practices. This emphasis can narrow LEA and SEA priorities and limits the potential contributions of research offices to instructional improvement. Last, limited focus on accountability for good business practices can lead to organizational conditions which make it difficult to leverage the potential of research offices or to generate and use evidence in improvement efforts.

External research partners

Working with external research partners is often an important part of generating and using evidence in educational agencies. While there are several benefits to these partnerships, they can also create additional challenges for staff.

Among the **strengths** of partnering with external researchers is the possibility and potential for enhancing or extending the research capacity of the education agency. These capacities include resources such as time, skills, or expertise that either may not be available at the agency or may be available but in limited capacity due to other competing demands (e.g., accountability reporting). Additionally, there is an opportunity to engage in a variety of novel activities when working with an external partner, including modifying the research question generation process, utilizing new methods to investigate research questions, learning from others, and connecting to and with a broader research community beyond the agency walls. The potential for political cover afforded by externally produced research, especially due to the perceived independence of such research, is also an important strength.

Related, there are also several opportunities and benefits to structuring research efforts in this way. For example, in terms of the individual benefits, partnering with external researchers may help to change one's own perspective of a problem of practice, may validate different kinds of expertise with respect to addressing a practice priority, may afford various training opportunities on both the research and practice sides, and may offer intellectual stimulation. At the organizational level, partnering with external researchers may strengthen the connection between research and practice, a relationship that has historically had its own difficulties. And finally, the research itself may benefit, through the production of higher quality research that is informed by both research and practice, through more cost-effective approaches, and through the identification and development of new questions.

Despite the numerous potential benefits associated with external partnering, there are a number of **challenges** that influence the facility of adopting this type of approach. For example, the management of external partnerships tends to come with its own set of challenges, including (but not limited to) relationship management, unanticipated time demands, lack of institutional knowledge of the education agency, friction due to unfamiliarity or differing norms of communication, and so on. For example, working with external partners requires considerable additional responsibilities in the form of securing approval of contracts, setting up legal agreements (e.g., MOUs), preparing and sharing data, and even scheduling meetings across institutions. Moreover, launching an externally-partnered research project in partnerships presents a particular set of challenges that may derive from a mismatch between research needs and expertise, a misalignment between academic and practice incentives, substantially different timelines guiding the work of research and practice, as well as the political realities of practice-facing settings, which may be prohibitive. Additionally, there may also be externally-partnered research that is not necessarily attuned to the needs or practice, such as the program evaluations required by philanthropic funders, external research grants with inflexible demands, and national survey studies that aren't intended to inform a particular local agency's policies and that are not usually helpful for improvement.

There are also some inherent features of collaborative research approaches that are challenging, such as the lack of stable funding for many external partnerships, the lengthy time required to build truly meaningful relationships, and the negotiation of political dynamics between partners (e.g., the hiding of unfavorable results or the forging ahead of publishing these), which can be tricky. Finally, there may be systemic factors that threaten this approach, including the existence of White privilege in academia, the upholding of harmful and imbalanced power dynamics between research and practice partners, limited budgets that can constrain an agency's ability to fully leverage external partnerships, and turnover on both the research and practice sides.

Other research organizations and intermediaries

Other research organizations and educational intermediaries - outside of formal partners - can shape the work of research staff in LEAs and SEAs.

One of the **strengths** which research staff bring to their work is their professional networks which often include these organizations. These include membership in professional associations, relationships with other government agencies, and other networks (e.g. Council of the Great City Schools, National Network of Education Research-Practice Partnerships) to which they belong. Additionally, they also often have informal relationships with members of the larger educational system, including researchers and policymakers, from their current and prior professional roles. Together, these networks offer valuable resources - such as knowledge, additional capacity, and social capital - that help research staff navigate and succeed in their evidence use work. However, networks or professional communities of research offices or staff are smaller or less established, which can mean that for some agencies, research staff are isolated and reliant on the knowledge and resources within their own context. For them, building connections through networks of researchers may help fill this gap.

On the other hand, **challenges** pertaining to other organizations and intermediaries were noted. First, as research offices seek to build their capacity, they compete with these other organizations for talent, often losing due to better pay and working conditions. Further, there are challenges associated with building and leveraging relationships with these other organizations. Additionally, there may be few resources within education agencies - whether staff, time, or financial resources - to dedicate to building relationships or partnering with other organizations in ways that leverage shared resources.

How can we better support the work?

Within the SWOT conversations, participants also shared what different stakeholders in the system could do to support their work in promoting the generation and use of evidence in their organization. Their initial ideas are a useful starting point for an agenda to enhance the system's capacity for evidence-informed improvement.

Education agency research offices and staff

We make a number of suggestions for internal agency research office staff to build on the above strengths and opportunities and to address weaknesses and threats. Our specific recommendations span five themes: strengthening internal agency relationships, engaging in strategic work, improving data collection and use, building team capacity, and leveraging external partnerships.

1. **Within-agency relationships:** Starting with the general principle of ensuring that practitioners and leaders are actively involved in research and evaluation, strengthening relationships within the agency addresses questions of “with whom” and “how”. Issues of “with whom” include forging relationships with less-connected departments and schools, as well as advocating for more coherence and less “siloing” between divisions. Collaborating with the fund development office early in the process of seeking external grants also strengthens connections to staff who can facilitate greater evidence use. However, research offices must build these relationships while also maintaining independence from other departments, in order to protect the neutrality of their evaluations and reporting. Examples of “how” to build relationships include conversations and co-development. Conversations with leaders asking them how they used previous analyses before conducting new analyses raises expectations for using evidence, not just producing evidence, and may also help shape analyses to be more useful. Other conversations include sharing updates on the range of research projects and data collection activities taking place, in order to prioritize and plan sampling strategies carefully among them. Co-development may occur prior to starting work, such as collaboratively building research agendas with department leaders each spring to prioritize and plan projects for the following academic year. This also includes jointly creating logic models, rubrics, and clear expectations for deliverables and timelines to guide the data collection, analysis, and reporting. Co-development may also occur at the conclusion of a project, where research staff and practitioners jointly plan and facilitate organizational learning opportunities to share research and evaluation findings with broader audiences to formulate actions based on the evidence.

2. **Strategic work:** Working more strategically addresses how to anticipate as well as how to triage and adapt to requests involving data and evidence, whether by decreasing, increasing, or otherwise improving specific activities. To anticipate requests, discussing how research may be useful can guide the search for evidence prior to implementation, as well as the data collection plan during implementation. Reframing evidence more broadly than just research or data may also help illuminate the role of research staff in informing organizational decision-making. Triage may translate into meeting minimum reporting and compliance

obligations but declining other requests for technical assistance outside of research and evaluation, through engaging in difficult conversations with colleagues about which analyses would yield the greatest impact on decisions. Research offices also have the opportunity to learn to be more forward thinking and work more strategically to anticipate common research or data requests and to build their internal capacity to adhere to the increasing requests. A related recommendation is to develop a menu of standardized services to reduce customized reporting and analysis. In conjunction, research staff should simultaneously invest more effort in turning data into useful information and in conducting analyses that will inform high-leverage decisions. Another strategy may be to identify the kinds of data-related activities that can and should be done by other offices in the agency, and to support them in building their capacity to gather and use evidence thoughtfully.

3. **Data collection and use:** Improving data collection and use encompasses strategies to facilitate data collection, analyzing existing data, and creating tools to support the interpretation of data. Tools for efficient informal data collection may include survey instrument templates with fields that facilitate linking records and disaggregating information according to standard reporting categories. Another possibility is to provide examples of embedded measures that can be readily integrated into regular practice, to allow scraping and analyzing the data later. Other recommendations include conducting more longitudinal rather than just cross-sectional analyses of available data, and sharing data conversation protocols for practitioners and leaders to use when discussing data interpretations and implications.

4. **Team capacity**: Building team capacity addresses hiring as well as on-the-job professional learning and collaboration opportunities. Research staff need to be creative, critical thinkers with a strong background in research methods, statistics, and evaluation. Since salaries in education agencies are not particularly competitive with other industries seeking similarly qualified people, creating attractive work conditions requires providing the right balance of guidance, support, and independence for them to thrive. Professional learning may include training in additional research and evaluation methods from external sources, as well as immersing junior team members in the work of schools and other departments to better understand their perspectives, experiences, and needs. Given the often solitary nature of data and analysis work, providing the team with opportunities to collaborate and learn together builds collegiality and collective efficacy, in addition to strengthening the validity and robustness of the work.

5. **External partnerships:** Finally, leveraging external partnerships combines setting clear expectations with collaborating strategically. Before bringing in external research partners, agency staff should consult with their internal research colleagues to weigh the tradeoffs

between the independence and extra capacity of an outside partner, and the longer timelines, reduced flexibility, increased inefficiencies, and opportunity costs associated with external partnerships. Setting expectations include establishing boundaries for sharing data and for interacting with other district and school staff, along with establishing norms that any access to data (primary or secondary) comes with the expectation of returning useful information gained from those data. Those norms may specify expectations for how and when to provide periodic updates, as well as formats for reports and other deliverables. Partnering strategically with outside researchers allows agency staff to learn from them while balancing responsibilities to avoid redundancy and maximize complementarity of efforts. Other opportunities for partnering include sharing lessons with research staff in other agencies, such as strategies for prioritizing across the range of demands or other practical tools. Strategies for managing research requests may include asking departments to conclude certain research projects before initiating new projects, closing projects which have not provided the expected deliverables, tracking the impact of research projects on instructional time or educators' work time, and normalizing saying "no" to projects which are not worth the investment.

Others within education agencies

Agencies can advance the work of research offices and staff by continuing to build and strengthen the culture around evidence production and use. This will require an investment not only in people working in research departments but also in gaining knowledge around the work of research departments and the value of internal and external research. It also includes protecting research staff, their work and participation in data collection and analysis efforts through the development of policies and practices that support the production of research and evaluation throughout the agency. Having stable agency leadership can make the work of research offices less challenging and allow for more strategic planning. It can also foster a more stable research unit within the agency, where research departments are better able to recruit and retain talented research staff.

A critical issue is examining how the agency's organizational structure may support or hinder evidence generation and use. There is considerable variation both across and within agencies over how research staff are organized. Reporting structure emerged as one key theme throughout our meetings. Some research offices which were situated underneath other departments such as human capital, curriculum and instruction, student services, or education leadership noted that it was problematic for maintaining independence from the programs being evaluated. Locating the research office within the information technology department brought other concerns, such as reducing the visibility of research or potentially reinforcing misconceptions of research as data access rather than as evidence to guide decision-making.

Multiple members of research offices which reported to the accountability officer, chief of staff, superintendent, or board appreciated the ways that it elevated the importance of research and evaluation. However, regardless of position in the organization, maintaining connections with leaders across program areas continues to be important for providing a broad view of the system and ensuring the relevance of research and evaluation.

A related question is whether to distribute research or data analysts across different divisions or to concentrate them within a centralized research office. Locating analysts in other departments provides programmatic and operational leaders with more immediate access to relevant data and evidence. In organizational cultures which model using evidence to learn and improve, this can enable leaders to adapt more rapidly as information is updated. However, others have observed that this arrangement may lead to greater variability in analysts' training and responsibilities for research and data use. It may also lead to redundancy in work and lack of organizational clarity, where different analysts may be performing very similar tasks according to different standards. In organizations with hierarchical reporting structures or cultures of top-down decision-making, power dynamics favoring upper management may result in analysts being expected to complete short-term reporting tasks on demand, rather than more in-depth projects based on their interests and expertise. In contrast, situating all analysts in the same department may provide more flexibility in aligning projects with their areas of interest, content expertise, and methodological expertise. Leveraging collaborations across analysts with complementary areas of interest and expertise could yield greater efficiency and more robust work. Allowing analysts to specialize rather than all becoming generalists could also lead to greater differentiation, professional satisfaction, and long-term retention, by creating more opportunities for advancement. Both reporting structure and location of analysts in the agency are perennial themes in discussions among networks of research staff. We recommend a deeper analysis of these different organizational structures and how they function as barriers or facilitators affecting evidence use.

Education agencies should commit to gaining a better understanding and working knowledge of how to measure and monitor improvement and progress, moving from quick data pulls and data reporting for sake of accountability, to asking questions around implementation, outcomes and "how do we know". Agencies should use data in less reactive ways and in more strategic ways, embedding data practices throughout the fabric of decision-making throughout the agency.

Gaining buy-in from key stakeholders, both internally and externally, around the importance of data collection and use in agency decision-making is also critical. This means having stakeholders understand why data is being collected, how it's being collected, how their voice will be protected throughout the research process, why the research or evaluation is being conducted, and reporting findings back to stakeholders.

Overall, agencies could benefit from seeing research offices as part of a system of learning. In particular, it is important that research is valued throughout agencies, such that there is coordination across different parts of the agencies that are essential to providing evidence. The collection of various kinds of data that inform research will happen across different parts of an agency, from parent surveys to information about teacher retention. Similarly, evidence may be used by different parts of an organization from human resources to curriculum specialists. The key is that all parts of agencies should see that they have a role in helping to create or utilize evidence. External researchers can help to make this clear, but to do so they must understand the institutional structures of the agencies they work with and appreciate the constraints that different parts of agencies are working under.

As other departments within the agency grow in working with research offices throughout decision-making processes and in developing programs or initiatives, the agency will build knowledge and capacity around learning the work of research offices. Shared knowledge around research and evaluation processes, buy-in from key stakeholders, and creating a collaborative around producing research and evidence use will help guide the use of evidence and bridge the gap between other departments and internal research offices.

The broader research community

Partnerships with external researchers offer promising opportunities to enhance existing capacity, but they are not without challenges. Our participants offered a number of recommendations for those in the research community (e.g., researchers based at universities, research institutions, and/or non-profit organizations) wishing to collaborate with those in research-driven roles in education agencies.

First (and perhaps foremost), make the space and time to listen carefully to members of practice-side agencies so that they may describe their research priorities and proposed research questions. If pursuing a partnership structure, this conversation should include a two-way exchange of ideas so that both research and practice expertise are helping to shape the ensuing work. As part of this first step, establish initial channels of communication that will enable relationship development to emerge and strengthen over time.

Once partnership research work has commenced, make sure to share insights or findings that may be helpful to practice-based team members all along the way. In particular, creating opportunities to make sense of the data and findings with both research and practice partners will be especially important. Ensure there are plenty of opportunities to discuss all aspects of the work before “going public” with any findings, giving each side sufficient time to plan their externally-facing response to a report.

Engaging in partnership work itself requires its own set of competencies, skills, and mindsets that need to be established and developed over time, i.e., it cannot be assumed that everyone will know how to effectively work together on day one. Training opportunities in this regard may include learning how to become an RPP broker, practicing communications with non-academic audiences, and reexamining existing organizational norms or structures that may be reinforcing of White privilege and harmful power dynamics.

Finally, it will also be important to establish key agreements between partners that will help support the work, including data sharing agreements, working through IRB requirements, understanding intellectual property rights, and negotiating contracting requirements.

External research organizations and intermediaries should look for ways that they support, and not supplant, the work which agency research staff have the qualifications and interest to do. It is especially important to allow internal research staff to engage in intellectually satisfying and meaningful work, not just the more routine tasks of reviewing applications for compliance and obtaining data to share with external researchers.

Other organizations and intermediaries

Participants in the convening commented on particular ways that other actors in the larger educational community could contribute to and support their work.

Regional support units - referred to differently across states as intermediate units, regional service centers, and so on - as well as regional data and technology centers are positioned to and often do serve as important sources of capacity for generating local evidence. Relatedly, existing systems and processes housed at other levels of the system can enhance LEA and SEA capacity. For example, the State Longitudinal Data System grant program funded by the Institute for Education Sciences has resulted in large administrative datasets which can and have been leveraged for local research and evaluation. A key to fully leveraging these systems is streamlining and clarifying how data is collected, packaged, and accessed so that it can be used for compliance reporting as well as for local data analysis, research, and evaluation -

what some participants in our meetings referred to as “democratizing data”.

Institutes of higher education (IHEs) can play a role as well. First, they can offer professional learning that meets the needs of research staff in SEA and LEAs. But they can also contribute to the preparation and professional learning of other members of SEA and LEA staff (e.g. school and district leaders) in ways that help them to lead for evidence-informed improvement. As noted earlier, how SEAs and LEAs are organized and staffed as well as the mission and vision of the organization shape the opportunity for the generation and use of evidence. By preparing educational leaders in ways that support an evidence-use agenda, IHEs can contribute to capacity systemwide. Lastly, IHEs can provide internship opportunities for graduate students to gain practical experience analyzing data and conducting research in schools or by hiring experienced consultants or part-time retired staff.

Last, other organizations, such as professional organizations, networks, Regional Education Laboratories, and Comprehensive Centers, can support the work of SEA and LEA research staff. These organizations can help build capacity within and across education agencies through their technical assistance. They may also create opportunities to build stronger networks across SEA and LEA research offices (as well as among staff in agencies without research offices) that would help those agencies to build capacity and leverage existing knowledge and tools among the educational agency research community. For example, Results for America offers a State Education Fellows program, and the National Network of Research Practice Partnerships and Council of the Great City Schools offer peer groups for district research leaders. Efforts could include cross-agency collaborations as well as leveraging regional comprehensive centers and regional education laboratories (RELs). SEAs may also be positioned to serve in these roles when supporting LEAs.

Funders and Governing Bodies

Education agencies need a stable, reliable funding stream to enable and sustain the work of their research staff, who reported being underfunded and understaffed to conduct the full range of work that they are expected to do. Such funding would be valuable for both ongoing tasks and professional growth. While donors often prefer to support projects with carefully defined time constraints and goals, this may result in patchwork funding arrangements which create inefficiencies, inequities, and other unintended consequences. For example, conducting one-off program evaluations may help vendors sell their services and allow researchers to amass more publications, but piecemeal evaluations make it difficult for agencies to compare or generalize across multiple programs to inform more systemic decisions. Other inequities may result if one program is evaluated favorably by a high-status researcher, while other promising programs with lower-status evaluations (if any) receive less attention. Rather than asking individual providers to secure separate evaluations, donors should provide the funds to the agency to evaluate the broader scope of alternatives under consideration applying consistent standards of evidence.

Another challenge comes from external grants and accountability mechanisms with onerous reporting requirements. Inefficiencies result when agencies need to expend more resources compiling data to fit rigid accountability templates than using data for improvement. Moreover, the benefits gained upon reporting outcomes to one funder may not transfer meaningfully to other workstreams. Instead, funders and governing bodies should look for ways to structure their accountability expectations to support stronger internal systems for reporting and improvement to serve both immediate and long-term data needs. In particular, they should encourage systematic collection of data on implementation conditions and processes, not just outcomes, in order to better inform how to produce those outcomes.

While funding external researchers and intermediaries is another popular strategy for augmenting internal agency capacity, funders should beware of tradeoffs and inequities which may end up “cannibalizing” support for internal research. The money and status associated with external research partners may undermine the autonomy and professionalism of agency staff who now have to compete with outsiders to shape their own work. Supporting external research also adds to the workload of agency research staff, as noted above, while simultaneously taking opportunities away from them. In conjunction with the previous observations that research staff sometimes leave education agencies due to lack of opportunities for career advancement, this combination of factors becomes especially problematic. As a rule, donors should not fund external partners or intermediaries to perform work that the internal agency has the capability, interest, time, and resources to complete; that is, the funding should supplement, not supplant, the agency’s existing capacity. Providing the resources directly to the agency, rather than to external research partners, allows agency staff more flexibility and leverage either to conduct the analyses themselves or to direct the funding to the projects and partners which they consider most valuable.

Funders can also enhance capacity to generate local evidence by targeting resources towards different aspects of work (described above). To ensure that this additional capacity is maintained internally, funders should require external partners to include an explicit sustainability plan to integrate their work into the agency’s routine systems and processes. This may include a combination of training and coaching to develop the necessary knowledge and skills internally, along with a strategy to fade supports until the agency can successfully complete the required work independently and cost-effectively.

Further, partnering with external researchers often requires greater investments than funders offer. Partnerships require longer-term efforts to build and maintain relationships both before and between undertaking formal projects. The ongoing conversations which emerge from trusting relationships help to ensure that projects are realistic and aligned with agency priorities, and increase the likelihood that the research will be used productively. In contrast, funding is typically provided only for specific projects after partners on both sides have already explored the potential collaboration space to identify where working together would be fruitful. Funders need to be realistic about these invisible costs of partnership, whether by providing more support for sustainable partnership infrastructure or by allowing more time for partnerships and projects to develop and mature.

Rather than funding standalone projects which rely on external resources, funders should invest in creating robust systems, structures, and processes for evidence generation and use, in order to build this capacity within agencies. Some examples include survey platforms, data infrastructure, knowledge management systems, and data visualization tools. These should be owned and managed by the agency to ensure long-term sustainability, as well as flexibility to adapt to local needs. Other possible investments include professional learning, networking, and knowledge-sharing opportunities. Funders could also support additional capacity in SEAs and LEAs through schemes which train researchers to work (and stay) in education agencies.

Other Actions Across the Educational Ecosystem

Not all recommendations were directed at specific stakeholders. Below are two areas for improvement that benefit from collaboration across different actors in the educational ecosystem.

Supporting agencies without designated research offices or staff.
In both conversations, questions and concerns about how these issues and recommendations apply to agencies that do not have designated research offices and staff. Their voices were under-represented in the conversation, but several participants work with these agencies or aim to support them - particularly rural districts. They noted that absent research offices or staff, questions about data or evidence fall to leaders (e.g. superintendents) and school boards who may lack time and expertise in data and research. Further, these agencies may lack larger networks that allow for “cross-pollination” of research or research-based ideas. Recommendations discussed to support SEAs and LEAs more broadly may have particular significance for those that lack research offices or staff, including leveraging regional centers, developing productive and equitable research partnerships, and developing targeted funding and professional learning, and establishing networks for knowledge sharing.

Developing a workforce of agency-based researchers.

Lastly, in order for the work of evidence-informed decision-making in education agencies to move forward, the field needs to invest in building and developing the workforce of agency-based researchers. While there are programs such as Harvard's Strategic Data Project that focus on placing strong data or research staff in education agencies and graduate programs focused on research, evaluation or data analytics, there are still a limited number of opportunities for people to receive training in scientific practice of evidence generation, brokering, and use in the education field, particularly compared to the training opportunities for researchers. While many people enter this work from other fields of study, there are also limited opportunities for staff to engage in ongoing professional learning opportunities related to this work.

Building sustainable resources to support agency-based researchers.

The range of recommendations detailed here for funders and governing bodies underscores the need for significantly greater resources to support the evidence infrastructure in education. While philanthropic organizations have been filling in many gaps, more systematic and coordinated funding through federal and state sources would enable more reliable, stable, and equitable funding across the full range of education agencies and beneficiaries. In particular, we highlight a key opportunity for IES's National Center for Education Evaluation and Regional Assistance (NCEE) to play a larger role in coordinating the curation and use of evidence through the What Works Clearinghouse, as well as across its system of Comprehensive Centers and Regional Educational Laboratories. With greater resources and a stronger leadership role, NCEE could guide the field in building more robust networks of connections between the education research and practice communities.

Moving the Conversation Forward - Next Steps

The conversation among SEA and LEA research offices and staff yields important insights into the nature of evidence generation and use, the factors and conditions that shape the work, and potential strategies for enhancing their capacity to support evidence-informed improvement. Yet, the conversation also raises issues in need of further discussion. Below we highlight several ideas that invite continued thought, questioning, and collaboration in advancing the culture of evidence.

Continue our Learning

We have learned a lot about the work of research agencies and their ability and barriers to evidence use and production, but we also left these conversations with a number of lingering questions. The following set of questions provide new thinking and conversation that can inform our collective efforts to strengthen capacity for evidence-informed improvement.

- How do school systems best organize their structures and align their functions to promote quality use of evidence and evidence use?
- How might educational data systems, knowledge management systems, and evidence repositories be improved to facilitate evidence generation and use in school systems?
- What are the policies and procedures that help promote effective evidence generation and use?
- To what extent is the work of research offices and staff in SEAs and LEAs similar or different? Are there ways it can be better coordinated as to be complementary?
- What models or best practices can help align incentives between external researchers and education agencies?
- How can the evidence generation and use needs of LEAs without research offices or staff be met?

Continue the Conversation

Answers to these questions could emerge from forums that enable conversations about these issues and knowledge sharing about best practices. This can include continuing the work of already established networks of state and district research leads that have been previously mentioned in this report as well as cross collaborative efforts among these groups. But these conversations should expand to include:

- policy actors that can change policy and procedures related to the work of research in education agencies
- governing bodies and granting agencies that promote and financially support the production, curation, and use of research (i.e. federal and state regulatory agencies; IES, including NCER, NCSER, and NCEE; private foundations; and others)
- Regional Educational Laboratories and Comprehensive Centers that provide professional learning opportunities around evidence brokering
- professional associations;
- and non-research office district or state leaders responsible for leading evidence generation and use.

Continuing these conversations will be critical to leveraging support and building capacity for evidence-informed improvement in education agencies.

In Conclusion

In the two convenings and in this report, we sought to draw attention to the critically important role of research staff in LEAs and SEAs in generating and using evidence to inform educational policy and practice. We have shared key activities and challenges associated with those roles from the perspective of those engaged in that work, and in doing so, surfaced a number of recommendations to help advance the generation and use of evidence. But an arguably more foundational issue is how to create a culture - not just within education agencies, but beyond - that values evidence in decision making. What we imagine here goes far beyond generating reports and calling upon numbers for compliance purposes. Rather it is a culture that centers improvement not just accountability, that regularly asks questions when there is uncertainty about the implications of a policy or practice, and where there is an openness to weighing evidence against the myriad other political and cultural considerations that also affect decisions.

How to create a culture that values evidence goes beyond the scope of this report, but we want to close by acknowledging the importance of such a culture not only for leveraging the role of SEAs and LEAs in producing and using evidence, but ultimately for creating and sustaining conditions that support evidence-informed improvement across the education system.

References

Anderson, E., & Young, M. D. (2018). If they knew then what we know now, why haven't things changed? An examination of district effectiveness research. *Frontiers in Education, 3*(87). https://doi.org/10.3389/feduc.2018.00087

Arce-Trigatti, P., Chukhray, I., & López Turley, R. (2018). Research-Practice Partnerships in Education. In B. Schneider (Ed.), *Handbook of the Sociology of Education in the 21st Century* (pp. 561-580). Springer.

Bickel, W. E. (1984). Evaluator in residence: New prospects for school district evaluation research. *Educational Evaluation and Policy Analysis, 6*(3), 297–306. https://doi.org/10.3102/01623737006003297

Coburn, C. E., Honig, M. I., & Stein, M. K. (2009a). What is the evidence on districts' use of evidence? In J. Bransford, L. Gomez, D. Lam, & N. Vye (Eds.) *The Role of Research in Educational Improvement* (pp. 67–88). Harvard Educational Press.

Conaway, C. (2020). Maximizing Research Use in the World We Actually Live In: Relationships, Organizations, and Interpretation. *Education Finance and Policy, 15*(1), 1-10. https://doi.org/10.1162/edfp_a_00299

Conaway, C., Keesler, V., & Schwartz, N. (2015). What research do state education agencies really need? The promise and limitations of state longitudinal data systems. *Educational Evaluation and Policy Analysis, 37*(1_suppl), 16S-28S. https://doi.org/10.3102/0162373715576073

Conaway, C. & Goldhaber, D. (2020). Appropriate Standards of Evidence for Education Policy Decision-Making. *Education Finance and Policy, 15*(2), 383-396. https://doi.org/10.1162/edfp_a_00301

Data Quality Campaign (2016). Opportunities to Make Data Work for Students in the Every Student Succeeds Act. Author. https://dataqualitycampaign.org/resource/essa-opportunities/

Farley-Ripple, E. N. (2012). Research use in school district central office decision making: A case study. *Educational Management Administration & Leadership, 40*(6), 786–806. https://doi.org/10.1177/1741143212456912

Farley-Ripple, E. N., Sheeks, J., Jennings, A. B., & Millin, A. (2017). *Education Data Systems: A Systematic Look at State Practices Related to Researcher Access*. University of

Delaware Center for Research in Educational and Social Policy. https://www.cresp.udel.edu/wp-content/uploads/2018/07/CRESP-Research-Report-Researcher-Access.pdf

Farrell, C.C., Penuel, W.R., Coburn, C., Daniel, J., & Steup, L. (2021). *Research-practice partnerships in education: The state of the field.* William T. Grant Foundation. https://wtgrantfoundation.org/research-practice-partnerships-in-education-the-state-of-the-field

Goertz, M. E., Barnes, C., Massell, D., Fink, R., Francis, A. T. (2013). *State education agencies' acquisition and use of research knowledge in school improvement strategies* (CPRE Research Report (#RR-77). Consortium for Policy Research in Education.

Hale, S., Dunn, L., Filby, N., Rice, J., & Van Houten, L. (2017). *Evidence-Based Improvement: A Guide for States to Strengthen Their Frameworks and Supports Aligned to the Evidence Requirements of ESSA*. WestEd.

Honig, M. I. (2003). Building policy from practice: District central office administrators' roles and capacity for implementing collaborative education policy. *Educational Administration Quarterly, 39*(3), 292–338. https://doi.org/10.1177/0013161X03253414

Kane, T. J. (2017). Making evidence locally: Rethinking education research under the Every Student Succeeds Act. *Education Next, 17*(2), 52–58. https://www.educationnext.org/making-evidence-locally-education-research-every-student-succeeds-act/

Kennedy, M. M. (1983). The role of the in-house evaluator. *Evaluation Review, 7*(4), 519–541. https://doi.org/10.1177/0193841X8300700406

Kochanek, J. R., Scholz, C., & Garcia, A. J. (2015). Mapping the collaborative research process. *Education Policy Analysis Archives, 23*(121). https://doi.org/10.14507/epaa.v23.2031

Leithwood, K., Sun, J., & McCullough, C. (2019). How school districts influence student achievement. *Journal of Educational Administration, 57*(5), 519–539. https://doi.org/10.1108/JEA-09-2018-0175

Ming, N. C., & Goldenberg, L. B. (2021). Research worth using: (Re)framing research evidence quality for educational policymaking and practice. *Review of Research in Education, 45*(1), 129-169. https://doi.org/10.3102/0091732X21990620

National Academies of Sciences, Engineering, and Medicine. (2022). *The Future of Education Research at IES: Advancing an Equity-Oriented Science*. National Academies. https://nap.nationalacademies.org/catalog/26428/the-future-of-education-research-at-ies-advancing-an-equity

Results for America. (2017). *Leverage points: Thirteen opportunities for state education agencies to use their ESSA state plans to build and use evidence to improve student outcomes.* Author. https://results4america.org/tools/leverage-points-thirteen-opportunities-state-education-agencies-use-essa-state-plans-build-use-evidence-improve-student-outcomes/

Results for America, & Chiefs for Change. (2018). *Evidence-building opportunities under ESSA: How states can and should generate evidence to drive better outcomes for students.* Author https://results4america.org/tools/evidence-building-opportunities-essa-states-can-generate-evidence-drive-better-outcomes-students/

Shewchuk, S. & Farley-Ripple, E.N. (2020). *A job description and resume analysis of district research leaders* (R20-004.1). Center for Research in Education and Social Policy, University of Delaware. https://www.cresp.udel.edu/wp-content/uploads/2021/09/Shewchuk-Farley-Ripple_2020_A-Job-Description-and-Resume-Analysis-of-District-Research-Leaders_Upload.pdf

Tseng, V. (2012). *The uses of research in policy and practice*. Society for Research in Child Development. https://www.srcd.org/sites/default/files/file-attachments/spr_262_fiinal.pdf

Tseng, V., & Coburn, C. (2019). Using evidence in the US. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.) *What works now?: Evidence-informed policy and practice* (pp. 351-368). Policy Press.

West, M. R. (2016). *From evidence-based programs to an evidence-based system: Opportunities under the Every Student Succeeds Act*. The Brookings Institution. https://www.brookings.edu/research/from-evidence-based-programs-to-an-evidence-based-system-opportunities-under-the-every-student-succeeds-act/

Yoshizawa, L. (2021). Fidelity, Rigor, and Relevance: How SEAs are Approaching the ESSA Evidence Requirements. *Educational Policy.* (OnlineFirst) https://doi.org/10.1177/08959048211029025