



May 2023

**SERN'S STORY**

## Mobilizing Research for Structural Change in Education

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**This piece was authored by Molly Watkins and draws on documentation provided by Student Experience Research Network (SERN), conversations with SERN staff and partners, and a third-party assessment of SERN's impact.**

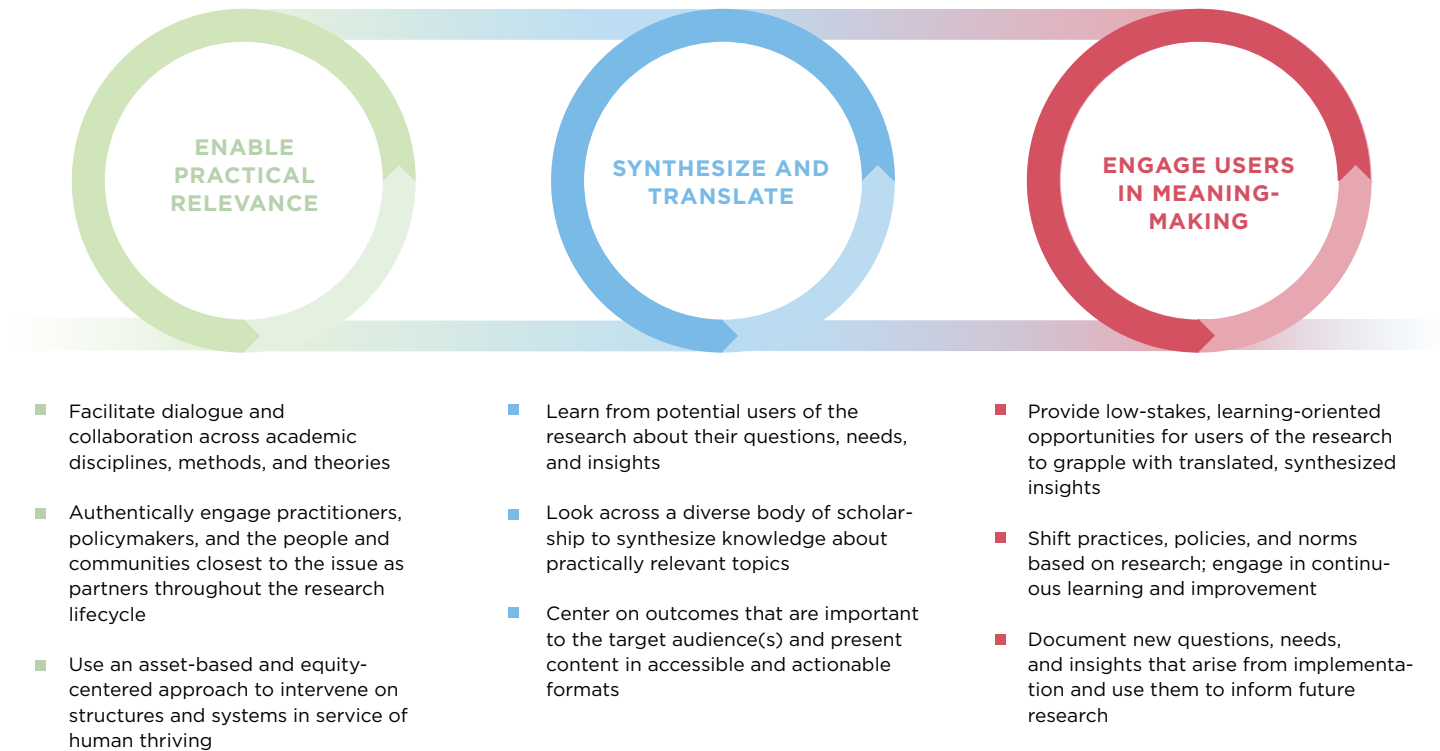
Student Experience Research Network's founding scholars knew the research they had been conducting on student mindsets and motivation was a promising body of knowledge and they wanted to protect it, expand it, and for it to have an impact in education. The scholars envisioned a research network that would bridge disciplinary silos in academia and, in turn, generate research that could better inform practice and policy. Too often, these silos mean that researchers whose work touches on one part of how students learn often are

not in conversation, much less collaborating, with researchers whose work touches on another.

As SERN grew and evolved over time, the organization realized, [and learned from others who have walked this path](#), that if it really wanted to not just change the way research was conducted, but how it was used in order to contribute to structural change in education, there were multiple aspects of the process that had to be thought about differently. SERN simultaneously took on three important bodies of work to address this. It focused on facilitating practically relevant research; creating understandable summaries and later, translational syntheses of research; and making meaning and facilitating the use of the translated research with its partners in practice, policy, and philanthropy.

# CHANGING HOW RESEARCH IS CONDUCTED, SHARED, AND USED TO CONTRIBUTE TO STRUCTURAL CHANGE

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## Enabling Practically Relevant Research

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Working in an interdisciplinary way was an important step toward producing practically relevant research because multiple lenses, methodologies, and theoretical tools are needed to understand and address complex structural issues like students' experience of school – and how it has been shaped inequitably depending on who students are and the opportunities they are afforded. But a number of other barriers to practically relevant research exist in academia. These include insufficient training and incentives for

involving those closest to the issues being studied through the research process; the discordant timelines between research and practice and policy; and the lack of relationships, support, and vehicles for engagement between these groups. Conducting practically relevant research that can contribute to structural change also entails taking equity-centered approaches. In order to inform structural shifts in education, SERN deepened its equity lens over time, and increasingly focused on research that attends to intersectionality and local

context, counters negative stereotypes and deficit-based narratives, engages those closest to the issue as partners in research, addresses root causes of inequity, and utilizes asset-based approaches.

It was a lot to take on. But SERN wanted its work to have an impact in the wider education field and knew that to do so, it needed to engage with practitioners, policymakers, and funders to ensure it was answering the questions the field was asking.

In a [memo](#) SERN produced on opportunities to create and use research on student experience in postsecondary education, interviewees identified a need for more support for practice-engaged research, including time to build relationships between researchers and practitioners, as well as training and capacity on both sides. One interviewee described: “What problems are researchers seeking to solve, what problem is the system seeking to solve, and where is there overlap? [Figuring this out] is not trained, it’s disincentivized, and it takes a lot of resources.”

To address this, SERN connected scholars with a wider community of practitioners, policymakers, and education funders to improve the feedback cycle, build new connections, and enhance the practical relevance of their work. It also provided opportunities for researchers to develop and refine the skills they would need to engage in this way. This work was done through funded research portfolios, fellowships, and convenings that offered opportunities for professional learning. Across its different initiatives, SERN connected researchers with coaching and trainings, showcased strong examples of practically relevant research and productive collaborations with practice and policy actors, and hosted workshops that facilitated methodological exchange across disciplines.



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#### — RESEARCHER, INTERVIEW

SERN also developed resources to support researchers in applying a stronger multidisciplinary, practical, and equity-centered lens. The [Data Archive for Interdisciplinary Research on Learning](#) provided an infrastructure for accessing and sharing datasets to encourage innovative, practically relevant questions and insights based on existing data. The [Compendium of Studies that Measure Learning Mindsets](#) compiled measures of belonging, growth mindset, and purpose and relevance across frameworks, with contextualizing information about each study, sample, and measure. It highlighted the need for future scholarship to address equity gaps in research (in particular, research published in high-profile journals) that understudies the full spectrum of students’ identities and lived experiences, especially for students from minoritized groups. Together, the resources aimed to support researchers in pursuing a more complete understanding of student experience and the structures that shape it.





SERN also worked to disrupt patterns in how research is funded, which favors more established scholars and those who are white and male and from high-status institutions. Funding inequities, as well as other structures and biases in academia, limit the richness and perspective of the field's scholarship. For example, in the paper, "[What counts as good science? How the battle for methodological legitimacy affects public psychology](#)," author Neil Lewis, Jr. cites long-standing trends in "basic" research in psychology that "the people who have 'counted' most as being legitimate producers of knowledge have resoundingly been White." And that "White psychologists study mostly White people, whereas psychologists of color are more likely to study people of color."<sup>1</sup> Such dynamics in psychology and other disciplines have [limited](#) our scientific understanding of human development and social

phenomena, and many studies have shown the importance of diversity for generating solutions that are innovative and impactful. But research has also shown that while scholars from marginalized groups, including scholars of color and women, are more likely to innovate and conduct work that [spans important boundaries](#), their novel scholarship is more likely to be "[devalued and discounted](#)."

SERN both diversified the pool of researchers it worked with and funded and connected them and their scholarship to influential actors and funders in the education field who could learn from and elevate their work. SERN consistently featured work from early and midcareer scholars in its funder briefings and created two fellowships for early career scholars, as well as a fellowship for midcareer scholars, which further expanded and diversified its scholarly community. (A list of participants in SERN initiatives is available [here](#).)

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<sup>1</sup> Lewis, N. A. (2021). What counts as good science? How the battle for methodological legitimacy affects public psychology. *American Psychologist*, 76(8), 1323-1333. <https://doi.org/10.1037/amp0000870>

## Synthesis and Translation

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It takes a long time for academic research to filter into the discourse of the education sector if it does at all. Academic journals have long lead times and paywalls, and people outside academia rarely have time and the technical background to engage with scholarly publications, which can minimize their reach. As a result, promising insights are often left on the shelf. Or findings are cherry-picked to advance a particular agenda without fully comprehending what the implications are.

Moreover, one study, discipline, or methodological approach cannot give a complete perspective on the social, historical, and cultural phenomena that comprise the education system. [Conceptual use of research](#) – drawing on insights from a broad body of knowledge that offer a new way of thinking about a problem or potential approaches to addressing it – is essential and [common among decision-makers](#). But not only are findings often not accessible to those outside of academia, contextualizing how a particular study fits into a wider field of knowledge is often not done well for education audiences or not done at all. That means weaving together what we know about a particular subject is an essential part of offering practically relevant insights.

SERN sought to fill this gap in the field of student experience and its main tool of engagement was its clear, accessible, accurate research synthesis and translation, carefully representing the scholarship in a way that researchers trusted while producing something that leaders in the education sector could easily understand and share with others without further explanation.

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SERN's unusual and holistic approach to synthesis was a key differentiator. When creating a research synthesis, it's impossible to include every piece of scholarship available on a particular topic, so how studies are chosen is a critical part of the outcome and SERN's criteria were different from most. It wanted to go beyond the types of scholars and scholarship most commonly cited in synthetic work and ensure inclusion of relevant research across multiple dimensions. SERN also made sure that it included rigorous research across multiple methodologies, because different methods – including both quantitative and qualitative approaches, as well as different study designs and theories – provide different kinds of information. At the same time, SERN wanted to encourage education actors to think expansively about the topics that were being raised. The syntheses were a way to do that.



SERN also worked with practice and policy actors to ensure its syntheses were answering their questions. These actors informed decisions about the topics to cover and reviewed the content for clarity and relevance, in addition to a review by a diverse group of researchers who were scholarly experts on the topic. SERN's syntheses not only significantly built out the knowledge base on student experience, but helped to shift how people understood and approached problems. The syntheses provided scientific warrant for areas of focus and strategies, and surfaced gaps in the field's empirical knowledge that were relevant for practice and policy. At the same time, they helped meet decision-makers' needs for distilled insights to reflect on and make changes in their work. Additionally, the syntheses opened the door to new conversations, helped SERN's staff align on evidence-based messages that it shared with diverse audiences, and allowed it to expand the types of research evidence these audiences were exposed to.

SERN produced multiple syntheses that pushed the field in important ways, including:

- 2017: A [synthesis](#) that helped shift the emphasis from a focus on direct-to-student interventions that aimed to change students' mindsets toward a focus on changing the environment that students experience. This synthesis also elevated student experience as a key driver of academic outcomes.
- 2019: A [synthesis](#) focused on postsecondary completion that made the case that postsecondary institutions have a measurable impact on, and thus responsibility for, students' sense of belonging and academic outcomes.
- 2020: An [early career fellowship](#) focused on synthesizing research on inclusive mathematics environments that examined how structures shape student experience in a specific academic subject area.
- 2021: A [synthesis](#) on the role of structures at multiple levels in education in shaping students' experiences of belonging.



# Making Meaning of Research with Education Actors

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For academic research to inform education, it needs to answer questions that practitioners and policymakers are grappling with. And it needs to reflect the lived experience of students, families, communities, and educators. Even when research is synthesized carefully and translated clearly, education actors need opportunities to make meaning of it and determine how it can inform practice and policy.

What is meaning-making? Big picture, it's how the ideas in research get "into the water" of a system. In the context of its work, SERN more specifically defines it as practitioners, policymakers, and funders unpacking the implications of a body of research for their work and beginning to articulate how they might apply that research in making changes to their approach. Sometimes, it may lead to adopting a specific evidence-based program but more often it can encourage people to integrate a new lens from research that shifts how they [conceptualize or address a problem](#).

As such, meaning-making is a critical precondition for these actors to change their practice based on research, which can look like developing resources and recommendations based on the research; revising or updating programming, messaging, or strategies; changing policies or practices; or otherwise shifting how an organization or system approaches its work (e.g., [shifting from measuring belonging in individuals to measuring conditions for belonging in the learning environment](#)).

SERN's structured meaning-making opportunities took various formats, and often used its research syntheses as grounding artifacts. It held an annual [funder briefing](#) for dozens of representatives from

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national philanthropies where they learned together about the latest research and discussed implications for the field. (This [resource](#) outlines the design and execution of the funder briefing in detail.) SERN also held a briefing for congressional staff and policy intermediaries to discuss the ways in which student belonging matters for postsecondary success and how institutions shape students' belonging.

Additionally, SERN convened practice organizations in hands-on meaning-making opportunities. It held a two-day event called Curriculum x Motivation in which leading curriculum developers learned about research on student engagement and workshopped implications for their curricula. It developed and facilitated a six-month engagement called the [Belonging Collective](#), in which participants from



nine national practice organizations developed resources applying research on belonging-supportive learning environments and made changes to their programming and messaging. SERN [documented its lessons learned](#) from these initiatives and noted the importance of meaning-making opportunities being responsive to participants' context, goals, and incoming expertise; having a collaborative and learning-oriented atmosphere in which participants can freely share challenges and ask questions; and setting up relationships and follow-up actions that can help participants sustain their work.

Meaning-making happened in lighter touch ways, as well, including asking attendees to reflect individually and collectively on questions during the annual funder briefing and in thought partnership conversations with education actors. SERN channeled what it learned in these meaning-making conversations back to the research community in how it scoped requests for proposals (RFPs) and fellowships, and in its thought partnership conversations with researchers.

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partners in education and consistently tried to represent a wide range of voices, approaches, and perspectives to address what it was hearing from the field – whether in the context of small, specialized interactions, or in its larger funder briefings. And it [prepared people to engage](#) with one another so they could get the most out of these opportunities and connect productively across sectors.



# What SERN Learned

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Changing how research is conducted, shared, and used in education to contribute to structural change is a large, multifaceted undertaking. SERN's hope is that the lessons it learned working in the three domains laid out below will be useful to others who seek to develop and mobilize practically relevant research that will influence the trajectory of education and other fields. SERN made progress in each of the domains, but multiple deeply entrenched incentives for upholding the status quo remain and need to be addressed. For more information on forward-looking directions, see SERN's [memo on priorities for the student experience field](#).

## Domain 1: Conducting Research

Ensuring there is diversity in the type of research undertaken and ensuring that research is informed by a wider set of actors in education is a key priority for the field going forward. Conducting practically relevant scholarship and bridging across sectors requires scholars to [collaborate across silos](#), and necessitates [opportunities for early and midcareer scholars to build capacity](#) in these areas. Scholars from minoritized groups and early and midcareer scholars must have access to funding and support for this type of practically relevant scholarship and bridging. Practices and norms in academia that shape how scholars are hired, evaluated, and published must shift along with biases in academia about what kind of knowledge is valued.

## Domain 2: Sharing Research

Studies show that [syntheses of research](#) are particularly influential for leaders in education.

In SERN's experience, developing syntheses that funders, practitioners, and policymakers could easily share with colleagues was a critical step in facilitating the use of insights from research. Syntheses can also help reveal where new research-based knowledge is needed. Synthetic work intended to advance structural change should be guided by input from practitioners and policymakers about which questions and topics they consider high-priority, and translation should be mindful of how the target audience(s) access and use information. Synthesis and translation can take multiple forms, including written, oral, visual, and multimedia, and can be led by a variety of actors – including collaborations across research, practice, and policy.

## Domain 3: Using Research

While synthesis is an essential step, SERN learned the importance of pairing it with opportunities for education actors to make meaning of the findings together. This entails providing structured (e.g., events, initiatives) and informal (e.g., one-on-one discussions) opportunities where practitioners, policymakers, and funders can engage individually and collectively with translational synthetic content, articulate how it might apply to their context, and surface new questions that arise based on the research. These actors can also benefit from examples and practical resources that document how research-based structural change can be achieved, in a way that is both inspiring and actionable. Documenting outcomes and insights from meaning-making work can help support future research use.

# Levers for Change

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There are multiple avenues for transforming the process by which new knowledge is developed and used in the education sector and pressure must be applied in each to consistently and sustainably generate research that is both informed and used by education actors. Below are three levers that SERN and others in the sector have focused on to advance change.

## Lever 1: Academia

Within academic institutions themselves, some of the responsibility for setting policy and changing incentives resides at the administrative level and some at the department level. Scholars and others who move into administrative roles can affect how research is produced by changing the incentives and supports available for practically relevant research. Departments within institutions have influence over tenure and promotion processes as they are directly informed by departmental leadership and faculty. Departments also engage outside reviewers to examine their faculty's scholarship as part of these tenure and promotion processes, and scholars who are journal editors and reviewers of journal articles play a key role in shaping what is published and in what journals – thus these scholars have a role to play in changing the expectations and standards of practice in academia, as well. Other actors within the academic ecosystem, including professional societies, also play important roles. It requires organizing and creative thinking to shift long-standing norms and practices, but change is possible.

## Lever 2: Public Policy

Another lever for change lies in public policy that shapes the requirements and capacity for conducting and using research. For example, in the current efforts to advance the reauthorization of the Education Sciences Reform Act, a wide range of leaders in research and education are encouraging policy changes that align with the type of work that SERN facilitated. Policy can:

- Encourage a wider range of types of research evidence to inform education practice and policy. Individual studies, methods, and disciplines can offer only a partial picture of any situation, experience, or context. Through policies that fund and encourage the use of a broader body of [relevant and rigorous](#) research spanning methods and disciplines, education decision-makers will have access to a more holistic understanding of an issue and the structures that shape it.
- Create a balanced federal investment in both basic and applied research and development. This includes enhancing funding, capacity, and infrastructure for research that engages students, families, communities, and practitioners as partners; research involving a range of methodologies, timelines, and topical areas (including research on implementation and research use); and research that focuses on a wider range of approaches and relevant outcomes – as opposed to the [narrower set of student-level interventions and outcome measures that have been incentivized](#) by much federal funding for education research to date.

- Strengthen the existing infrastructure for research use in education by investing in [knowledge brokers](#) who can bridge across sectors; establishing training and systems that allow researchers, practitioners, and policymakers to engage with each other more productively and regularly; ensuring that research and evaluation findings are presented in usable formats; and building capacity for education actors at all levels to make meaning of research insights that are relevant in their contexts.
- Create a more equitable and inclusive ecosystem for research and research use by investing in scholars of color and early career scholars, as well as traditionally underinvested institutions, including Historically Black Colleges and Universities, Tribal Colleges and Universities, and Minority Serving Institutions; using more transparent and engaging mechanisms to gather input from researchers, community members, and practitioners to identify new research topics for federal funding; authentically engaging students, families, communities, and education actors across the research lifecycle (e.g., grant applications, data collection, peer reviews, translation); and ensuring diversity in participants and disaggregated data.

### Lever 3: Funding

The federal government is the largest funder of academic research in education. While public and private funders operate in different ways, they each have roles to play in changing practices and norms so that research is more relevant to and used by practitioners, policymakers, and the students and families that education systems serve. All funders can place a greater emphasis on diverse methods and approaches, including applied research and all types of research that focus on the practices, policies, and norms that perpetuate systemic inequities in education. All funders can also change their practices and policies to address systemic barriers and biases in who receives funding in order [to generate more innovative, responsive solutions and repair the long-standing underinvestment in researchers from minoritized groups](#) and those from under-resourced institutions. Philanthropic funders can play a targeted, complementary role to public funders by investing in earlier stage ideas and investing on faster cycles and with more flexibility in the use of funding. SERN, in its role as an intermediary that engaged in re-granting, incentivized the kind of interdisciplinary, cross-sector work the field needed, but for this approach to take hold in academia, the major sources of research funding need to demand it and support it as a matter of course.

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**If there is one consistent through line in all the domains outlined here, it is relationships. Building relational trust is essential in helping researchers work across silos in sectors and disciplines. Relational trust is essential in facilitating the ability of researchers to partner with and share their work more widely with communities, policymakers, practitioners, and funders and to receive their feedback. And relational trust is essential for**

**groups of education actors to come together to make meaning of what the research reveals. It requires time, intention, and scaffolding because building relational trust isn't easy, and it doesn't happen overnight. [But it can be done.](#) And when it's done well, the result is the connective tissue and knowledge-building a field needs to be resilient, dynamic, and to continuously improve.**