# TOWARDS A FIELD FOR COLLABORATIVE EDUCATION RESEARCH

## DEVELOPING A FRAMEWORK FOR THE COMPLEXITY OF NECESSARY LEARNING

**THE COLLABORATIVE EDUCATION RESEARCH COLLECTIVE**

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# A NOTE ON AUTHORSHIP

This white paper represents years and months of collective work across many different conversations and iterative designs. We attribute authorship to the "Collaborative Education Research Collective" to recognize the multitude of contributions and co-development of ideas. In this paper, when we say "we," it refers to the collection of contributors along the way who shared their ideas to form this framework (see below for a full list). Where relevant, we name the specific individuals or groups who were involved in particular activities.

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# INTRODUCTION

There is a growing need in education research, policy, practice, and community circles to build authentic partnerships that co-construct new ways of engaging together to achieve equitable outcomes. These collaborative approaches are fundamentally different from traditional ways of conducting education research which often have a one-directional pathway of knowledge from research to practice (Penuel et al., 2020). Collaborative approaches disrupt historical power hierarchies as stakeholders seek to enact roles, work together, conduct research, and value diverse perspectives in the service of transformed futures for students, families, and communities.

Now is the time to step back and consider the opportunities future leaders and participants have to learn about and engage in collaborative education research. One report from the National Academies of Sciences, Engineering and Medicine in 2022 called for new infrastructure among researchers, practitioners, and community members to help the education sector enhance the impacts of research, development, and improvement efforts towards equity-centered goals (National Academies of Sciences, Engineering, and Medicine, 2022).

## A NOTE ON DISRUPTION

There is ongoing work to articulate what, exactly, it means to disrupt oppression and transform power systems in research contexts (see, for example, Diamond, 2021; Doucet, 2019; Ishimaru et al., 2022; Patel, 2014; Kirkland, 2019; Tanskley & Estrada, 2022;Tuck, 2014). Collaborative education research efforts do not guarantee such disruption and can simply perpetuate historical patterns of inequity. Here, we consider disruption in relation to transforming how collaborators are positioned, how local contexts and wisdom are positioned, and how systems of oppression are interrupted through the practice of collaborative education research.

Similarly, an emergent literature suggests a broad range of skills, knowledge, and dispositions needed to engage in collaborative research efforts (e.g., Henrick et al., 2017; Dostillo & Perry, 2017). For example, some literature suggests how to find partners and develop relationships (López Turley & Stevens, 2015; Nelson et al., 2015), collaboratively identify focal issues with partners (Thompson et al., 2017; Strambler et al., 2021; Meyer et al., 2023), develop a plan for how insights from research can support educational change and transformation efforts (e.g., Gutiérrez & Vossoughi, 2010; Gutiérrez & Jurow, 2018; Farrell et al., 2019; Yamashiro et al., 2022), and facilitate conversations across different stakeholder groups while addressing issues of racial and gender identities (e.g., Denner et al., 2019; Vakil et al., 2019) as well as role definition (Farrell et al., 2019). There are also early efforts to create learning opportunities for individuals from practice, family, and research communities that address these goals. For example, several institutions offer courses on preparing graduate students to engage in research-practice partnerships (RPPs), improvement science efforts, or design-based implementation research (e.g., Stanford University Graduate School of Education, 2022; University of California, Irvine: Orange County Education Advancement Network, 2022).

However, compared to the infrastructure that supports the traditional research and development pipeline, infrastructure for preparing and supporting people for collaborative research work is relatively weak at present (Peurach et al., 2019). Opportunities to learn about or within collaborative education research settings are highly uneven across and within institutions. This challenge is further exacerbated by the fact that collaborative education research typically requires changes to established practices around research endeavors, thus involving significant learning for all participants. Without a shared vision for what the learning demands are for collaborative education research, past efforts suggest that there may be tinkering around the edges but that the "status quo" will largely be preserved. The aspiration to advance equity and justice through collaborative education research efforts may lead to surface-level change without shifting the dynamics of joint activity and educational systems that reproduce inequities for students, families, and communities (Diamond, 2021).

> *Without a shared vision for what the learning goals are for collaborative education research, past efforts suggest that there may be tinkering around the edges but that the "status quo" will largely be preserved.*

In an effort to support sensemaking around what it takes for individuals and organizations to meaningfully engage in collaborative education research, over 150 people from a range of institutional homes participated in a series of field-wide conversations during the summer and fall of 2022. These discussions aimed to conceptualize and articulate the necessary learning for partners from across organizational spheres and roles to participate in collaborative education research. We viewed conceptualizing the learning demands as an essential first step in building a system of learning supports and tools.

Initially, the aim was an expansive and inclusive approach to identify learning demands through the lens of knowledge, skills, dispositions, or orientations to inquiry required for collaborative education research efforts. This paper presents the story of how this initial aim evolved through critical reflection, iterative design, and collective wondering about the complexity of learning involved in collaborative education research. In particular, the contributors to the series of conversations documented here grappled with how to represent individual learning within complex systems of power and normative practice and how to specify learning demands while emphasizing the importance of local responsiveness and experimentation.

In the pages that follow, we describe the different stages of this journey to represent the learning demands of collaborative education research. We examine each of the steps in turn, as we believe the process we engaged in illustrates the complexity of the work and ongoing learning and critical reflection needed to truly build a field of collaborative education research. As one step in this process, this paper puts forth an emerging framework to guide preparation for and participation in collaborative education research representing the collective thinking of a group of about 154 individuals from across 95 organizations in 11 countries. The paper concludes with next steps and lingering questions for this work.

# DEFINING COLLABORATIVE EDUCATION RESEARCH

We use the language of "collaborative education research" (Penuel et al., 2020). This language is intentionally broad, allowing for a more expansive and inclusive understanding of such efforts. We aim to signal and encourage consideration of the multiple forms of collaborative partnerships involving inquiry in education as legitimate and worthy of pursuing. Our intentional framing of "building the field for collaborative education research" puts these different approaches in conversation by welcoming all forms and approaches under a big tent. This language is meant to capture a broad family of approaches and traditions including, but not limited to, research-practice partnerships, participatory action research, youth participatory action research, community based partnerships, community engaged scholarship, social design experiments, school–university partnerships, networked improvement communities, and design-based implementation research partnerships.

# HISTORY OF INITIAL EFFORTS

The launch point of the efforts described here was a week-long meeting hosted by the National Center for Research on Policy and Practice (NCRPP) in Semiahmoo, Washington in summer 2019. NCRPP had received funding from the Institute of Education Sciences to study how research evidence was used to inform policy and practice decisions in education, and this event was connected to strategies for supporting engagement around research. The focus was specifically on the training and learning contexts for graduate students who wanted to engage in collaborative education research. Small group conversations convened at the event generated initial ideas for what cross-institutional efforts might look like to sustain and coordinate preparation for collaborative education research. After the Semiahmoo convening, representatives from the University of Colorado, Boulder, University of California Irvine, Northwestern University, Stanford University, and University of Delaware continued to meet together informally to think about cross-institutional training for doctoral students in 2020 and 2021. Figure 1 represents these early days.
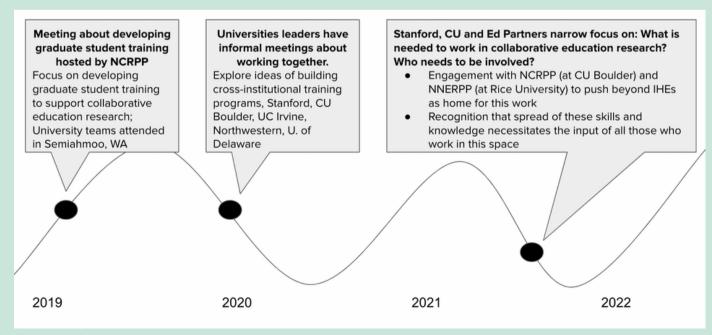


**Meeting about developing graduate student training hosted by NCRPP**
Focus on developing graduate student training to support collaborative education research; University teams attended in Semiahmoo, WA

**Universities leaders have informal meetings about working together.**
Explore ideas of building cross-institutional training programs, Stanford, CU Boulder, UC Irvine, Northwestern, U. of Delaware

**Stanford, CU and Ed Partners narrow focus on: What is needed to work in collaborative education research? Who needs to be involved?**
- Engagement with NCRPP (at CU Boulder) and NNERPP (at Rice University) to push beyond IHEs as home for this work
- Recognition that spread of these skills and knowledge necessitates the input of all those who work in this space

2019     2020     2021     2022

**Figure 1.** Origins of the design process.

With support from The Hewlett Foundation, in 2022, a design team ("the design team") made up of members from the National Network of Education Research-Practice Partnerships (NNERPP), NCRPP, California Education Partners, Stanford University, and CU Boulder next came together to develop a framework for training individuals in collaborative education research. Notably, this group expanded upon the initial idea explored at the Semiahmoo convening of focusing only on graduate student preparation to imagine a wider range of learning opportunities that could meet the needs of all those engaged in collaborative education research (i.e., including those from research, practice, and community spaces). Based in part on this larger focus, the design team outlined three guiding commitments as a starting place. These commitments are rooted in critical, sociocultural perspectives on learning and becoming, and suggest that learning is situated in contexts, not isolated in individuals:

## GUIDING COMMITMENTS

**We will position all collaborators positively and powerfully through attention to roles, relationships, and power differences.**

**We will support responsive adaptation within research that honors local experimentation, wisdom of practice, and research evidence.**

**We will disrupt systems of oppression for more just futures.**

As a starting point, the design team took up a scan of literature related to collaborative education research, in addition to searching for existing learning opportunities. The design team selected research-practice partnerships (RPPs), a growing set of approaches to collaborative education research, as a focal area given RPPs' recent attention from funders and policymakers, as well as the uptick of research on RPPs (Penuel & Hill, 2019). Artifacts from this effort can be found in the accompanying supplementary resource[1] to this report.

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[1] Oyewole, K. and Weiss, J. (2023). Towards a Field for Collaborative Education Research: Developing a Framework for the Complexity of Necessary Learning Supplemental Resource. The William and Flora Hewlett Foundation.

# INITIAL CYCLES OF REFLECTION AND SYNTHESIS

While the original intention of the design team was to end up with a draft of the collection of learning opportunities needed to support meaningful participation in collaborative education research, the proposed set of activities changed early on in response to collective noticing, reflections, and learning amongst the team. In summer and fall of 2022, the design team coordinated a set of virtual open-access discussions to further explore what preparation is needed for working in collaborative education research. Building on the shift in thinking, the design team sought out and welcomed many different perspectives and orientations to collaborative education research to learn with and from one another. These conversations were publicized broadly through email lists (e.g., the NNERPP newsletter) and via social media from Stanford University and CU Boulder. Across the three online events, 339 individuals representing 185 institutions registered. About half of those who registered (45%; 154 of 339) engaged in at least one online event via discussion, notetaking, and survey input, and about ten percent of those who registered (9%; 30 of 339) attended two or more of the virtual sessions (see front matter for full list of virtual participants and contributors). All virtual meeting attendees were asked how they would like to engage in this effort, with options including receiving updates, writing collaboratively, sharing research/resources, or attending a future in-person meeting. Each of these three sessions represented a complete cycle of design, reflection, and synthesis that led into the next session. Each cycle and its products are described in the sections below.

**CYCLE 1**

Generating lists of skills, knowledge, and dispositions

**CYCLE 2**

Reflecting on consolidated themes

**CYCLE 3**

Engaging an explicitly critical lens

## CYCLE 1: GENERATING LISTS OF KNOWLEDGE, SKILLS, AND DISPOSITIONS

The first virtual meeting, which took place in July 2022, involved small-group brainstorming and generating lists of knowledge, skills, and dispositions needed to engage in collaborative education research. Around 100 participants contributed ideas in small groups in Zoom and then completed a Google form to further share their suggestions. After the meeting, the design team attempted to synthesize themes from this brainstorming and represent the relationships between the themes in a diagram.

As shown in Figure 2, the brainstorm produced ideas that the design team organized according to three themes: (i) habits of mind (e.g., how people "show up" to the collaboration; individual conditions for collaboration); (ii) supporting productive interactions (e.g., behaviors necessary for successful interactions between collaborators); and (iii) developing infrastructure for the work (e.g., all the practical requirements for supporting effective collaboration including project management skills). The figure also points to specific mindsets and behaviors related to the overlap of these three themes such as "being able to attend to human aspects of this work such that partners feel honored, seen and valued," which relates both to habits of mind and supporting productive interactions.

For further elaboration, the design team also created a table that summarized ideas from the online survey and lined them up with our attempts to synthesize across those ideas, shown in Table 1. These two representations were the outcome of our first cycle of design and were then brought to the second virtual session.
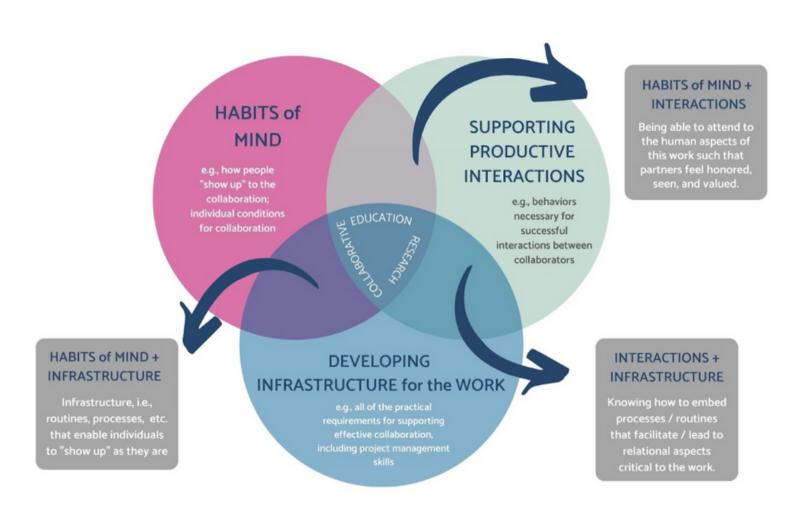
**Figure 2.** Summary of key themes from July 2022 online discussion

**Table 1.** Summary of key phrases and ideas related to themes from July 2022 online discussion

| OUR ATTEMPT AT SYNTHESIZING KEY PHRASES | KEY PHRASES + IDEAS SHARED BY PARTICIPANTS |
|---|---|
| **Proposed Label:** "Habits of Mind"<br><br>**Key themes:**<br><br>• Being flexible, responsive, and ok with ambiguity<br>• Valuing others and the different expertise, perspectives, and ways of knowing they bring to the partnership<br><br>**Proposed description:**<br><br>This set of "skills" speaks to how people show up to engage in collaborative education research. It is less about the actual interaction and more about how individuals create the conditions for successful collaboration to occur. | • Being ok with ambiguity, especially as it relates to roles<br>• Appreciating / valuing / respecting different ways of knowing, understanding<br>• Participants need to see each other, know why they are there, value each other and their expertise<br>• Inquiry stance / mindset<br>• Committed to the goals of the endeavor<br>• Curiosity, humility, responsible, respectful<br>• Shape shifting / wearing "multiple hats" is required<br>• Trust yourself / others enough to admit weaknesses<br>• Flexibility, adaptation, responsiveness; let go of previous norms and adjust to what is needed |
| **Proposed Label:** "Supporting Productive Interactions"<br>**Key themes:**<br><br>• Communication skills: the ability to listen to others and share in ways so that others can hear you<br>• Relationship building, strengthening, and troubleshooting<br><br>**Proposed description:**<br><br>The focus of this set of "skills" includes attending to and designing productive spaces where interactions between actors occur. Many of the examples shared highlight the need to nurture relationships between people, as well as attending to power dynamics, which may include bringing an awareness to how institutional culture, incentives, and norms may affect individual behavior, for example. | • Ability to "see" the system and understand the work in relation to other efforts / people<br>• Acknowledgement of role, identity, institution, etc. and how that may shape collaboration<br>• Knowledge of the journey, planning for change<br>• Ability to learn from each other<br>• Relationship development, nurturing<br>• Ability to communicate needs, preferences; having agency<br>• Listening, negotiation, and conflict resolution skills<br>• Leveraging diverse experiences productively<br>• Provide and receive constructive feedback<br>• Establishing and nurturing friend / teammate connections<br>• Power dynamics…all the things here (e.g., inclusion of diverse voices, acknowledging + mitigating power dynamics, positionality) |
| **Proposed Label:** "Developing Infrastructure for the Work"<br><br>**Key themes:**<br><br>• Understanding what is needed for effective project management<br>• How to create invisible infrastructure to support all aspects of the collaboration<br><br>**Proposed description:**<br><br>This set of "skills" describes the practical aspects of supporting effective collaboration, including knowing how to set up, complete, and sustain projects. Many of the skills described could be considered dimensions of effective "project management". | • Project management skills<br>• Time and resources<br>• Lots of people mention the "why" or the goals or purpose of coming together<br>• Knowledge of existing relationships, power, setting, context, culture, norms<br>• Knowing individual and collective goals<br>• Identification of roles, responsibilities<br>• Logistical considerations, e.g., data sharing, findings distribution, etc.<br>• What's the difference between a team and a research team?<br>• Embedded structures / routines / processes<br>• Shared language, shared understanding |

## CYCLE 2: REFLECTING ON CONSOLIDATED THEMES

During the second session, participants were invited to consider the representation of consolidated themes from the first session (via Figure 2 and Table 1) through the lens of what might be missing or needs adjustment. Following the session, members of the design team summarized the feedback generated during the discussion. Table 2 shows the frequency of the different ideas discussed during the session. In addition, participants also identified the following challenges:

**1. Need to interrogate word choice throughout for problematic, normative ideas that might be carried forward**. For instance, one participant asked: "I'm curious about the term 'effective project management'. What does this look like or mean? Does 'effective' mean to maintain or disrupt hegemonic norms?"

**2. Need to more explicitly represent the role of power and power dynamics within the work.** Another participant noted, "Positionality and power differentials are not explicitly stated, and because they're very complicated, perhaps should be called out more directly."

**3. Need to be more disruptive in the ways were are conceptualizing learning demands.** A participant reflected: "[The diagram] feels a little like how Simmons describes how SEL is taken up–'White supremacy with a hug'--there's an underlying normative approach that feels very academic, very White. I think we need to be much more explicit about how we are trying to counter that."

**4. Need to more explicitly represent the broader system in which individuals and groups are working and learning.** One individual asked, "I'm wondering about the systems in which this work is taking place. How are the constraints and affordances of different institutional memberships and positions represented here? Does that matter?"

Taken together, the feedback pushed the design team to recognize the need to critically analyze the collective work thus far with the goal of ensuring this effort was disrupting habitual patterns of thinking that perpetuate systems of oppression.

## KEY IDEAS SHARED IN AUGUST MEETING

**What is missing from these findings? What parts of the findings need to change?** (n = 188 responses)

- Consideration of socio-historical contexts - Power, justice, equity, inclusion (n=38)
- Adjustment to/expansion of model (n=28)
- Continuum or differentiation of support/learning based on experience in CER/maturity of partnership/role/level (individual vs org) (n=23)
- Questions/concerns about next steps in CER design process (n=23)
- Adjustment to/expansion of a specific knowledge, skills, or disposition description (n=22)
- System-level influences, considerations, challenges (n=22)
- CER-specific research methods/questions/norms/skills/tools (n=17)
- Baseline conditions/knowledge for success, common mistakes/pitfalls (n=11)
- Dissemination/training (n=4)

**Table 2.** Summary of ideas related to themes from August 2022 online discussion

**Inquiry Methods:** Members of the design team read participants' responses from breakout sessions multiple times. A design team member coded each response, revising and re-coding as new themes emerged. The initial codes were then collapsed into broader categories. Responses addressing more than one emergent theme were dual-coded as necessary. Due to the large number of participants, the occurrence of each theme was counted to provide a representation of approximately what percentage of participants expressed similar ideas.

## CYCLE 3: ENGAGING AN EXPLICITLY CRITICAL LENS

For the third collaborative virtual session, the group collectively named and grappled with some of the common assumptions about learning, change, and equity that would be problematic to bring forward. To support this work, the design team put forth a tool termed "thinking traps" as a way of capturing the habitual ways of thinking about learning and educational change that we all can - and often do - fall into but do not disrupt systems of oppression. These "traps" were framed as often baked into our educational systems and organizations as "the way things are done" and/or the way to make sense of what we are experiencing and working on. While there are many of these, the design team invited participants to focus on the following three as potentially useful lenses to critically apply to the group's current thinking about how to meaningfully represent the learning involved in collaborative education research.

**THINKING TRAPS**

> **Viewing learning through the lens of rectifying individual deficits or gaps; ignoring the necessary systems change.**

> **Viewing goals for learning through the lens of an already established, "right" body of knowledge.**

> **Ignoring or leaving implicit the ways that ideas and systems of power that live outside of schools and educational organizations interact with and shape learning, relationships, and practice.**

### THINKING TRAPS

The use of "traps" as thinking tools was inspired by Shane Safir and Jamila Dugan's book Street Data: A Next-Generation Model for Equity, Pedagogy, and School Transformation (2021). Safir and Dugan define a trap as a "mechanism or device designed to catch or retain" (p.32) and describe how naming traps can support those leading equity-centered educational change to "build awareness of our default discourses and behaviors" (p.42) that shape approaches to the work.

In processing the questions raised through engaging with the thinking traps as a lens post-meeting, the following major questions surfaced, which then served as a frame for the subsequent in-person and virtual meetings:

**How do we represent this thinking in a way that is disruptive, takes a stance, and is also not prescriptive?**

**Are we bringing forward an individual-focused vision of learning and change in our current representation?**

**Are we implicitly conveying a deficit perspective that folks don't already have some (or all) of these skills/knowledge/dispositions?**

**Are we implicitly conveying that all learners learn in the same way or have the same learning needs?**

**How do we represent learning demands in a way that fully captures the complex, relational, and transformative work that we are envisioning?**

**Are we conveying an implicit acceptance of many systems (e.g., research methods, purpose of research) in our current representation? What if we started over?**

**How do we represent the systems that also need to change in relation to individual learning?**

**How does this particular work fit into a broader theory of change?**

Collectively, these questions signaled a growing sense that there was a need to rethink the way we (the design team and participants) were representing the learning demands involved in building the field of collaborative education research.
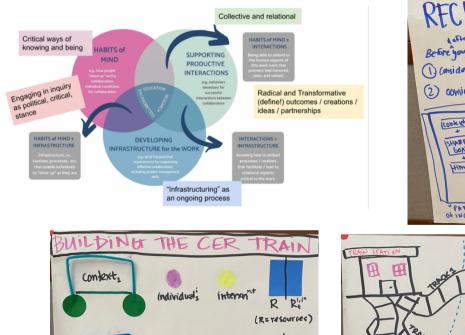
# SHIFTING THE FRAME: FROM INDIVIDUAL SKILLS AND KNOWLEDGE TO CRITICAL QUESTIONS
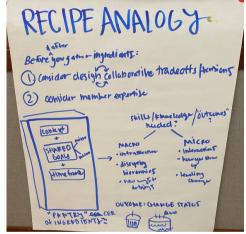
In October 2022, the design team held parallel in-person and virtual design events to synthesize the insights raised at the previous three virtual events. The goal was to facilitate a collaborative design process that would build from insights developed during the previous design cycles to converge on a framework representing the learning demands of collaborative education research.
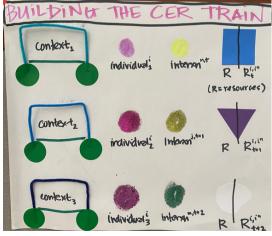
Everyone who indicated an interest in attending the in-person event was asked to submit a form asking details about themselves and their possible involvement. From this form, the design team invited and recruited in-person attendees with attention to diversity of racial and ethnic identities, organizations (e.g., university, non-profit, schools, local educational agency, state educational agency, foundation), and roles (e.g., professor, graduate student, program officer, partnership intermediary, professional researcher). In particular, the design team attempted to recruit individuals from groups historically marginalized in academic research–Indigenous, Black, Latinx, and state/local educational participants. With support from the Hewlett Foundation, attendees' travel, lodging and food was covered. In terms of the virtual event, this opportunity was designed to accommodate the participation of people unable to attend in-person because of personal or professional constraints. The virtual event included two days of facilitated three-hour sessions held in parallel.

In both settings, participants were invited to first review the previous attempts to capture the learning demands of collaborative education research alongside the critical questions and revisions surfaced in the

previous virtual sessions. The initial review process involved individual and small group analysis, annotation, and discussion of highlights and questions present in the summary documents from previous meetings. Attendees then worked in small groups to try to develop representations of the learning demands of collaborative education research that synthesized ideas across the rich contributions from the three previous virtual sessions. To provide space for a broad range of thinking and participation, the in-person session involved a variety of materials that participants could use to create visual poster representations of their thinking while attendees in the virtual setting drew on shared virtual tools, like Google slides and documents. A selection of the resulting ideas are shown Figure 4, below and on the following page.
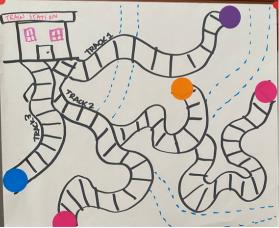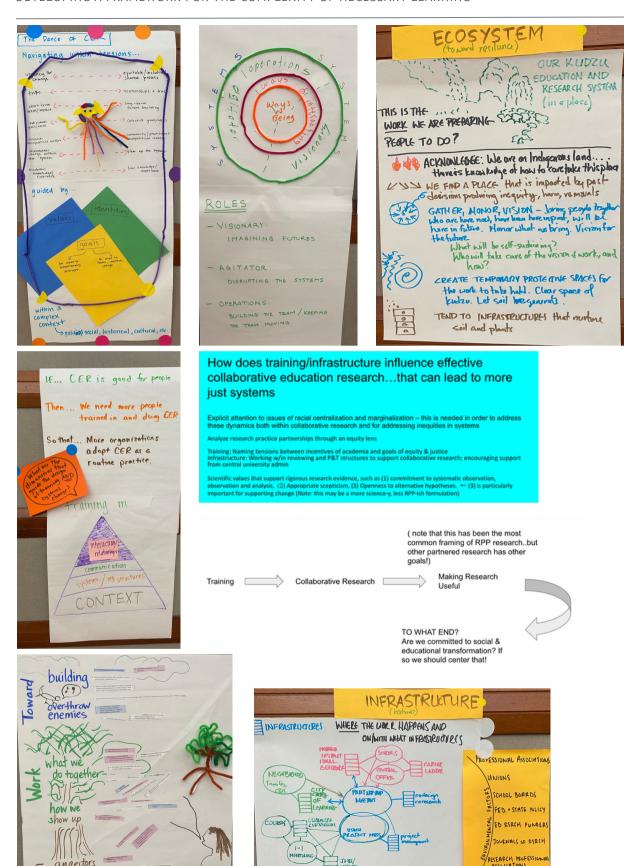


**Figure 4.** Representations of the necessary learning.

**Figure 4.** Representations of the necessary learning.

## CORE IDEAS

**Context and history**

socio-political context, ecosystem, ancestors, traditions, roots

**Interaction, relationship**

ways of interacting, roles, building trust, relationships, consensus, sensemaking, collaborating

**Intrapersonal**

values, identity, goals, ways of being, openness, humility, responsiveness, flexibility, how we show up

**Resources, systems, organizational structures**

**Knowledge of local context and educational research**

domain-specific expertise

**Work is political, disruptive**

power dynamics

**Evolution, non-linear, growth**

micro and macro levels

**Complexity and tensions**

**Figure 5.** Core ideas found across representations.

## THE CHALLENGE OF BRINGING DESIGNS TOGETHER

In the in-person setting, the next step in the framework design process invited small groups to pair up and combine their frameworks into one prototype framework reflecting the most salient themes. Participants readily recognized important similarities and distinctions in each group's representation, noting the critical contribution of each person's lived experience and context in each group's initial representations. Though discussions were fruitful, participants found the greatest value in thinking about why and how their models were different and were, therefore, reluctant to combine models. One group's discussion aptly described the overall group's tension with combining their representations noting that, "It's [collaborative education research] a complex balancing act, and there's no right way to do it." A simmering tension as the full group came back together was how to reconcile the competing goals of specifying learning demands while also embracing the broad diversity of approaches, contexts, and collaborators within collaborative education research: was there a way to create a single model without flattening - or even alienating - the varied experiences of collaborative research participants? At the end of the first day of the October meetings, attendees were left with more questions than answers.

The evening between the two days of the October meetings, a small group of design team members met to consider how to move forward. As a first step, the group looked across the representations created by both the virtual and in-person groups for common ideas. The group found that - despite the many differences in representations - participants did converge on a core set of big ideas about the complex work of collaborative education research. These "core ideas" were are shown in Figure 5.

## A SHIFT TOWARDS CRITICAL QUESTIONS

The design team's conversation then shifted to how to move forward. At this point, two challenging questions that were persistent across the summer and fall discussions remained:

**Is framing the learning demands of collaborative education research as "skills, knowledge, and dispositions" useful or contradictory to the goals of the work?**

This question represented several concerns. First, framing the work of knowledge, skills, and dispositions in individual terms seemed for some to directly conflict with the inherently collaborative and collective nature of collaborative education research. Second, others were concerned that the framing could imply a deficit focus on what individuals might 'lack' and thus need to learn about, rather than engaging the resources and experiences that participants bring to the table to engage in collaborative education research. In these ways, focusing on skills, knowledge, and dispositions represented historically prevalent ideas about learning that conflict with the more complex sociopoliticial and sociocultural learning involved in collaborative education research.

**How do we represent learning demands in a way that specifies the complex work and also supports responsive adaptation and local experimentation?**

Given the necessarily local and responsive nature of collaborative education research, a major question was how to represent learning demands in a way that specified and honored the complexity of the work without suggesting a uniform approach. As part of this question, the group wrestled with the ongoing challenge of how to meaningfully represent the complex systems, histories, and sociopolitical dynamics that are at constant play within collaborative education research efforts.
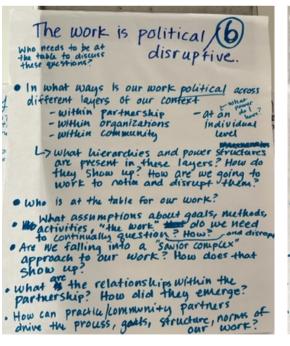
At this juncture, the group of design team members reflected on Jennifer Randall's (2021) heuristic for anti-racist and culturally sustaining educational assessments. Randall focused on construct definition – precisely understanding the concepts tested on exams – through the lens of explicit disruption of systems of oppression. Rather than a list of steps or goals for defining constructs in an anti-racist way, Randall argued for the need for assessment designers to engage in critical reflection around a series of interrelated questions, provided in the form of a heuristic. In other words, there is not one way for construct definition to be critical or anti-racist, and there is not a simple list of what to do; instead, ideas from Randall (2021) encouraged the design team to consider how key questions can lead one to interrogate their own roles and positionality as a way of moving toward a more critical and anti-racist future.

The smaller group of design team members considered the utility of this approach for specifying the learning demands of collaborative research. At its core, education research produced collaboratively needs to be locally responsive and involve a number of voices in ways that are fundamentally disruptive to historically prevalent research approaches and systems. Therefore, instead of specifying knowledge, skills, and dispositions for collaborative education research (which might inherently conflict with locally responsive practice), the group wondered whether it would be powerful to instead surface the range of questions that might be essential to engaging in the processes of collaborative education research. This wondering turned into a revised plan for the second day of the in-person event.

In launching the second day of in-person work, the design team shared the challenges and the core ideas that emerged as similar across participants' representations of the learning demands of collaborative education research. Participants were invited to divide into small groups for each of the core ideas and engage with the following questions:

- **Where does this core idea show up across the designs from yesterday?**

- **What questions would you list next to this core idea to help people surface or consider this idea in their own context (e.g. graduate preparation, practice organizations)?**

The small groups created posters to capture insights from the existing designs and questions. Two examples of posters listing potential questions are shown in Figure 6. Participants then gathered to share key insights and connections across the different core ideas and brainstormed additional questions. In closing conversations later in the day, participants noted that the shift to developing key questions felt meaningful and generative in a way that was a departure from the previous day's efforts to come up with a single framework or "answers."
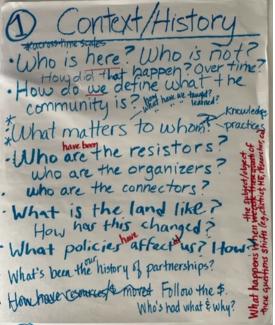


**Figure 6.** Posters with brainstormed critical questions for core ideas.

# TOWARD A FRAMEWORK FOR LEARNING IN AND THROUGH COLLABORATIVE EDUCATION RESEARCH

Following the October meetings, the design team made the decision to more fully build out a framework that represented the core ideas and questions surfaced by participants. Inspired by Randall's (2021) heuristic, the aim was to design a tool that captured an organized set of questions that could guide the way that participants can grow and learn in and through collaborative education research. Thus, rather than seeking a structured, specified set of learning demands this framework represents the learning demands of collaborative education research by unpacking the kinds of thinking and critical reflection those participating in collaborative education research need to learn how to wrestle with both individually and collectively. To do so, the design team worked to summarize and organize the questions developed across the small group conversations in Houston, in addition to ideas and artifacts generated from the virtual meetings. This draft framework was then iterated on through two cycles of feedback elicited through virtual sessions that took place in December 2022.

The resulting proposed framework is shown in Figure 7. Critical questions are grouped in relation to five core ideas: systems landscape, interpersonal relationships, intrapersonal relationships, resource mobilization, and educational research. In response to feedback about intermingling of questions related to previous practices and questions related to ongoing/future processes, questions are also grouped by those that relate to "Critical Reflection on Past Practices" and those that relate to "Equitable Development of Future Processes." Given the interrelatedness of the core ideas, there is not a one-to-one correspondence between questions on past practices and questions on future processes; they influence each other in reinforcing ways.

While the framework organizes questions by core ideas, the intention is to conceptualize these core ideas and questions as both distinct and deeply interconnected. Here, drawing on Indigenous metaphors of cordage is useful, which present knowledge creation as akin to the doubling and intertwining of one long cord of cedar to make a stronger cord from two distinct pieces (Tzou et al., 2019). Separating even the most salient questions would neglect other important considerations. We also recognized that power was a central, recurring idea throughout the design process, and highlighted woven within and across the core ideas.

## MAKING SENSE OF THE FRAMEWORK THROUGH ILLUSTRATIVE VIGNETTES

In order to ground the framework in the stories from the field, the design team asked online discussion participants to submit short vignettes illustrating how and where people see the five core ideas of the collaborative education framework represented in their work, as well as what participants and their teams were learning through the experiences. Through stories of how individuals themselves, their partners, or others were developing, engaging in, or learning about collaborative education research; many of the vignettes explored multiple aspects of the framework through both past reflection and the development of future processes. Some suggested connections are linked in Table 3 below. The full set of 11 vignettes can be found in Appendix A.

| Core Idea | Connecting Vignettes |
|---|---|
| Systems Landscape | 7, 8, 9, 10, 11 |
| Interpersonal Relationships | 2, 6, 7, 9, 11 |
| Intrapersonal Relationships | 2, 9, 10 |
| Resource Mobilization | 1, 10 |
| Educational Research | 3, 4, 5 |

**Table 3.** Connections between the framework and illustrative vignettes.

**Figure 7.** Emerging framework for the necessary learning of collaborative education research

## A FRAMEWORK FOR THE COMPLEXITY OF NECESSARY LEARNING OF COLLABORATIVE EDUCATION RESEARCH

| Critical Reflection on Past Practices | Equitable Development of Future Processes |
|---|---|
| **Systems Landscape** *Educational research is embedded in social, cultural, historical, and political contexts.* | |
| • What is the history of our collaboration? Of the individuals within or adjacent to our collaboration? <br>• What is the history of the land where our collaboration is situated? How has this changed? <br>• Which institutions, individuals, stakeholders are here? Who is not? How did that happen? What does that look like over time? <br>• What local policies or politics have affected our collaboration and community? How? | • How are hierarchies and power structures present between our collaboration, organizations, communities, and project members? How are we going to work to notice and disrupt them? How are we interrupting racism? <br>• Which individuals, organizations, and collaborators can we incorporate into our project to center the local context? <br>• How can our collaboration center the people previously marginalized in our work? <br>• How do we define community in our collaboration? How will our project be held accountable to the community? <br>• How can we engage the cultures of the local context with respect for who and what precedes us? |
| **Interpersonal Relationships** *All collaborators can and should be positioned positively and powerfully through attention to roles and relationships.* | |
| • Do we share a commitment to antiracist, equitable social and educational transformation? <br>• How do internal or external organizational conflict/tensions impact our collaboration and inform our interactions? <br>• Do the members of our collaboration represent the racial, gender, and other identities of the communities where they work? <br>• Is there a history of interpersonal relationships on our team that needs repair? <br>• Have we devoted adequate time to partner relationship building to develop rapport and build trust? | • How can we collaboratively build routines for meeting, communicating, interacting, and decision making to promote power sharing and system transformation? <br>• How can we build space for regular reflection into our collaborative practice? <br>• What assumptions about time, schedules, and production do we need to disrupt? Is our project reliant on a linear notion of progress? <br>• Are we moving away from White, middle-class norms and status quo interactions and behaviors? |

# A FRAMEWORK FOR THE COMPLEXITY OF NECESSARY LEARNING OF COLLABORATIVE EDUCATION RESEARCH

| Critical Reflection on Past Practices | Equitable Development of Future Processes |
|---|---|
| **Intrapersonal Relationships**<br>*Individuals can and should reflect on how they perpetuate power differences as they "show up" for the work.* ||
| • What identities do you hold? How do these identities intersect? How do these identities align with or diverge from others on the project team and the community?<br>• Why are you engaging in collaborative research?<br>• What principles guide your engagement in this project? How did you come to hold these principles?<br>• What do equity and justice mean to you?<br>• What are your individual goals for this project? How do your personal goals interact with the goals of other team members? | • What roles do you have (e.g., teaching, listening, designing, funding)? Do these roles represent your desired engagement?<br>• How do your identities confer power and privilege? How do they lead to marginalization or disadvantage?<br>• What role can you play in disrupting power structures while conducting research focused on improvement or equitable transformation?<br>• What transformations are you prepared to go through as a result of the collaboration (in terms of beliefs, knowledge and practices)? |
| **Resource Mobilization**<br>*Human, financial, and material assets can and should be leveraged to create more equitable education systems.* ||
| • What types of organizations are involved in the collaboration? What are the incentives within these organizations? How are resources distributed in these organizations?<br>• What resources (e.g., funding, in-kind donations, advocates) does this collaborative project have? What resources do we lack? How do they fluctuate?<br>• What is the landscape of systems surrounding our collaboration? Are there any efforts to create supportive infrastructure? Or, do the systems create barriers?<br>• Who are the people resisting systems of oppression in our organizations? Who are the organizers? Who are the connectors?<br>• What is the structure of our collaboration (e.g., umbrella, etc.)? | • How might we be creative with mobilizing resources?<br>• How (if at all) might a "savior complex" approach show up in our work?<br>• Who can we recruit from our organizations and community to support our collaborative project? How can we use nontraditional outreach methods to recruit new research collaborators?<br>• How can we equitably distribute resources in our collaboration?<br>• How can we make our entire process more equitable to reduce (present) harm and prevent (future) harm inflicted on persons with historically marginalized identities involved (e.g., students, researchers, practitioners, consultants, etc.)? |

# A FRAMEWORK FOR THE COMPLEXITY OF NECESSARY LEARNING OF COLLABORATIVE EDUCATION RESEARCH

| Critical Reflection on Past Practices | Equitable Development of Future Processes |
|---|---|
| **Educational Research**<br>*Research evidence can and should be adaptive and responsive to local needs.* | |
| • What educational scholarship, frameworks, and methods inform our project? How should we explore interdisciplinary traditions?<br>• What construct (i.e., phenomenon or abstract concept) are we trying to understand? What perspectives or forms of knowledge have we privileged in our approaches to doing so?<br>• Does our research rely on White supremacist notions of methodological rigor?<br>• What ethical principles govern our research?<br>• How do community organizing and activist practices influence our project?<br>• How has our collaboration communicated knowledge from research? | • Do our research methods align with the principles of collaboration outlined by our team?<br>• How does knowledge from research honor and integrate local knowledge?<br>• How are we communicating our research knowledge to broader audiences? Are we properly contextualizing this knowledge?<br>• How is our research knowledge reaching local communities? How is it responding to local needs?<br>• How are we supporting members of our collaboration to gain the institutional power associated with traditional research methods? To mobilize the grassroots power associated with collaborative research methods? |

# DISCUSSION AND FUTURE DIRECTIONS

The preceding pages describe one step in a longer effort to build systems and supports for a field of collaborative education research. Building such systems and supports must come a deep understanding of what it is that individuals and organizations must learn in order to truly transform the ways in which educational research interacts with local organizations and leaders. While we believe the framework presented here is likely to be a useful tool, we also argue that the journey towards that tool also provides essential insights. In the end, our initial steps towards identifying the learning demands of collaborative education research did not represent the full complexity of the necessarily complex, localized, and disruptive practice. Attempting to identify individual skills, knowledge, and dispositions surfaced important learning, but did not capture relational, political, systemic, and transformational learning. We see the shift to critical questions as an important pivot in that it focuses attention on the ongoing, critical reflection necessary for equitable educational practice and systems to emerge.

## HOW MIGHT THE FRAMEWORK BE USED

As we envision a future for collaborative education research, we see some incredible opportunities to build structures for on-going field building and strengthening. We envision the field using the framework created by this process in some communities of practice. These communities of practice could include:

- Instructors of courses (e.g., faculty at universities, or staff leading workshops) working to design learning opportunities related to collaborative education research
- Leaders of educational organizations outside of universities that want to support their staff engaging in collaborative education research
- Early career and future scholars in training striving to develop careers in educational research who want to learn how to engage in collaborative education research

There remains further work to experiment with ways the framework can be used. We invite new and continuing members of the collaborative education research community to engage with this framework in creative and locally-responsive ways.

Through the virtual and in-person conversations as part of this effort, a number of potential opportunities have already emerged:

The themes and questions could be used to organize resources or articles. If someone wanted to access resources related to collaborative education research, these core ideas and questions could help the person think about the area of work they want to strengthen or grow, and locate resources related to those ideas.

The clusters of questions could be used as a guide for facilitating conversations within a collaboration.

These questions could be organized into developmental pathways, with some questions being more appropriate to ask at the beginning of a collaboration, and others, over time. For example, an emerging collaboration might not be equipped to address all of the questions, but raising some of them can make clear whether partners are grounded in similar principles and visions for their project. A mature collaboration can maintain an equity focus by incorporating a subset of questions into a strategic planning meeting or regular meeting agenda, for example.

As instructors are developing curriculum or coursework for collaborative education research, they could use these core ideas and questions to challenge the boundary of their content and access resources and articles they may have omitted based on their personal expertise. This framework is an attempt at marrying a set of questions that sit across different traditions of collaborative education research, which could help participants in each tradition stretch their thinking and work in collaborative education research.

## A PATH FORWARD

The efforts summarized here demonstrate the tensions, future visions, and lingering questions that surfaced as we collectively wrestled with a vision for the learning demands of collaborative education research. Throughout, participants emphasized the need to confront past histories (particularly of harm with research and historically-marginalized communities), shift cultures, build coalitions, develop collective efficacy, and create institutional change, among other tasks. This was not surprising, given that community engaged research is fundamentally a different kind of field. Building a field of collaborative education research requires coalition building that will take time and involvement of multiple organizations, leaders, and individuals who are willing to build bridges, share power, collaborate, and break down historically unjust systems.

While the framework provides guiding questions for learners and instructors, the field also needs a set of routines related to these questions. For example, what are some model routines for using these questions during learning processes? However, it is essential that at the design and enactment of such routines also depart from more traditional approaches to "training." A key question that emerged throughout the process documented here was the following:

> **How can structures and routines for learning be designed with a sociopolitical learning lens to both support collaborative education research and disrupt historical systems of power and oppression?**

This question relates to tensions identified by participants in our discussions such as calling out "positionality and power differentials" explicitly; emphasizing "effective" collaboration could be a code word for maintaining hegemonic norms; ensuring diagrams of a framework were not normative, academic or white-normed; and supporting continual engagement of the different institutional memberships and roles involved in the field. These tensions need to be explored and constantly revisited and challenged so not to fall back into the status quo.

As efforts to build a field of collaborative education research move forward, it is essential to consider the power structures related to those who fund collaborative education research. Some of this has already started with private foundations and funding agencies (e.g., William T. Grant Foundation, Spencer Foundation, National Science Foundation) having specific funding efforts for collaborative work. However, we see room for a network of funding opportunities that are coordinated and aligned to the guiding questions in the framework. How are funding opportunities offering a critical lens and addressing power differences in collaborative education research proposals? Are funders and reviewers adjusting their lens for what makes a good proposal?

As we move ahead with these tensions and future aspirations, we continue to have lingering questions about this field-building work. These questions begin with considering how to better welcome others into this work, which includes examining the diversity of roles, contexts, and accessibility of this current work and any future work. Our future efforts will be built around commitments to engage more students, families, teachers, school and district leaders, non-profit leaders, early career scholars, and scholars at HBCUs and other minority-serving institutions to have their voices elevated in contributing to the future of collaborative education research.

We also acknowledge and grapple with the reality that in defining a framework to destabilize historical power hierarchies and patterns, we may yet be replicating activities and assumptions rooted in colonial, hegemonic practices. How do the core ideas generated here align with, add to, or move beyond, similar frameworks that have been developed in the past? To what extent are the themes generated here represented in different contexts and in communities that have been historically underrepresented in research, including international collaborative education contexts, indigenous communities, and multilingual communities, among others? More broadly, how can we simultaneously engage in collaborative educational research while also disrupting those contexts in which work? These and other questions must be central as we collectively envision a role for collaborative education research that advances a more just and equitable future for students, families, and communities.

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# APPENDIX A: VIGNETTES

Below is a collection of short vignettes authored by participants from our online discussions. The vignettes represent the experiences of 11 individuals working in collaborative education research efforts within and around multiple institutions and contexts across the U. S. and internationally. Authors crafted their vignettes in response to a call for illustrations of how and where people see the five core ideas of the collaborative education framework represented in their work, as well as what participants and their teams are learning through the experiences. The goal of sharing these stories is to provide readers with multiple examples of how the core ideas of collaborative education research are being enacted across the U. S. and in other parts of the world. A list of vignettes contained in this appendix, indexed by title and author, can be found below.

## Vignette 1: Faculty Fellowships for Collaborative Education Research

Elizabeth Farley-Ripple, University of Delaware Partnership for Public Education, and Roderick Carrye, University of Delaware

The Partnership for Public Education (PPE) at the University of Delaware created a fellowship program for faculty and staff to promote partnerships with the Delaware education community. The PPE fellowship program was created with three objectives: a) incentivizing mutually-beneficial projects with education partners, particularly for faculty and staff without engagement expectations in their workload (i.e. tenure track faculty), b) advancing engaged scholarship and developing models of engaged scholarship across campus, c) mobilizing campus resources to address issues of equity in public education. Over the three years of its existence the fellowship provided $10,000 to support emerging partnerships. Funds could be used to hire students, buy out time, compensate partners, or for other project-aligned reasons. Further, applicants were encouraged to seek a matching commitment of either financial resources, release time, student support, or other compensation in order to both maximize the resources available for the project and to encourage departmental and college commitment to engaged scholarship. The initiative funded 4 scholars of color, 6 female scholars, and promoted partnerships (not all research-centered) with both non-profit organizations and local K-12 schools addressing mattering, civic engagement, postsecondary attendance, professional learning, and parental engagement. All projects achieved their goals and resulted in lessons learned. I highlight one example as an illustration of the work.

The first project was conceptualized by an assistant professor of color to create a partnership with a local high school aimed at imagining mattering by learning from the Black boys and young men themselves the ways they do or do not infer their mattering from their school site. This work was also intended to develop a professional learning experience for educators drawn from students' voices aimed at creating or refining school spaces where Black boys and young men can more deeply infer their robust and comprehensive mattering. The faculty scholar spent about six months building relationships with the district and school leaders to build both permission for the work, but also buy in.

School leadership appointed an experienced teacher who was effective in the classroom as the AVID teacher (Advancement Via

Individual Determination) and had a stellar reputation (participants often cited her as their favorite teacher for her willingness to sustain meaningful student relationships) as the primary staff collaborator for the work. The faculty scholar has engaged other researchers and students at the University in the work, as well as students in the project, as researchers, leading to a participatory approach. The partnership has been in place for three years now, and has published several academic and broader audience pieces on the project. Recently, the faculty member received a call from a support professional working at the school, sharing that a student had specifically asked them to reach out to him to bring the program back after a lull since the start of the COVID pandemic.

Although this example represents one of several fellowship projects, it is illustrative of other projects and provides insight into some of the lessons learned through the fellowship program.

First, collaborative education research is resource intensive and requires institutional support – particularly in the form of release time for all phases: initiation, accomplishing partnership work, and sustaining the partnership. Fellows attribute the ability to do this work to the willingness of PPE to seed emergent work focused on equity, noting that there are not many options to help such projects get started. One partnership was sustained through school and foundation funding, while others have been difficult to sustain due to the absence of funding. Second, collaborative research can engage many partners, including students, schools, community organizations, districts, researchers, and/or graduate students. Across projects, these stakeholders took on different roles, ranging from active engagement in the research process, to gatekeeping, to advocacy, and all had different kinds of influence on the work. Research fellows needed to know how to work with the various types of partners in order to be engaged over time. Third, relationships were central to effective, sustained collaboration. In the project shared above, relationships with school staff enabled the work to begin, and relationships with students facilitated its success and (hopefully) sustainability. In other cases, trusting relationships enabled fellows to serve as brokers among additional partners, facilitated data collection, and created conditions for partners' learning. Last, fellowships demonstrated the different types of benefits experienced by partners, including production of academic research and associated career advancement, funding to support both research and programs, and direct impact on the work of schools through change in practice and, ultimately, on students and teachers.

## Vignette 2: Co-teaching with Ontological Humility in Leadership Preparation

Jennifer Goldstein, California State University Fullerton
Leadership Education for Anaheim Districts (LEAD)

Our partnership focuses on leadership preparation. CSU Fullerton partners with the Anaheim Union High School District (AUHSD) and Anaheim Elementary School District to support those districts in "building their bench" of school and district leaders. In the leadership preparation process, candidates earn their Preliminary Administrative Services Credential. The objectives of our collaborative education research are nested. We are collaboratively engaged, through our co-design and co-teaching of the program, in training the candidates to engage in practitioner action research on their P-12 practice. At the same time, the partners are engaged in collaborative research on our practice of leadership preparation and development. For example, we currently have a book co-authored by university faculty, district leaders, and program graduates under contract at Teachers College Press (Goldstein, Panero, & Lozano, forthcoming).

Co-teaching is the core condition that university faculty and district leaders developed to support our collaborative research. Co-teaching is the primary feedback loop structure (Halverson, 2003) allowing the partnership to flourish, both in the practice of growing the candidates and in the practice of growing ourselves as teachers of leaders and researchers. We are together ongoingly, in weekly meetings to prepare to co-teach and to debrief our teaching, as well as in all day in-person classes once each month. During co-teaching, university faculty have come to understand district needs and priorities more deeply, which allows us to tailor instructional content to meet those needs and priorities. This has involved growth that was uncomfortable at times; university faculty are often accustomed to remaining in their domain of expertise and are not typically forced to authentically stretch and adapt. Doing so has engendered an enormous level of trust. At the same time, and critically, district leaders/co-instructors have come to understand the instructional content, which is designed by university faculty to shift outcomes for the district's students—in particular, the disproportionality for Multilingual Learners, that sits at the center of our theory of action for the program.

It was in this interplay, where instructors were forced to get concrete about actual teaching in front of one another, that the tensions about "what we are doing here" surfaced for examination, and the district and university could learn from one another. Manuel Colón, recently retired Chief Academic Officer for AUHSD and LEAD co-instructor gave this description of the phenomenon of the co-teaching feedback loop:

> "We would grow together because we discussed, every Monday when we met in cabinet, how did LEAD go this weekend? We dealt with topics in LEAD that we normally wouldn't have talked about in cabinet. The whole conversation of equity, we attribute this to [CSUF faculty] and the readings—because the cabinet was involved in co-teaching, it was very impactful for us; it was part of building our capacity."

What Colón is displaying, and what we have learned is crucial in collaborative education research, is ontological humility (Kofman, 2013). Collaborative research involves co-building new knowledge together. To do so requires some level of shared understanding or mental mapping about the endeavor. Showing up for our joint work with an ontologically humble stance has allowed our feedback loop (co-teaching) to generate these shared understandings and mental maps—which were absolutely not present at the outset of our partnership. Being ontologically humble means recognizing and valuing both partners as researchers and as practitioners.

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**Vignette 3: Collaborating with an Out of School Program Provider on a Program Evaluation Design**

Kylie Klein, American Institutes for Research

There are many ways for partners to engage in conducting collaborative education research efforts. For example, I recently worked with an out of school time (OST) program provider seeking to enhance their program evaluation process. I was collaborating with their leadership team to revise their evaluation activities including redesigning their data collection and analysis approaches. The OST program had been operating for over ten years but had never conducted formal program evaluation or worked on a research project with an external party. As a small organization, they did not have research expertise within their team, however, they had a compelling vision for their program and significant expertise working with the students, teachers, and families who were program participants. Here I describe how practices situated within our work were an important opportunity to learn methods to effectively work as collaborative partners.

As an initial first step, researchers and practitioners need to examine a practice program's vision and goals. In this instance, the program leadership described in rich detail the ways in which they believed their program worked and the changes they felt their program was making for students and teachers. They shared stories of student experiences and teacher testimonials, all of which reflected the leadership's passion and commitment to their program's vision. As I listened and learned, I asked clarifying questions to try to probe ways in which the impacts of their efforts might be measured. During this period, it was important to me to honor the years of experience they had in running the program and their understanding of how their program operated to influence outcomes, while also seeking opportunities to support them in identifying systematic ways they might evaluate their program.

In the next phase of collaboration, researchers and practitioners bring their knowledge and expertise together to develop shared goals and consensus about the path forward. In this case we developed a clear logic model for the program that tied their activities to measurable outcomes for students and teachers. Based on our prior conversations and my experience with evaluation design, I proposed draft ideas for what these outcomes might be and sought their feedback and input on these initial measures. In the draft I had narrowed the outcomes to those which their program was most likely to directly influence rather than including distal and unrelated outcomes and those for which we lacked data to measure. In doing so, I proposed excluding a specific secondary outcome that they hoped to influence. Although I recognized that narrowing the set of outcomes the program intended to influence might be seen by the program leaders as a limitation, I also knew it would support them in moving closer to their primary goal of having strong evidence to inform their program's ongoing development. By developing shared goals and focus we were able to achieve a meaningful evaluation plan.

To learn methods for working in collaborative research, I recommend that researchers and practitioners create opportunities within the work to foster learning and bring their expertise to the table. The first step is for all partners to listen and learn about the practice context. The leaders of the OST program had a depth of knowledge about how it had grown and evolved over time that was relevant to planning their evaluation approach. Following that learning, we sought to coalesce around a shared understanding of the activities and interest in the research, in this case by developing a logic model. This created an opportunity to build trust and open, productive communication around our specific research and evaluation goals.

## Vignette 4: Building Collaborative Partnerships by Taking Risks and Being Vulnerable

### Abbey Loehr, Institute for School Partnership at Washington University in St. Louis

Conducting research that has a positive impact on students' educational outcomes and learning experiences has always guided my career goals. During my doctoral training, I studied the impact and use of supplemental curriculum materials on student learning as part of a collaborative team of mathematics education and cognitive psychology researchers. After a postdoctoral fellowship, I joined the Institute for School Partnership (ISP) as Research Director. For the past three years, I have been leading a multi-disciplinary team of researchers and education specialists at ISP that serve as the hub of a Networked Improvement Community (NIC) with three partner school districts. Our NIC aim is to close opportunity gaps in mathematics outcomes for students and create more joyful mathematics learning experiences. ISP provides not only the support districts need to implement research-based practices, but also a commitment to listening and providing evidence to guide decision-making. The primary source of evidence comes from NIC-wide data the ISP is collecting across a system of measures that operationalize the NIC's working theory of improvement.

My learning about how to engage in collaborative education research resulted from throwing myself into the world of research-practice partnerships (RPP coursework, literature, and networks) and applying that learning while initiating and leading an RPP. My doctoral advisor stressed the importance of finding a research collaborator you can develop a relationship with, who shares research interests but also has unique expertise and experiences, and who will serve as an equal partner. These characteristics are also important for partners of an RPP. Once collaborators are identified, my reading about RPPs suggested that establishing regular routines for joint learning and work is critical. For example, I have organized and led a research study group for the ISP hub's internal research and evaluation team. This hub is where researchers coordinate and facilitate learning from research across districts during quarterly and summer NIC convenings. These convenings drive the NIC's research agenda and inform district action steps

In three short years, I've dramatically deepened my initial learning about collaborative research during my doctoral training through my work in RPPs, and learned a few lessons about what makes this type of research work in education. First, collaborative education research requires multidisciplinary teams working together to understand each other and the strengths and constraints of the context in which the research is being conducted. This is essential to ask the right questions and inform decisions about how to balance rigor and feasibility. Second, despite the coordination and negotiation required, partners trust and believe in the power of working together collaboratively to achieve a common goal that is bigger than any individual could achieve alone. Third, these types of partnerships require vulnerability, humility, and the work is messy– which is uncomfortable. Finally, as a researcher collaborating with educators, observing their classrooms, and learning from data with them, I've built trusting relationships that also produce better research in service of our ultimate goal– to impact equitable student outcomes and experiences.

**Vignette 5: The Power of Engaging Educational Practitioners in Research: The Story of STEM DI**

Rachel Martin, Institute for School Partnership, Washington University in St. Louis

In the spring of 2021, I joined the Institute for School Partnership (ISP) at Washington University in St. Louis as a graduate student researcher. I was a doctoral student in the university's department of education and was intrigued by the opportunity to conduct applied, impactful research with educational practitioners. ISP's work in the St. Louis community aims to bridge research and practice, promoting equitable and high-quality educational experiences through partnerships with local school districts. As a graduate student researcher, ISP's Research & Evaluation team supplemented my more formal doctoral training by allowing me to contribute to their work on the STEM District Immersion program (STEM DI), which aims to provide high-quality, equitable math instruction to middle school students in three local school districts using a Networked Improvement Community (NIC) model. In this role, I collaborated with the team on tasks such as creating data collection tools (e.g., survey instruments), cleaning and analyzing data from students, teachers, and administrators, and generating data visualizations that would allow us to communicate research findings to diverse audiences, especially the educational practitioners we partnered with.

ISP's Research & Evaluation team implemented specific, recurring practices to support ongoing learning about approaches to collaborative education research. Coming from a more traditional academic background in which researchers define the question(s) of interest and educational practitioners provide the sites and subjects through which these questions can be answered, I had much to learn about collaborative education research. The Research & Evaluation team, composed of university staff members, had learned about improvement science and launching RPPs like STEM DI using resources from organizations like the Carnegie Foundation for the Advancement of Teaching. To ensure continued learning and support our growth as the STEM DI NIC's hub team, we had regular research team study group sessions in which we discussed texts such as "Research-Practice Partnerships in Education: The State of the Field" (Farrell et. al, 2021). In addition to these study groups, the Research & Evaluation Team provided an apprenticeship model of learning for me as a graduate student researcher new to the world of collaborative education research.

In my time working with STEM DI, I learned a great deal from our efforts to engage practitioners in the research process. For example, through the co-development of a survey intended to measure students' beliefs and mindsets about math, I witnessed the power of involving teachers in a process that usually happens at the direction of researchers behind closed doors. When we presented teachers with potential items to include in the survey, they provided invaluable feedback about what would be most helpful for them to learn about their students to enhance their practice, in addition to insight about how their students would likely interpret the items and engage with the survey. By including teachers in the design process, I believe that we: 1) administered a more valid and relevant survey, and 2) increased engagement with the survey in individual classrooms, as teachers knew that receiving this data would be helpful and relevant to them.

My core takeaway from my time working with STEM DI is that the knowledge education practitioners bring to the research process is invaluable if our aim is to ensure that research is applicable to actual educational contexts. Practitioners are experts of their own contexts, and their expertise deserves to be elevated in investigative processes that are designed to enhance their practice and produce equitable outcomes for students.

To learn methods for working in collaborative research, I recommend that researchers and practitioners create opportunities within the work to foster learning and bring their expertise to the table. The first step is for all partners to listen and learn about the practice context. The leaders of the OST program had a depth of knowledge about how it had grown and evolved over time that was relevant to planning their evaluation approach. Following that learning, we sought to coalesce around a shared understanding of the activities and interest in the research, in this case by developing a logic model. This created an opportunity to build trust and open, productive communication around our specific research and evaluation goals.

## Vignette 6: What I Would Hope to Learn about Collaborative Education Research in Graduate School

Christopher Miklaszewski

As someone who is considering attending graduate school in the field of education, engaging in Collaborative Education Research (CER) might be a way for me to ensure that I have a positive impact on the field! Collaborative research has the potential to be used to disrupt systems of oppression, encourage new partnerships between groups, evaluate current practices in education or educational research, and determine new ways of facilitating positive outcomes for everyone involved.

If I were to be enrolled in a graduate program, I would want to learn from educational professionals who understand collaborative education research well and have practiced it. I would like opportunities to learn about how to maximize benefits from CER work while minimizing potential harm. Consequently, I would like to learn to conduct collaborative research within existing partnerships that already have routines I can learn and partners who are already benefiting from the research. I could envision practicing collaborative research practices in real time through real or mock collaborative research projects, but hands-on experience would probably be most beneficial for learning about effective collaboration. I also think that because a core aspect of collaborative research is partnership, I would also want to learn about how to develop strong partnerships.

Ideally, I would develop long-term relationships with partners during my graduate student training that could last beyond my time as a graduate student and could continue into my career as a researcher. Even while researching which graduate education program to apply to, I have learned a valuable lesson about collaborative education research. Although a lot of great work has been done in the field of educational research, there is more that can be done to ensure that new research impacts the field of education in a positive way. I believe that collaborative education research can have that positive impact!

**Vignette 7: Learning to Negotiate the Rules of Collaboration**

Simon Sjölund, Mälardalen University
Sustainable Preschool

As a PhD-candidate interested in investigating collaborative education research, I was invited to engage in a collaborative research and improvement program. This program is at a large scale including over 300 participants from across Sweden. My role was to be active and participate in meetings, while also conducting research on the collaborative processes. This vignette describes my first in depth experience of collaborative education research where I got to follow a program aiming to improve and gain more knowledge on how preschools in Sweden work with sustainability.

The coordinating independent institute employs a specific structure to all their collaborative programs. It is organized in an iterative pattern of firstly, strategic, decision-making meetings between researchers and school leaders focused on planning improvement tasks for practice and research, as well as setting the agenda for improvement seminars. Secondly, there are the improvement seminars for preschool teachers, constituting the driving force of improvement work as preschool teachers get the chance to discuss the tasks and information on relevant research. A yearly cycle includes six strategic meetings, four improvement seminars, and continuous improvement work locally.

A recurring event at the strategic and decision-making meetings involved school leaders, researchers, and the coordinator from an independent institute discussing their expectations for working together. This was seen as important to avoid ambiguity and uncertainty in each other's roles, to which I agreed and noted as something that was critical to an effective collaboration. These events were organized in a sequence of (1) group discussions, (2) presentations from groups and (3) open discussion. My experience of these events, while providing some insights on how others' think, is that the negotiation and open discussion on setting clear expectations and role structure had limited depth and direction.

Instead, what instigated negotiation and open discussion on roles was when an aspect of the program was questioned. For instance, in a post improvement seminar survey, a small group of preschool teachers said they wanted more information and in-depth synthesis from researchers on the research they had been conducting on the program. When this was raised in a strategic meeting between researchers and school leaders, an engaged discussion started on defining the role of researchers, and if they were to just give preschool teachers a prescriptive way of working or rather provide them with conceptual challenges in the form of, for instance, provocative questions. This also initiated a discussion on when and to what extent school leaders should be informed of researchers' plans for tasks for preschool teachers.

After several such events, where something in the program was questioned and this prompted renegotiation of roles and practices, I re-evaluated my prior optimism about the more formal role negotiations. Through these experiences, I learned that:

- Not all the structures for collaboration can be organized in advance.

- Perhaps more important, you need a skilled coordinator to be able to pick up on the moments where a renegotiation of roles is suitable.

- Capitalizing on these key moments of renegotiation seems critical for successful collaboration.

**Vignette 8: An Unexpected Opportunity: Pandemic Helps Motivate Engagement in Collaborative Research**

Rhonda Tate, Maine Mathematics and Science Alliance (MMSA), STEM Workforce Ready 2030

In June of 2022, STEM Workforce Ready 2030 (WFR), an RPP focused on the integration of CS into the K-8 curriculum in rural Maine, gathered for the first time in two years. MMSA, a nonprofit focused on STEM education research and practice and the lead researchers on several past NSF RPPs, had secured additional private funding for the work and had reached back out to partner districts. The pandemic had brought the classroom realities into the living rooms of many families for extended periods of time. As parents and grandparents struggled to navigate learning management systems, Zoom©, and Google Jamboard©, the pressure on schools to support students in emerging technology was amplified. For those who have been pushing for computer science expansion in K-12, this presented an opportunity to demonstrate that students should not only be users of tech, but also understand the underlying principles. If the need for computer science had been amplified during the pandemic, however, so had the pressures on teachers. Collaborative education research requires, at minimum, collaborators. Could educators not only carve out the time for this research, but also commit to taking an equal role in the work?

To MMSA's surprise, the districts came and were even more committed to the research. After two long years of survival teaching, our educators and administrators were emerging with newly found confidence in their expertise. So much of the pandemic response had been left up to them. Without intervention from experts, they were left believing they were the experts. In the RPP, this has translated into an opportunity to build a more collaborative partnership that breaks down the hierarchical roles. Consequently, teachers and administrators came ready to dive into the work, with a new sense of ownership of that work. They took the lead on planning for the onboarding of new schools. They chose sessions to plan for the summer institute. They offered insight into past findings and questioned structures going forward. In short, it was what an RPP can and should be– one that was truly collaborative in structure and not unduly driven by the priorities of the convening organization.

"Today was great. Being back with such thoughtful, knowledgeable humans is food for my brain and soul. You all take care of us and this is one space where I feel my teaching experience is and knowledge is truly valued."

- WFR RPP member

Since reconvening, the WFR RPP has created a series of structures to build on the emerging leadership of educators within the project and amplify their voices during this potential time of power shifting.

- RPP members have created sub-working groups for grade level teams where agendas are designed by the educators.

- Researchers on the project have created video journal prompts on Flip©, giving each participant an opportunity to reflect on the process. These reflections are coded and shared back to the group in a timely manner so the project can quickly shift directions in response to concerns or opportunities raised by participants.

- Researchers made the subtle shift to send project staff and researchers to the schools for in-person meetings, rather than hosting them at the nonprofit office, resulting in a quiet but powerful message about the heart of the project.

## Vignette 9: A Meta-Reflection on Educator Collaboration

Van Anh Tran, Stanford University

After a transformative summer planning and facilitating a teacher professional development (PD) workshop series with a small group of women of color educators, I reconnected with my team to reflect on our experiences and to share our learnings with a broader audience. As a part of a larger PD program for early career teachers, our team of four was tasked by program leaders with designing the curriculum for History/Social Science teachers participating in the PD. Two members of our team are alumni of the PD program and current secondary history teachers; the other two members of our team are new facilitators to the PD program, former secondary history teachers, and, now, teacher educators and researchers. While each of us have different professional responsibilities and priorities, we learned that we had aligned values, beliefs, and commitments regarding social justice in education.

Initially coming together as experienced facilitators, curriculum designers, and instructional coaches, our new team quickly recognized the unique position that we were in to create a professional learning experience for a field that is predominantly white and male. While we did not know each other very well before being brought together for this PD, we immediately recognized our opportunity to center the ways of knowing and being of women of color. Over the course of our time working together, we made modifications to prior iterations of the PD for History/Social Science teachers and approached our facilitation in a way that decentralized power on our team.

Coming back together following the summer to reflect with one another and to consider the broader implications for educational spaces was an exciting opportunity to continue our collaboration. We decided to come together to collaboratively write about our experiences in this PD so that others designing learning experiences for educators can learn from the way that our curricular design, pedagogical decision-making, and, most importantly, reflexive practices demonstrate connections between educator positionalities and enactments of critical stances. Engaging in a PD designed by women of color educators gave our teacher participants a fundamentally different experience than prior cohorts who had not engaged with the same content in the same way. Our reflection process mirrored our planning process for the PD. We communicated over our group thread to initially share ideas. Then, our meetings often led to storytelling and reminiscing about different powerful experiences. From these (re)tellings of different stories related to our summer facilitation, we identified themes we wanted to elaborate on in our writing, including: 1) justifications for modifications to the existing curriculum; 2) feeling safe to be ourselves; and 3) power sharing.

Ultimately, we approached our collaboration in education research the same way that we approached our initial collaboration as co-planners and co-facilitators—leaning into each of our strengths. As we worked together on the writing, we started to form our conceptions of our process and content for collaborative learning from the PD. In terms of the process, the four of us approached our collaboration in complementary ways—inviting one another, celebrating one another, building on one another, and offering different pathways and ideas to one another. In terms of the content, we learned that engaging in collaborative education research is centering the lived experiences and expertise of the members of the team and reinforcing the interdependence of all team members. Doing this with one another allows humanization to guide our practice, not only as researchers, but as educators, colleagues, and whole people.

## Vignette 10: Building Data Capacity for Youth Organizing

Siomara Valladares, University of Colorado Boulder
Research Hub for Youth Organizing

Our work on Building Data Capacity for Youth Organizing forms part of a long-term partnership between the Research Hub for Youth Organizing[1] and Padres y Jóvenes Unidos (PJU)[2], to reduce inequality in education opportunities and outcomes for Colorado students. In 2017, the Research Hub and PJU partnered with the ATLAS Institute[3] to co-design and build a mobile-friendly web-based platform that could support PJU chapters in their youth participatory action research (YPAR) in local schools and communities. This project was situated at the intersections of community-based research, youth civic engagement, computer science, and the growing use of social media among youth organizers.

Our collaborative goals included:

- The Research Hub would advance education justice by engaging directly with marginalized communities in producing useful research that expands access to resources, decision-making spaces, and builds capacity for students and communities.

- PJU students and their advisors would create and administer surveys, as well as analyze and share data through the developed platform; and

- CU Boulder ATLAS undergraduate students would apply their computer science skills to design socially useful products that met end-user needs.

We began with a discrete question, "How can we develop new technology that helps PJU advance its goals?" During Fall 2017,

[1] The Research Hub for Youth Organizing is a collaborative project of CU Engage and the National Education Policy Center (NEPC) at the University of Colorado Boulder. The Research Hub supports young people's capacity to claim power and create more just communities through field-driven research.

[2] Movimiento Poder, formerly known as Padres y Jóvenes Unidos (PJU), is an intergenerational, racially, and ethnically diverse community organizing group located in Denver, Colorado. PJU's model of organizing involved its members in participatory research methods to gather information about issues of interest.

[3] The ATLAS Institute is an interdisciplinary institute for radical creativity and invention at the College of Engineering and Applied Science. Here, faculty and students transform ingenious ideas into reality through research, experimentation, and critical thinking.

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monthly meetings were set up between students and members of ATLAS, PJU, and the Research Hub. These meetings were used to identify and organize the requirements for the platform and how it would be used (use cases)[4]. These meetings also established partnership roles and the remaining timeline for this project. Importantly, the first phase of this collaboration focused on the development of a digital platform and possible instruments to be used for data collection (AY 2017-2018). The second phase of this collaboration focused on beta testing the platform and instruments (AY 2018-2019). The third phase of this collaboration focused on refining the platform and instruments through an iterative process of testing by- and feedback from users.

The prototype for the platform was completed and shared with PJU in May 2018. We delayed the beta testing phase, due to staff and leadership turnover within PJU. Our plan was to continue our collaboration with PJU and ATLAS in designing and refining a platform that could support statewide youth organizing, train young people in PJU's strategy, and evaluate progress during fall 2019. However, PJU's internal changes, and a quickly changing and polarized political context (2020 presidential election) led to a shift in context and interests. Thus, it was appropriate for our collaboration to shift from the digital platform to tools that could meet the shifting context (a YPAR toolkit and an action camp for youth). In 2019, the Research Hub and PJU co-produced the Youth Participatory Action Research (YPAR) Teacher's Toolkit—a guide for teachers and students to act and learn together, while using YPAR to create change in schools and communities across Colorado. We were also able to support the launch of PJU's action camp for youth interested in using surveys as part of their YPAR work.

While our original work product was envisioned as a digital platform, our end products sustained a long-term partnership, generated a shareable toolkit, and provided real time training on survey data collection for PJU youth. Staying rooted in a shared vision of education equity allowed the partnership to transcend unpredictable political moments to meet timely and relevant collaborative goals.

[4] For example, these use cases included examples of when and where the platform and surveys might be accessed and used, the technology used to access the platform and surveys (paper printouts, outdated tablets/ipads, smartphones, and/or laptops), the ease of access and use, how surveys were developed by PJU members, the language(s) used for survey creation and use, issues with keeping collected data secure, and creating an interactive data analysis site.

**Vignette 11: Developing the Next Generation of Collaborative Education Scholars**

Adriana Villavicencio, University of California Irvine

For more than a decade, I have had the privilege of conducting research in partnership with districts, schools, and non-profit organizations that serve educators and students. Yet, it is only in the last few years (since becoming a faculty member at UC Irvine) that this work has relied so largely on the skills, experiences, and insights of doctoral students. The students I work with—many of whom have worked in the public sector—are not only drawn to work that centers community partners, but are uniquely positioned to contribute to research that involves deep collaboration with individuals outside of academia. In leading this work as a principal investigator, advisor, and mentor, I have observed how the following learning opportunities support students' capacity to engage in collaborative education research:

**1. Understanding local expertise and history**. Before our research begins, students spend ample time exploring the organization(s) we are working with, their histories, trajectories, and current developments. In our work with Internationals (a network of schools that serves recently arrived immigrant youth), for example, students spent a quarter in their roles as research assistants closely studying the organization's website and policy briefs for mission and common terminology, met a number of its leaders and staff, joined an Internationals webinar to understand its offerings for schools, and reviewed archived video footage to notice changes over time. Memos or other forms of documentation capturing this data can then be shared with other students who may join the project at a later time. It is not always immediately obvious how these efforts will shape our research, but it is inevitable that what students learn during this period of exploration will contribute to the way we approach our collaboration, our collective meaning making, and the extent to which we can draw on our partners' expertise.

**2. Fostering relationships through routines and events.** Formal and informal mechanisms bring partners together with graduate student researchers in ways that flatten typical power dynamics and build a network of relationships. Weekly, biweekly, or monthly meetings where student researchers are expected to share their processes and findings help promote transparency, while providing partners with the time and space to share feedback and make decisions about the project. Ensuring that partners add agenda items allows all members to establish priorities and initiate mid-course corrections as necessary. Breaking bread with our partners on their own "turf" (literally their backyard on one occasion), provides us unique opportunities to see our full humanity—not just as partners engaged in research, but as people committed to a shared mission of transforming education.

**3. Cultivate a spirit of flexibility.** Too often researchers are wedded to the plans and designs they create at the outset of their research projects. (And indeed, acquiring funding to conduct research or getting approval for our Institutional Review Boards involves spelling out every last detail from recruitment to publishing.) The reality of working with community partners, however, means that even the best laid plans may need to be revisited or revamped. In our work, we have faced 6-month delays, shifts in the scope of our data collection, and replacements of entire study sites. Preparing students for this level of unpredictability and modeling how to remain flexible in the face of inevitable change is critical if we want our research to remain relevant and responsive to the needs of our partners.