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Negotiating Trust, Power, and Culture in a Research-Practice Partnership

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This article describes the role of culture and power in building a research–practice partnership (RPP). The original aims that drove the building of the RPP were to generate and use research to inform the programs and services provided by the youth-serving organization to Latinx youth and to use the findings to inform research on how to broaden participation in computing. In this article, we describe how the RPP evolved. Data include documentation from meeting notes, e-mails, and observations as well as interviews with practitioners. The results suggest that the research goals and process changed when the partners began to critically analyze and discuss the role of power and culture, and adjustments to the methods and theoretical grounding of the research were made as a result. The lessons learned are summarized in terms of their implications for generating research that has both theoretical and social justice implications.

Keywords: research-practice partnerships, culture, power, informal education

In the field of education research, leaders have argued that for "research to matter, that is, to better society and schools, it must escape the ivory tower and engage in the public sphere" (Oakes, 2017, p. 91). But the push toward scientific rigor has led to the production of knowledge that, although statistically sound, can have little relevance for education practice or can perpetuate racism and racial stratification (Zuberi & Bonilla-Silva, 2008). In order to leverage the power of research to disrupt the injustices that affect educational pathways, particularly for marginalized and nondominant populations, researchers must employ self-reflective and critical methodologies, which includes interrogating the role of race and power in their ability to conduct equitable research (Vakil, McKinney de Royston, Suad Nasir, & Kirshner, 2016)

Research-practice partnerships (RPPs) offer a potential strategy to make research matter. But education researchers are rarely trained to work effectively with practitioners, and the cultures and demands of their own institutions do not always align with those of the organizations they hope to work with. In addition, practitioners are not waiting for a

research team to help them; they refine their practice based on years of experience and formal and informal input from other practitioners, and some draw on research or research-informed practices (Baldridge, 2018). Being asked to participate in research, particularly with people viewed as outsiders, may elicit a guarded or cautious attitude among practitioners, often justified by their lived experience. For some, the world of research is a site of privilege and oppression that has long-term negative consequences for communities (Fine, 2006; Tuck, 2009). To dismantle this inequity, researchers must continuously reflect on and adapt their approach so that the research can be used to address rather than to perpetuate injustice (Souto-Manning & Winn, 2017). For those of us committed to this ideal, we need models to guide our work.

RPPs are organized to increase the relevance and usability of research. They are long-term partnerships driven by problems of practice (Coburn, Penuel, & Geil, 2013). RPPs involve what Penuel, Allen, Coburn, and Farrell (2015) call "joint work to define, create, implement, and study strategies

for improvement" in education (p. 3). There are different ways that RPPs go about their work, and the most common configuration of an RPP involves researchers from a higher education setting working with practitioners from a school district (Farrell et al., 2017). Coburn et al. (2013) describe three general RPP approaches. The first is a research alliance, which involves working together to study problems of practice that are central to the practitioners. The second approach is a design research partnership, in which the partners work together to develop, test, and refine solutions to a problem of practice while also informing research and theory. The third approach is a *networked improvement community*, which aims to address a problem that is common across multiple school districts by designing and testing solutions. The roles of the researcher and practitioner are more distinct in the research alliance and become progressively more intertwined across the other two types.

The RPP model holds great promise for producing research that has direct implications for society and schools. However, the set of skills, expertise, and time required to make RPPs successfully cross lines of color and power are not part of most researchers' training, leaving them ill equipped to avoid perpetuating existing systems of injustice. These experiences are typically framed in terms of challenges that are experienced by real, rather than idealized, RPPs. Studies identify challenges, such as staff turnover that disrupts the process of collaboration, difficulty creating data-sharing agreements, challenges with synching schedules, and differences in the pace expected by practitioners and researchers (Farrell et al., 2017). But these challenges may be symptoms of a larger issue. For example, Penuel et al. (2015) describe how cultural differences in norms and practices related to communication and language, as well as differences in priorities and timelines, mean that effective RPPs require partners to cross boundaries between research and practice. But the field is lacking honest accounts of how the researchers and practitioners experience the challenges, their reflections on the underlying causes of those challenges, and how they address them.

The purpose of this article is to begin to unpack the reasons behind some of the challenges faced by RPPs by doing a critical and self-reflective analysis of our own RPP. The scholarship we have consulted for this article has helped us see how hidden and subtextual factors drive these challenges, namely, the dynamics of power (in the critical sense), privilege, and culture. When power and culture are not explicitly understood and managed in an RPP, it leads to inequity in the partnership (Ryoo, Choi, & McLeod, 2015), resulting in failed relationships and research that is not applicable, and can also result in misinformed social policies and harmful perceptions of nondominant communities (Gutiérrez & Arzubiaga, 2012). Making these dynamics visible involves an acknowledgment that research is not neutral; it is driven by both spoken and unspoken values and

theories that inform methods and determine what "counts" as knowledge (Denzin & Giardina, 2016).

This article is informed by critical research approaches that aim to understand, uncover, and transform how educational research is related to social divisions and power differentials. Broughton (1987) highlighted the importance of self-reflection to inform how one's research is embedded in a social and political process. Similarly, Fine (1994) described the struggle that many of us face in dealing with apparent contradictions between being researchers and committed to using our work to disrupt injustice. When Fine writes about power, she describes the operation of power as involving both the systematic oppression of people and the ways that oppression is navigated. This simultaneously acknowledges the violence and discrimination faced by nondominant groups while also acknowledging their agency. Following these and other scholars (e.g., Cooper, 2011), our definition of power includes the ways in which people navigate institutional and relational systems of oppression that affect their educational pathways. The lead author of this article, who trained with these scholars, was drawn to working in RPPs as part of her struggle to navigate the contradictions of pursuing social justice through research.

Our definition of culture builds on theories that have helped us conduct research that challenges deficit-oriented approaches. Critical race theory recognizes the interconnectedness of racism with other forms of subordination (e.g., ethnicity, gender, class, immigration, sexuality), challenges claims of objectivity or neutrality in research by acknowledging researcher and methodological bias, and uses a multidisciplinary and multimethod approach to draw on the lived experiences of people and to transform oppression (Solorzano & Yosso, 2000). In the application of this theory to education research, community cultural wealth is "an array of knowledges, skills, abilities and contacts possessed and used by Communities of Color to survive and resist racism and other forms of oppression" (Yosso, 2005). The cultural wealth of an organization involves its local practices and routines driven by assumptions and values; these are developed over time and reinforced by cycles of funding that build this wealth. Equitable partnerships rely on individuals' awareness of the cultural wealth and history of oppression within their own organization as well as a recognition of the history and cultural wealth of the institutions they partner with. In this article, we strive to move beyond a narrow view of individual behavior to look at how culture and shared knowledge (McDermott & Varenne, 2006) shaped the relational dynamics in our RPP.

Collaboratively and successfully navigating the sometimes hidden and often unspoken dynamics of power and culture requires critical reflection and awareness. Ryoo et al. (2015), longtime advocates for equity in RPPs, say that among other things, equitable partnerships

challenge power dynamics and hierarchies, equally value all knowledge, experience, and skills, collaboratively develop shared language and vocabulary regarding research, educational theory, and practice, and regularly clarify and surface needs, wants, and expectations relating to the partnership and partners' professional contexts. (p. 1)

This description clearly describes what the end goal for critical consciousness could be, with its focus on power and hierarchy.

Others have described the role that self-reflection plays in building trust within research projects. Writing about the relationship between researchers and the research participants, Vakil and colleagues (2016) "found that establishing and maintaining trust was foundational to our research endeavors and, moreover, was a key site of racialization" (p. 199). In this context, "racialization" involves another person attributing a racial and/or ethnic identity to a group or a practice. Their ethnographic narrative describes how they negotiated trust by building relationships between researchers and participants that are explicit about the prior experiences that each individual partner has had related to race-ethnicity and power. Like Ryoo et al. (2015), they conclude that building trust is not something accomplished through a single activity; it is part of an ongoing process of negotiation that may evolve but must consistently reveal and address the dynamics of race and power.

As an increasing number of scholars build RPPs, there is a need to better understand the strategies that work to turn multiculturalism into an asset. Penuel and colleagues (2015) offer one such strategy by describing the "boundary practices" that RPPs have developed to navigate power/culture challenges. These practices are established routines, such as the codesign of data collection, that respect differences while also moving the research and practice forward. Ryoo and colleagues (2015) also provide guidance on establishing equity, engaging equitably, and encouraging equity in an RPP. These include (a) identifying possible privileges and inequities that each partner brings, (b) developing a shared language, (c) identifying resources and how they will be allocated as well as resource constraints and how they will be addressed, and (d) developing respectful processes that include a system for monitoring conflicts and a strategy for addressing them.

In this article, we add to the efforts to identify strategies to engage in critical reflection about culture, power, and privilege in RPPs. To this end, we describe the development of an RPP that involves a community-based technology center for youth and a nonprofit research organization. Specifically, we address two questions that emerged from conversations between the researcher and practitioners in leadership roles: What was the role of culture and power in how the RPP was negotiated? What were some effective adaptations by the research team?

The Partnership

The Digital NEST (or the NEST; Nurturing Entrepreneurial Skills with Technology) and ETR (Education, Training, Research) have a long-term partnership that uses research to strengthen efforts to create and support career and education pathways for Latinx youth and uses practice to inform research. ETR is a nonprofit organization that has worked to increase diversity in science, technology, engineering, and mathematics (STEM) fields since 2002. In collaboration with a diverse group of stakeholders and funders, ETR's staff conducts applied research and evaluation, professional development, and program development to create science-based services, solutions, and programs. The values of ETR include doing methodologically sound research, building the capacity of schools, community organizations, and government, and taking that research to scale in the form of products and technology-based solutions. Funding for research comes primarily from federal agencies, and work is organized into project teams where the focus is on time and tasks, and productivity is directed toward meeting the specific goals of a grant. ETR has staff and offices across the United States, but the team that worked on this project is based in an office located in a majority-White and uppermiddle-class community where many of our friends and neighbors work in Silicon Valley. The authors from ETR include a White, female-identified senior researcher (Denner) that leads ETR's focus area of equity and inclusion in STEM; a White, female-identified research associate (Campe); and a Latinx, male-identified research assistant (Torres).

The NEST is a nonprofit organization that was founded in 2014 by a former ETR employee. The NEST provides youth from high school to age 24 with free access to computers, software, Wi-Fi, and state-of-the-art digital tools and technology literacy and job-training classes. Modeled after successful technology companies that inspire creativity and innovation, the NEST is a safe and learning-focused open workspace that provides training and mentorship to help Latinx youth members master the technological, interpersonal, and professional skills they need to launch careers and start businesses in their own vulnerable communities. Three career focus areas (CFAs) provide training tracks in three pathways: digital arts and technology, web and information technology, and "soft" skills—communication, leadership, collaboration, and project management. The NEST uses a four-level intervention that starts with establishing safety (physical and emotional) and access, progresses to building positive youth development assets, and then moves into career training and culminates in career launch. The NEST is funded primarily by private donations. Because many of these donation dollars are a response to fund-raising messaging and marketing, program accountability is not tied directly to hard scientific data or definitive evidence of widespread outcomes.

The NEST is located in a rural, primarily Latinx community where many families are employed in agriculture. The staff embrace the values and rituals of Latinx culture, which puts a strong emphasis on trust, relationships, and family. The NEST authors on this article are executive-level managers: a Latinx, male-identified founder and executive director (Martinez) and a White, male-identified enterprise director (Bean). Both worked at ETR before leaving to start and work at the NEST in 2014.

The ETR-NEST collaboration was initially not framed as an RPP. It was driven originally by a 3-year grant from the U.S. National Science Foundation (NSF) to study patterns of youth participation in technical activities and how they relate to learning, career and education pathways, identity, and skills. The study's research questions focused on what motivates participation in computer science education, including the role of relationships with peers, staff, and other mentors, as well as whether digital microcredentials ("badges") can increase engagement and learning. This study aimed to inform efforts and strategies to strengthen the NEST and address research questions that have implications beyond the NEST, including how to support the educational pathways of Latinx youth and how informal learning settings can support the development of interest, knowledge, and identity, among others (National Research Council, 2009).

Over time, the collaboration evolved from communityengaged research to an RPP. The changes involved working together to iteratively refine the research questions and methods, moving from distinct to more blurred researcher and practitioner roles, and increasing mutual understanding of both research and practice. Among the RPP types identified by Coburn et al. (2013), ours is a place-based Research alliance. The partnership is in a "middle" phase (Penuel & Gallagher, 2017) due to achievements that have strengthened the partnership, improved NEST efforts, increased capacity to conduct strong and relevant research, and informed the work of others. The research has only begun to influence the NEST's norms, culture, and routines around the use of research and evidence and has not reached the point where research is integrated in a way to regularly inform implementation.

Method

This article uses a narrative ethnography analytic approach that contextualizes narrative data, allowing for the identification of links between the story and the context in which it is told (Gubrium & Holstein, 2009). Specifically, text from interview transcriptions and documents were analyzed along with notes generated using field-based methods of ethnography. We apply a critical ethnographic approach, which can be used by members of dominant groups to see the world from the perspective of those who are not dominant (Carspecken, 2013). It involves applying a self-reflective

lens to the narrative produced and the interpretation aligned with it. This lens was used to examine the power differences between researchers and practitioners as well as how those differences were negotiated, the impact of the researchers on the target of study, the identification of varying and sometimes conflicting perspectives and what those mean, and the context of culture. Gutiérrez, Engeström, and Sannino (2016) describe this type of work as research *with* nondominant communities (not *on* them), "where the tension between research and participants' subject positions is preserved, troubled, realigned, and leveraged" (p. 275).

The data include interviews, meeting notes, e-mails, and observation notes. Interviews with eight NEST program staff were conducted by an external evaluator and included three staff members who previously worked at ETR in program development-related roles. Interview questions included the following: "What challenges has the RPP faced along the way?" "[How] were they dealt with?" "How would you compare the culture or values of the NEST to the culture or values of ETR?" Interviews were audio recorded and transcribed. Additional data include notes from monthly RPP meetings with leadership from both organizations over 2 years, internal ETR research team meetings, six NEST staff meetings, and an all-day NEST staff retreat. In addition are observation notes by research staff of the day-to-day NEST interactions between staff and youth, weekend events, and classes/workshops as well as the NEST's annual report and planning reports. The collection and analysis of the data were led by the first author, who worked iteratively with the research team and the NEST staff to negotiate the interpretation of the findings.

Results

The findings are organized by research question, and quotes are used to document the voices and perspectives of the practitioners. Researcher perspectives are drawn from meeting notes and summaries based on the lead author's conversations with her team members. The quotes and summaries are linked by themes that emerged from the analyses conducted initially by the first author and then negotiated with the coauthors.

1. What Was the Role of Culture and Power in How the RPP Was Negotiated?

We centered our analysis of the dynamics of culture and power by first identifying the structural-functional challenges in conducting research faced by our RPP, challenges that had both practical and theoretical implications. The challenges included staff turnover at both organizations, obtaining data, different priorities, lack of trust, and different organizational cultures. Examples of each challenge are described next, along with our reflections about how the

dynamics of culture and power contributed to those challenges. A cross-cutting theme that emerged from this analysis was to problematize the terms *researcher* and *practitioner*. As the findings show, there is the variation in how power was viewed and enacted within both the research team and the practice team.

Staff turnover. Staff turnover occurred at both organizations, especially in the 1st year of the grant. There were a total of eight different ETR researchers involved in the work, including the three that remain directly involved. Whereas two left the project because they were no longer at ETR, the reasons the others stopped or reduced their participation were related to work demands and expectations that did not align with the organizational culture of the NEST. For example, the research team began its work with the assumption that trust and buy-in at the NEST's leadership level meant there was also trust and buy-in at the frontline staff level. The unspoken belief was that our research would "help" the NEST and that the staff would welcome our help to collect and analyze data for them. However, the researchers soon met with what they interpreted to be resistance by the staff. For example, e-mails asking staff for input on survey questions or procedures, or help to get access to the youth, were often not answered. As some of the researchers became frustrated or determined that they did not have the power or resources to carry out the grant requirements, they shifted their focus to other projects. In response, the lead researcher led the rethinking of the research questions and related tasks, timeline, and approach; this will be described in the next section.

From the NEST's point of view, the turnover was due in part to different definitions of what an equitable partnership involves. One staff member characterized it as "the research staff's inability to adjust to working within a 'Marxist-definition-of-equitable' approach, in the context of an RPP, involving an *elitist* educational laboratory and a place-based, economic justice—oriented, working-class Latino-serving [community-based organization]." The practitioner voicing this perspective acknowledged how the organizational culture played a role in the way the research project was launched, but then shifted to how the individuals should change. He stated that research staff needed to

shift their thinking away from a perspective that "the research comes first," "grant-funded deliverables are paramount," and "both organizations should work equally hard on the aforementioned perspectives as priorities" mindset. While there's nothing wrong with that mindset per se, I think the inability to shift is reflective of issues of power, privilege and culture/ethnicity. I think the sense of "equal contributions" (as opposed to the more Marxist "each according to their ability, each according to their need") and rulesdriven goal orientation are products of a middle-class, White, capitalist culture.

He went on to state the belief that the fluctuation in ETR researchers was "partially some combo of structural, functional, and organizational [factors], but also potentially reflective of issues of power and culture/race/ethnicity." These views suggest that the researchers were perceived as maintaining a privileged position incompatible with the organizational culture and critical worldview of the NEST when they did not take the time to learn about the NEST on its own terms.

Turnover—not in the sense of people leaving but in the sense of changes to who was the "point person" on project components—was common among the NEST's practitioners. At the NEST, there were 12 people directly involved at some point in the partnership, including the two in leadership roles that remain directly involved. But there were frequent changes in staff roles, including who was the point person for specific tasks. For example, one of the grant-funded activities was to develop a system for developing and awarding digital badges; this had been identified as a priority by NEST leadership during the grant-writing phase. However, the staff members assigned to work with the research team on this task fluctuated, resulting in research staff having to restart by building a relationship and shared knowledge several times. Some of that fluctuation was due to staff discomfort. One staff member explained the power dynamic this way: "It is intimidating when people come from the outside, by the academic language they bring and their own feelings about their lack of skills or their accent." He continued that the issue for some of the newer staff was having limited experience "engaging with non-Latinos, and those they did interact with were educators or professionals so they felt inadequate." Others explained that some staff members just weren't ready: "People hadn't been given the time to think about how this specific thing was aligning to their individual goals or the broader goal." As a result, the staff members did not make time to work on badges because it felt "like something that was draining resources and taking time from other things."

Obtaining data. Another major challenge was in getting usable data to answer the NSF project research questions. These questions were originally generated by the lead author of this article in consultation with the NEST founder during his transition away from working on research projects at ETR. The questions as originally written did not reflect a community-based or critical worldview about injustice and thus did not result in buy-in from NEST staff. As a result, the researchers, as outsiders, had difficulty getting staff to help them reach youth to participate in the study. This was due in part to staff perceiving the researchers as coming in and making demands, when instead they should, according to a staff member, "show up, be a good listener, don't dominate

conversations." This comment reflects the frontline staff focus on the youth and the fact that the NEST did not have research as part of its culture. As one lead staff member explained about his staff, "Because most of them had not been involved in a research project themselves, it was hard to force kids to do surveys."

Comments from a different staff leader suggest that the disconnect might have been due to different perceptions of what research entails. Some staff members, in his view, had negative perceptions toward surveys they associated with standardized tests, which are widely viewed as culturally biased. He further explained that staff were not against data collection: "All our staff—with the exception of possibly the newest, most frontline youth workers—see the need for us to figure out what's working and what isn't." But although the research team was committed to developing and integrating a system for data collection that was responsive to the NEST's needs, this was a long-term goal without immediate results. As the staff leader explained, the staff "are more invested in data for rapid prototyping than in more resource-intensive methodologies."

Different priorities. As the research team members realized that the "research project" was not a priority for the NEST staff, they tried to understand why. Staff explained that it was due, in part, to "not really thinking about the research as something that will help us in the long run, or even immediately. There was a lack of alignment. We were trying to answer different questions." It wasn't until we embarked on writing this article that the critical perspective voiced in the quotes was given space to be heard. The research team's initial understanding was that for staff members, serving the youth took priority over helping with data collection and that the demands on them were so great that there was no time to help the researchers. However, reflections from multiple staff members in their interviews created space to describe the previously unspoken power dynamics that affected the relationship. One frontline staff member described in an interview what some of the other staff wanted to say when the researchers asked them questions:

Don't you see I have so many other things to do? I thought you were supposed to be helping me? 'Cause we were hearing "we're here to help you"... but here I am having to stop everything I'm doing to sit and explain stuff to them. Why can't they come in and figure it out like the rest of us had to? Why do they think they get special treatment and deserve me to stop everything I'm doing to explain to them and give them a custom tutorial?

This quote shows that staff perceived a power differential between the research team and themselves; they did not view the researchers as on their team but rather as people who were trying to get "special treatment." Significantly, this information was conveyed in an interview to an external person and not directly to the research team.

Lack of trust. Staff feedback also suggested the tensions that arise when outsiders come in with privileged expertise, an issue that Tuck and Yang (2014) have shed light on in their descriptions of how social science research has done harm to some communities. As a frontline staff member explained,

People take a lot of pride in being from the community and therefore being able to speak to a lot of this . . . so data is [sic] almost . . . it dehumanizes? And so there's some resistance there. And there's a reputation of elitism in the research world. "And so the researchers are gonna come in and tell me about me? No. I'm not interested in that." So I think there was an initial amount of that.

Staff at the NEST talked about prior experiences or stereotypes of researchers swooping in for data and then leaving; this shows the importance of first understanding how history plays a role in every relationship. Similarly, staff raised concerns when the researchers came to observe their classes or meetings. Whereas some were just annoyed and saw it as "another thing I have to deal with," others conveyed in their interviews that they felt like they were being evaluated. These examples show a lack of trust between partners as well as a lack of clarity about what the researchers aimed to do. As one staff member explained, "One of the strengths of the NEST is a staff that represents the community it serves, but as a result has a staff [with] all the suspicions of an ETR-like organization that you would expect from this community."

One of the staff leaders was more explicit about the dynamics of power and culture and how they played out:

On the NEST's side, I see issues of perception of power/privilege and culture/race/ethnicity as the main source of the project's rocky start. NEST staff... were publicly outspoken about their perception of organizations like ETR having a "White savior complex" and coming to Watsonville to "help" but doing so in a top-down manner and not being committed to the community. These staff . . . stood in opposition to the research work, but not because of any thoughtful critique of research or the proposed project, but because White researchers coming from outside of the community were going to be immediately suspect. It didn't help that the project activities had been proposed before most of the staff had been hired-so these same staff felt like they were being given top-down directives to do things for a bunch of White researchers that they didn't have any say in and that, if asked, they did not see as important priorities for their work at the time. I think one can clearly see the issue of perceived power/privilege and culture/race/ethnicity in this situation when one recognizes that the project activities had largely been proposed by the NEST's own Latino [executive director] but NEST staff clung to blaming ETR for the perceived misalignments.

The frequent reference to the race of the researchers in this quote reflects the NEST's pride and intention of being a Latinx-serving organization but also its awareness that its success is based, in large part, on partnering with people from other racial-ethnic groups.

Different organizational cultures. Different organizational cultures created challenges in the RPP, which was apparent

in the differences in staff autonomy and decision making. The research staff were working on a federal grant-funded project; those funds come with clear expectations about how and how much time they spend on the research and partnership. Although research staff had some autonomy in how and when they did tasks, there was no question that they had to carry out the research tasks. The same was not true for the NEST staff. This was partially due to the culture of the leadership. As one leader explained, "I am trying to empower my staff from the bottom up to help me build this organization and allowing them to make decisions and allowing them to fail." This is consistent with what the NEST saw as its startup culture, where things change rapidly and staff are expected to wear a lot of hats. It led one staff member to say, "The NEST was really not ready for the kind of research that was proposed in that grant." However, the research team was not initially ready to negotiate the "kind of research" it was doing or to articulate the values and intellectual orientations that drove its efforts.

The challenges that emerged from our data and collaborative reflection clearly show that the equity work that Ryoo et al. (2015) and others have recommended would have been beneficial for our partnership. Staff from both organizations came to the partnership with a history that influenced how they thought about research, where it landed in the list of priorities, and how partnerships should work, and these histories led them to different conclusions. However, the RPP persisted despite these challenges. This was due, in part, to the relationship between the seniorlevel staff members from both organizations that was developed over 10 years of working together at ETR. It was the trust we built over those 10 years that allowed us to take the risk of critical self-reflection, and our belief in the value of working across cultures to benefit youth that led us to co-define the negotiation strategies that helped this RPP to persist despite the challenges.

2. What Were Some Effective Adaptations by the Research

In this section we describe the adaptations made by the research team that strengthened the relationships and increased the relevance of our research for both theory and practice. The adaptations are organized into five categories identified by the lead author; they emerged from her conversations with both research and practice staff. Specifically, the research team (a) established a shared understanding of equity, (b) listened and responded, (c) aligned with NEST priorities, (d) revised the research questions and focus, and (e) evolved from a task-oriented approach. Quotes are included to show how NEST staff were thinking about these issues.

Established a shared understanding of equity in the partnership. Ryoo and colleagues (2015) suggest that RPPs create a shared understanding of what they mean by "equity" in the partnership. We relearned this, because a key lesson was to not expect the partnership to be "equitable" in the sense that everyone starts on equal footing and provides the same amount of time and resources. As a lead staff member said,

I think ETR invested a lot of time and energy in developing shared language and vocabulary about research, collaboratively defining research questions, regularly clarifying and surfacing needs and expectations related to the partnership, and respecting the pressures and demands experienced by the NEST. I do not think this was equally reciprocated, but again, isn't that "equitable" when you look at the two organizations in relation to each other in terms of power, resources, and privilege?

A clearer understanding of equity in this partnership helped the researchers address their feelings about doing "more than their share" to make the partnership work.

Listened and responded. A key adaptation was to build relationships beyond the NEST leadership. As a staff leader advised.

One way of doing that is to give leadership and power in the meetings/process to underprivileged members of the team. Then empower and support them in building a culture within the partnership that feels "simpatico" to them, culturally/in terms of dynamics.

To this end, researchers attended multiple NEST staff meetings to get input on the data collection, data analysis, and findings. The result of that was explained by a staff leader in this way:

ETR was willing to spend time educating staff about research methods, shift from a researcher-driven agenda to a "client-driven" agenda, bending over backwards to always ask, and be responsive to the question, "What does the NEST need to know? What data is [sic] valuable to you?" Examples include creating data briefs driven by what NEST staffers said they wanted to see, and doing an extra cluster analysis to try to answer NEST staff's questions about what the different "profiles" of research participants might look like.

The researchers asked NEST staff questions that led to analyzing the data and sharing it back in a way that was responsive to staff priorities and questions, and helped them see the role that data can play in answering their questions. In particular, the presentations were designed to not privilege the data over staff's own experiences and expertise. For example, one data brief summarized findings on why youth come to the NEST, including how those reasons vary across demographic groups. The data brief was shared at a staff meeting; staff worked in pairs to use their own local expertise combined with the data to identify how the findings could be used to guide their member recruitment efforts. Out of those discussions came the suggestion to reanalyze the data in a way that would be more meaningful to them. Thus, rather than separating the data into the demographic

categories that researchers usually use to analyze data (e.g., gender, mother's education), they were separated into "more" and "less" active members. The results showed that these two groups were different in a number of ways, including their motivation to come and how they benefited.

Being responsive helped the research become more valuable to the staff. To this end, the data needed to address the things they care about: Why do people not come back to the NEST? Why do people come? What are they gaining from coming? What are the characteristics of youth the NEST should be targeting to become active members? This information can also be shared with donors and foundations. As one staff person said, "It's important for the study, but beyond the study, it's important for what we're doing here." Sharing results early on helped to show how systematic data collection can be used to build on their personal experience about what works as well as to offer a language and concepts to explain why something does or does not work. It also began to demystify research and conveys our values related to doing research—that it was not just an intellectual endeavor.

Aligned with NEST priorities. One of the NEST staff leaders' goals was to build the professional skills of its staff members and begin to help them see how attending to the larger organizational needs is an important part of having an impact on the youth they care so much about. Staff varied in the extent to which they had professional skills, such as tracking tasks, communicating with external partners, and documenting contact with youth.

As mentioned earlier, one of the grant-funded tasks was to create a digital badging system and test whether it motivates youth to participate and/or can be used as a source of skill-based assessment. In response to staff members' initial reluctance to spend time identifying skill-based outcomes, the researchers started by developing badges to track participation. After some staff members expressed interest in sustaining the badges, the researchers wrote a "how-to" document for staff to help youth members set up online badging system accounts and worked together to create a spreadsheet to enter the data used to award badges. This support helped some program staff to become more data driven in their decision making and program tracking.

NEST staff also began to ask for help to use the data to inform their work. To this end, the research team created data visualizations and attended staff meetings where they led small-group discussions to help staff identify how they could incorporate findings into their priorities (e.g., recruitment strategies). The NEST leadership considered these interactions to be a form of professional development for staff. As a result, staff members began to think about how they could not only use but also collect data. As one stated, "Now you see program managers here figuring out ways to generate their own data."

In addition, the researchers told NEST staff about different ways to approach research, including what we were doing to meet the demands of our grant as well as the methods that others use. The result of this effort, according to a staff leader, was that "as our [young, 'green'] program managers became more seasoned, they were increasingly asked, and asked themselves, 'How do you know whether your strategies/approaches are working?' As a result, they began, themselves, to put value on data."

Revised the research questions and focus. Our research team began to recognize that the NEST's organizational culture is designed to help the youth, which included protecting them from becoming the subjects of research led by outsiders that may perpetuate injustice. Rather than expecting that culture to change to meet a particular research goal or methodology, we pivoted to adapt to the organization and leverage its ways of knowing and doing. This meant working to refine our outsider status by building relationships with the youth-serving staff, not just the organizational leadership. That led to adapting and clarifying how the research goals were aligned with staff priorities, including seeing the promise of the youth rather than taking a deficit lens. It ultimately meant getting fewer surveys and doing more interviews, which provided more contextualized data in the form of youth telling their stories. It also meant that rather than getting a count of the number of activities a student participated in, the data consisted of staff report of how engaged a member was, which provides a different kind of information.

We began to reframe our research to focus on contexts or learning ecologies, rather than on individual learning, in an effort to avoid a deficit perspective and increase relevance. Over time, our methods and analyses were increasingly informed by sociocultural theories (Rogoff, 2003), which look at how individuals participate in communities of practice and how that participation is influenced by the interplay between individual's cultural and historical backgrounds. They were also informed by a community-based design research approach (Bang & Medin, 2010) that is premised on understanding how to create learning contexts that support the participation of youth in STEM. For example, the original plan was to help the NEST formalize and strengthen the external mentoring that was being provided to youth by industry representatives. When it became clear that the NEST could not sustain a stand-alone program, the program manager suggested a study of the mentoring that was already happening. By focusing on this informal mentoring, the project made a contribution to the knowledge base and served to recognize the important work that staff were doing when they built relationships with youth.

Evolved from a task-oriented approach. The research team shift from approaching staff with a focus on the research agenda to leading with a focus that showed a respect and

understanding of the organizational norms and the students' lives. We built trust by not always leading with questions about how to optimize data collection or build systems that were viewed as the researchers' priorities. Instead, we asked about NEST activities or inquired about staff members' own interests or goals. In addition, participating in social events, retreats, and fund-raisers helped us to better understand the NEST's culture and values and to reflect on our positionality. For some in the research team, these experiences reinforced an understanding of the importance of the value of "la familia" in Latinx culture, which emphasizes the well-being of the collective over the individual. These experiences led the researchers to reflect on their positioning and their methods and to explore ways to integrate data collection into everyday processes. A staff leader explained, "ETR was willing to contribute time and resources to things that were a priority for the NEST but not for the research agenda. A simple but powerful example of this was ETR staff attending NEST events, like fund-raisers."

In summary, the RPP came closer to reaching its goal of using research to inform theory and justice-oriented practice when the researchers pivoted in order to be aligned with the priorities of the NEST. This pivot was possible only when, when something was not "working" (e.g., staff were not helping researchers get access to youth for data collection), the partners were willing to step back and think about why. The senior members of this RPP wrestled with whether the ideas in the grant proposal were no longer relevant and how to address the requirements of the funder as well as the culture of the NEST. A tension remained for the researchers to both immerse themselves in the program culture and also retain the parts of their organizational culture that make the research widely respected as well as fundable.

Discussion

A critical approach to development entails a thorough reworking of what the subject matter under investigation is and ought to be. (Broughton, 1987, p. 16)

The analysis described in this article is ongoing, as our team continues to critically reflect on the dynamics of race and culture in our RPP. The results show that as the RPP evolved, the most important subject became the dynamics of the RPP rather than the "findings" produced by researching the youth. As part of this process, the lead author began to make the hidden forces behind the research visible, by reconnecting to and prioritizing her roots in critical research. Our findings are similar to what Bang and Vossoughi (2016) have found: "The absence of attention to researchers' social locations and histories can function in ways that conceal racialized, classed, gendered, colonizing power dynamics, often under the guise of neutrality" (p. 177). This risk is particularly great in RPPs, where claims of partnership can veil inequities in who benefits.

Like others have found, our analysis revealed few explicit references to race. But as Vakil et al. (2016) point out, "Although race itself was rarely named, related topics that index race were named, such as power, extractive versus collaborative research, and how to form a project that met mutual interests" (p. 202). This was evident in the NEST staff references to some feeling intimidated by the academic language of research, but it was also evident in the things that were not named. When working with nondominant communities, researchers must reflect on their race-ethnicity and their positionality as it relates to the research tasks. This requires exploring and critically questioning how/which of our own multiple identities are at play at different phases of the research partnership. Similarly, practitioners must ask their research partners to be clear about their theoretical orientation, their methods, and how they would ensure that their research will not perpetuate injustice.

The goal of this article was to build on prior efforts to describe the development of RPPs in order to guide new partnerships and to increase the equity of existing ones. Before entering into an RPP, we recommend that the partners review and discuss the list developed by Tuck and Wang (2014) to determine whether research is even needed. They state that it is not needed under the following conditions:

The researcher already has a very clear sense of what she wants her research to say or do; The research is constructed to convince a group of people of something that they are completely closed to hearing; The research is meant to legitimize community knowledge that is already deeply recognized; The researcher would like to say something that has already been said, but this time in the voices of youth, community, elders, and so on; There is too much at stake for a research process to reveal findings that counter a researcher or community's position on an issue. (Tuck & Wang, 2014, p. 236)

For those of us who believe research is a tool to address injustice, it is one of our challenges to consider when or if research should be done.

In cases where there is a consensus about the need for research among key partners from both the research and practice perspectives, then advice from the RPP community comes into play. Penuel and Gallagher (2017) provide a useful list of the "process and impact" dimensions of RPP development. They involve the development of partner relationships and capacity (process) and a focus on local improvement efforts, rigorous and relevant research, and contributions to the field (impact). Several things must be added if we are to "carefully and continuously attend to the ways our designs and partnerships may reproduce some of the inequities we seek to transform" (Bang & Vossoughi, 2016, p. 178). These include a commitment from partners to make their theories of research and action explicit, to regularly provide and reflect on critiques of what is not working, and to make discussions about power and privilege a regular part of the RPP routine. In addition, the research team must work in a setting (and with a funding source) that supports a flexible, responsive, and critical approach to research.

Writing this article has been part of our process of reflecting on the role of culture and power in our RPP. Trying to meet the deadline to submit the article shined a spotlight on the privilege of having time to write and reflect. The willingness of both research and practice staff to self-reflect about how their own expectations influenced the RPP has resulted in an honest description of the challenges that must be negotiated. Building a joint research agenda and process takes time, and trust building is ongoing. As one practitioner stated, "Trust must be earned every time you walk in the door." As researchers who want to be involved in these partnerships, we need to be willing to give up our power to intrude on peoples' work and priorities. We need to listen more than we talk and contribute more to the practice organization's mission as the organization understands it than we do to our research priorities. We must recognize that research methods are not neutral, and we must become knowledgeable about which methods are appropriate for different settings. These recommendations are challenging for those of us who rely on federal funding, which can limit our flexibility. But as more scholars become willing to share their stories, we can work collectively to develop our capacity as researchers to do critical and responsive research that does no harm and that more accurately represents the lived realities of nondominant communities.

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References

- Baldridge, B. J. (2018). On educational advocacy and cultural work: Situating community-based youth work[ers] in broader educational discourse. *Teachers College Record*, 120(2).
- Bang, M., & Medin, D. (2010). Cultural processes in science education: Supporting the navigation of multiple epistemologies. Science Education, 94(6), 1008–1026.
- Bang, M., & Vossoughi, S. (2016). Participatory design research and educational justice: Studying learning and relations within social change making. *Cognition and Instruction*, *34*(3), 173–193.
- Broughton, J. M. (1987). An introduction to critical developmental psychology. In J. M. Broughton (Ed.), *Critical theories of psychological development* (pp. 1–30). Boston, MA: Springer.
- Carspecken, F. P. (2013). Critical ethnography in educational research: A theoretical and practical guide. New York, NY: Routledge.
- Coburn, C. E., Penuel, W. R., & Geil, K. E. (2013). Researchpractice partnerships: A strategy for leveraging research for

- educational improvement in school districts. New York, NY: William T. Grant Foundation.
- Cooper, C. R. (2011). Bridging multiple worlds: Cultures, identities, and pathways to college. New York, NY: Oxford University Press.
- Denzin, N. K., & Giardina, M. D. (2016). Ethics and the broader rethinking/reconceptualization of research as construct. In N. K. Denzin & M. D. Giardina (Eds.), *Ethical futures in qualitative* research (pp. 67–84). New York, NY: Routledge.
- Farrell, C. C., Davidson, K. L., Repko-Erwin, M., Penuel, W. R., Herlihy, C., Potvin, A. S., & Hill, H. C. (2017). A descriptive study of the IES researcher–practitioner partnerships in education research program. Retrieved from http://ncrpp.org/assets/documents/RPP-Technical-Report Feb-2017.pdf
- Fine, M. (1994). Dis-stance and other stances: Negotiations of power inside feminist research. In A. Gitlin (Ed.), *Power and method: Political activism and educational research* (pp. 13–35). New York: Routledge.
- Fine, M. (2006). Bearing witness: Methods for researching oppression and resistance. A textbook for critical research. Social Justice Research, 19(1), 83–108.
- Gubrium, J. F., & Holstein, J. A. (2009). *Analyzing narrative reality*. Los Angeles, CA: Sage.
- Gutiérrez, K. D., & Arzubiaga, A. (2012). An ecological and activity theoretic approach to studying diasporic and nondominant communities. In W. F. Tate (Ed.), *Research on schools, neighborhoods, and communities: Toward civic responsibility* (pp. 203–216). Lanham, MD: Rowman & Littlefield.
- Gutiérrez, K. D., Engeström, Y., & Sannino, A. (2016). Expanding educational research and interventionist methodologies. *Cognition and Instruction*, *34*(3), 275–284.
- McDermott, R., & Varenne, H. (2006). Reconstructing culture in educational research. In G. Spindler & L. Hammond (Eds.), *Innovations in educational ethnography: Theories, methods, and results* (pp. 3–31). Mahwah, NJ: Lawrence Erlbaum.
- National Research Council. (2009). Learning science in informal environments: People, places, and pursuits. Washington, DC: National Academies Press.
- Oakes, J. (2017). 2016 AERA presidential address: Public scholarship. Education research for a diverse democracy. *Educational Researcher*, 47(2), 91–104.
- Penuel, W. R., Allen, A. R., Coburn, C. E., & Farrell, C. (2015). Conceptualizing research–practice partnerships as joint work at boundaries. *Journal of Education for Students Placed at Risk*, 20(1/2), 182–197.
- Penuel, W. R., & Gallagher, D. J. (2017). Creating research practice partnerships in education. Cambridge, MA: Harvard Education Press.
- Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press.
- Ryoo, J. J., Choi, M., & McLeod, E. (2015). Building equity in research-practice partnerships. Retrieved from http://research andpractice.org/wp-content/uploads/2015/10/BuildingEquity Oct2015.pdf
- Solorzano, D., & Yosso, T. (2000). Toward a critical race theory of Chicana and Chicano education. In C. Tejeda, C. Martinez, & Z. Leonardo (Eds.), *Charting new terrains of Chicana(o)/*

- Latina(o) education (pp. 35-65). New York, NY: Hampton Press.
- Souto-Manning, M., & Winn, M. T. (2017). Foundational understandings as "show ways" for interrupting injustice and fostering justice in and through education research. *Review of Research in Education*, 41, ix—xix.
- Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, 79(3), 409–428.
- Tuck, E., & Yang, K. W. (2014). R-words: Refusing research. In D. Paris & M. T. Winn (Eds.). Humanizing research: Decolonizing qualitative inquiry with youth and communities (pp. 223–248). Los Angeles, CA: Sage.
- Vakil, S., McKinney de Royston, M., Suad Nasir, N. I., & Kirshner, B. (2016). Rethinking race and power in design-based research: Reflections from the field. *Cognition and Instruction*, 34(3), 194–209.
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity* and Education, 8(1), 69–91.

Zuberi, T., & Bonilla-Silva, E. (Eds.). (2008). White logic, White methods: Racism and methodology. Lanham, MD: Rowman & Littlefield.

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