

Boundary Spanning Roles and Power in Educational Partnerships

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Research-practice partnerships (RPPs) offer promising approaches to improve educational outcomes. Navigating boundaries between contexts is essential for RPP effectiveness, yet much work remains to establish a conceptual framework of boundary spanning in partnerships. Our longitudinal comparative case study draws from our experiences as graduate student boundary spanners in three long-term partnerships to examine boundary spanning roles in RPPs, with particular attention to the ways in which power permeates partnership work. Using qualitative, critically reflexive analysis of meeting artifacts and field notes, we found that our boundary spanning roles varied along five spectrums: institutional focus, task orientation, expertise, partnership disposition, and agency. Our roles were shaped by the organizational, cultural, relational, and historical features of the partnerships and contexts of interaction. We aim to promote the development of effective RPP strategies by leveraging the perspectives and positionality of graduate students in order to advance understanding of boundary spanning roles.

Keywords: *research-practice partnerships, boundary spanning, roles, graduate students, power, research utilization, instructional design/development, organization theory/change, equity, case studies, qualitative research*

RESEARCH-PRACTICE partnerships (RPPs) represent a promising strategy for improving educational systems (Coburn et al., 2013). The success of partnerships depends on adept navigation of sociocultural and organizational differences (Booker et al., 2019; Farrell et al., 2019). Boundary spanning has been a prominent subject of scholarly study (Lamont & Molnár, 2002), particularly in educational contexts (Akkerman & Bakker, 2011; Weerts & Sandmann, 2010), but it remains an emerging topic in RPPs (Penuel et al., 2015). Graduate students represent a unique subset of boundary spanners (Christenson et al., 2008), and clarifying their roles may provide useful insight into boundary spanning in partnerships more broadly.

The present study builds on the conceptual work of Penuel et al. (2015), Akkerman and Bakker (2011), and Weerts and Sandmann (2010) to conceptualize boundary spanning in RPPs. Particular attention is given to power dynamics and equity (Denner et al., 2019). We draw from graduate student experiences in three long-term partnerships to provide an initial foundation for a pragmatic and theoretically salient framework. We aim to inform new methods of supporting early career scholars, encourage the development of effective RPP strategies, and, more broadly, increase understanding of roles at partnership boundaries. Literature on RPPs is introduced below, followed by a synthesis of relevant theories on boundary spanning, both of which are then

applied to studies of graduate student experiences of power and equity in partnerships.

Research-Practice Partnerships

RPPs are oriented toward solving problems of practice through mutual collaboration and intentional cultivation of relationships (Coburn et al., 2013). In contrast to traditional educational research approaches, RPPs emphasize bidirectional relationships rather than translation of research findings to practitioners (Akkerman & Bakker, 2011; Penuel et al., 2015). The use and study of RPPs has gained traction in the education field over the past two decades (Arce-Trigatti et al., 2018; Donovan et al., 2013). RPPs offer the potential to improve educational outcomes (Tseng, 2012), solve persistent educational problems (Coburn & Penuel, 2016), and influence educational policies (Conaway, 2020), although much work needs to be done in order to understand and guide their implementation.

Interpersonal relationships are central to productive educational partnerships (Bang & Vossoughi, 2016; Henrick et al., 2017). The establishment of relationships involves identity development and negotiating roles. Grounded in organizational theory (March & Olsen, 1989), Farrell et al. (2019) found that partnership work floundered when roles were unclear or when members of the partnership had



conflicting role expectations. This finding is consistent with other scholarship, which demonstrated that collaborative projects can be derailed by uncertainty in relationships with partners (Coburn et al., 2008).

RPPs require negotiation of roles across organizational and sociocultural differences, implicating issues of equity. Relationships inherently invoke power (Bang & Vossoughi, 2016), and in the presence of sociocultural differences, unacknowledged power dynamics can contribute to inequities (Denner et al., 2019). Furthermore, tensions can emerge due to power differentials in roles, especially because researchers often enter partner communities as outsiders with greater control of the direction of the collaboration (Minkler, 2004). Ideally, RPPs encourage mutual participation of members in improvement efforts; however, issues related to diversity, equity, and power endemic to educational settings also manifest in partnerships. To avoid perpetuating oppression, Denner et al. (2019) assert that members of RPPs must critically reflect on how they may perpetuate inequities and marginalization through their routines. Existing literature on community-based research may offer insight for structuring partnerships in ways that attend to power (Minkler, 2004; Tuck, 2009). Characterizing practices that cultivate equity in RPPs remains a pressing need (Bevan & Penuel, 2017). We address this gap by extending Penuel et al.'s (2015) conceptualization of partnerships as "joint work at boundaries."

Boundary Spanning

Sociocultural differences in partnerships "can cause discontinuity in the sense that the [participants] experience role or perspective changes between sites as challenging" (Akkerman & Bakker, 2011, p. 133); this experience of challenges associated with discontinuity is an indicator of a "boundary." Boundaries are inherent in partnership work because at a minimum, different organizations have different cultures, norms, values, and routines; the degree of difference between tasks in each context is reflective of the boundary "strength" (Daniels, 2011). The act of boundary crossing "entails stepping into unfamiliar domains" (Engeström et al., 1995, p. 333) and "encountering difference, entering onto territory in which we are unfamiliar and, to some significant extent therefore unqualified" (Suchman, 1994, p. 25). In this sense, tensions (the discomfort resulting from unfamiliarity, contradiction, or oppression in social interactions or organizational structures) can be used to locate boundaries and guide crossing routines. Boundary crossing can occur at intersecting institutional, interpersonal, and intrapersonal levels (Akkerman & Bruining, 2016), and on each intersecting level, boundaries are embedded within complex and potentially contentious histories, especially when researchers enter practice sites as outsiders to partner communities (Minkler, 2004).

An individual in a partnership embodies the position of a boundary spanner when they engage in stabilized boundary crossing routines of the partnership (Penuel et al., 2015). Often called brokers or boundary workers (Akkerman & Bruining, 2016; Davidson & Penuel, 2019), boundary spanners can have a wide range of roles in RPPs. Roles are defined as the functions, positionality, attitudes, and identities related to partnership work that are enacted by an individual, according to their own expectations of others and others' expectations of them. This conceptualization is consistent with role theory (Biddle, 1979).

According to literature grounded in organizational theory, boundary spanners act as a bridge between organizations and are often tasked with building or maintaining linkages (Fisher & Atkinson-Grosjean, 2002; Scott, 1998). This bridging role may be used to motivate change by conveying influence or to promote understanding through representing the perspectives of different partnership members (Aldrich & Herker, 1977; Friedman & Podolny, 1992). Effectively accomplishing each of these tasks depends on the boundary spanner's ability to process information and keenly assess organizational and relational constraints and strategies (Aldrich & Herker, 1977). Boundary spanners are responsible for establishing communication systems, interacting with individuals outside their own context, and negotiating power structures to facilitate the goals of the partnership (Weerts & Sandmann, 2010), which involves both teaching and learning (Akkerman & Bakker, 2011). Although it is unlikely that a particular boundary spanner is required to take on all of these roles (Hill, 2016), the multitudinous functions of boundary spanners are complex and potentially contentious.

By definition, boundary work is contested, requiring spanners to "face the challenge of negotiating and combining ingredients from different contexts to achieve hybrid situations" (Engeström et al., 1995, p. 319). Boundary spanners may be construed as the embodiment of the division between the two organizations or contexts (Akkerman & Bakker, 2011), potentially resulting in conflicts or personal frustration. A boundary spanner's efficacy is dependent on situational and interpersonal factors, content knowledge relevant to the specific partnership, and boundary crossing competence and skills (Walker & Nocon, 2007; Weerts & Sandmann, 2010), but because boundary work is inherently complex and ambiguous, the prerequisites for success may not be known a priori. Additionally, boundary spanners can experience competing influences and responsibilities between different stakeholders in the partnership, or even hold incongruous expectations about one's role or identity (Friedman & Podolny, 1992). Boundary spanners may feel a variety of negative emotions in response to these challenges, such as inadequacy, failure, and alienation (Akkerman & Bakker, 2011; Tanggaard, 2007). Such tensions are particularly salient when boundary spanners

navigate power differentials associated with sociocultural variation across contexts.

Sociocultural Differences and Power

Boundaries are defined in terms of, but are not equated with, sociocultural differences (Akkerman & Bakker, 2011). Consequently, power and equity are inherent in boundary work. That is, conceptualizing boundaries is not only a useful approach for investigating equity in RPPs, but the use of boundary frameworks requires explication of power to ensure that inequities are not perpetuated by the partnership (Denner et al., 2019). Discussions of boundaries risk perpetuating oppression if underlying assumptions regarding sociocultural differences are not addressed.

As elaborated by Akkerman and Bakker (2011), sociocultural differences that do not result in the experience of challenges or the discontinuity of work are often mistakenly interpreted as boundaries. This leads to misconstruing diversity as an inherently problematic obstacle to progress, which is particularly prevalent in approaches to research that emphasize translation of knowledge (as opposed to collaborative knowledge generation; see Penuel et al., 2015). In contrast, effective partnerships value both diversity and boundaries as resources for learning. Boundaries are located by identifying the challenges that arise from discontinuities in work due to sociocultural and organizational differences; it is a boundary spanner's responsibility to detect, negotiate, and address these differences, with others and within oneself. In this sense, the present study positions boundary spanners as liberational agents of equity. Recognizing the value of diversity and understanding underlying power dynamics in partnerships are essential qualities of equity-oriented boundary negotiation. Put simply, equity work happens at the boundaries.

Although boundary spanners play crucial roles in facilitating equitable processes and outcomes, inequities within a partnership (or associated educational contexts) may constrain the ability of boundary spanners to accomplish the functions associated with these roles (Denner et al., 2019). Consider three examples. First, new partnership members must be empowered by existing partnership members to effectively fulfill necessary boundary spanning roles. This power may be less likely to be afforded to individuals from nondominant groups. Second, without working in tandem with community members to inform studies, educational researchers risk contributing to harmful understandings of certain communities (Minkler, 2004; Tuck, 2009). Boundary spanners may be set up for failure due to legacies of systemic oppression. Third, opportunities to participate in educational partnerships may be limited to those who have privilege. For instance, an overwhelming proportion of graduate students are White with college-educated parents, which may yield underrepresentation in boundary spanning

positions for marginalized graduate students (National Science Foundation, 2015).

In RPPs, boundary spanners experience a complex, multilevel, and multidimensional landscape of intersecting power and privilege. Through an investigation of boundary spanning attentive to power and equity, we hope to assist RPP scholars in cultivating a self-critical awareness of power dynamics and promote understanding of the importance of disrupting hierarchies of status and privilege (Denner et al., 2019; Ryoo et al., 2015). Power differentials are inherent in social relationships in educational settings (Bang & Vossoughi, 2016; Gutierrez et al., 1995), influenced by aspects of identity such as gender and ethnicity, as well as other factors like professional role and education level. Power operates through systems of oppression, but power can also be recaptured through the ways in which oppressed individuals navigate these systems (Fine, 1994). Reframing boundary spanning roles in RPPs to acknowledge that power may be gained and redistributed through boundary work can be considered a practice of axiological innovation (Bang et al., 2016). Power permeates all role functions, and consequently, equitable outcomes are shaped through role negotiation.

The perspectives of graduate students may be especially well-suited for exploring power and equity in partnerships. Graduate students inherently have less power than professors in university settings, which may exacerbate preexisting inequities in their own educational experiences or replicate inequities at partner sites. Educational partnerships are intended to serve as a learning context for graduate students (Akkerman & Bakker, 2011), but the opposite effect may result if students experience marginalization and alienation or are not supported well enough to succeed. As graduate students ourselves, we hope that our present study will increase receptivity to the voices of graduate students (and more broadly, all boundary spanners) who may feel unheard in partnerships.

Graduate Students as Boundary Spanners

Graduate students are commonly positioned as boundary spanners in RPPs, responsible for carrying out research and facilitating practices across multiple contexts. Several studies of tensions experienced by graduate students highlight boundary spanning dynamics in educational partnerships. Christenson et al. (2008) found that the complexity and ambiguity of boundary work were prominent sources of challenges. Specifically, graduate students experienced difficulties working with a large number of people, balancing responsibilities across organizations, and accepting the amorphous nature of being in a "middle space." Some were able to tolerate and negotiate the tensions associated with their boundary spanning roles, whereas others were not. Recent research suggests that boundary spanning roles may

be complicated by the presence of boundaries within the university context, which graduate students must also navigate (Penuel et al., 2015).

We advocate for an asset-based approach, as graduate students may have specific knowledge, skills, and dispositions that can be considered advantageous in partnerships (Davidson et al., 2020; Mull & Adams, 2017) and may have social affordances that enable them to effectively enact boundary roles. For instance, graduate students may be relatable to students and teachers due to age proximity or cultural familiarity and could have substantial experience working in school or community settings. Graduate students are more likely to be Black, Latinx, or female than are tenured faculty (National Science Foundation, 2015), and as a result, graduate students may reflect the students and staff at partnership sites. Occupying a boundary space may make graduate students well-positioned to hold critical perspectives of both university and practitioner institutions that support the recognition of cultural wealth and the development of equitable practices (Denner et al., 2019; Ryoo et al., 2015).

Scholars have identified an array of skills that may be helpful for performing boundary work (Adams, 2014; Dostilio & Perry, 2017; Edwards, 2017; Fortuin & Bush, 2010; Morse, 2010; Walker & Nocon, 2007; Warren et al., 2016). Graduate student training is certainly important for success in RPPs (Davidson et al., 2020), however, relational work and structural positionality is at least as essential. We argue that a broader framework beyond knowledge and skills is necessary to understand boundary spanning roles. Perspectives of knowledge and skills, which risk being deficit-oriented, may overlook structural features related to equity and the multidimensional nature of partnership work. Defining knowledge and skills as expertise is itself a boundary practice specific to each partnership (Engeström et al., 1995), and labeling members of a partnership as an “expert” or “nonexpert” is laden with connotations of power, especially for boundary spanners who are graduate students (Ghiso et al., 2019).

Role clarification has been identified as a strategy for encouraging success of partnership work (Farrell et al., 2019; Friedman & Podolny, 1992). Grounded in the work of Friedman and Podolny (1992), Weerts and Sandmann (2010) describe boundary spanning roles in partnerships between universities and community organizations. Specifically, their qualitative study identified four roles: community-based problem solver, technical expert, internal engagement advocate, and engagement champion. These roles manifested as spectrums in two distinct dimensions: task orientation and social closeness. We extend the work of Weerts and Sandmann (2010) by examining boundary spanning in the joint work conducted by graduate students in RPPs. Insights gained from the experiences of graduate students may contribute to understanding boundary spanning roles more generally and facilitate the development of novel strategies for

cultivating effective boundary spanners and emerging RPP scholars (Ghiso et al., 2019). To these ends, we pursued three overlapping research questions:

Research Question 1: What are the boundary spanning roles of graduate students in educational partnerships?

Research Question 2: What features of partnership contexts shape graduate students’ role negotiation?

Research Question 3: How can power dynamics manifest in graduate students’ boundary spanning within RPPs?

Method

Study Context

Our present study is based on three long-term RPPs that involve two school sites and one out-of-school program in southern California serving primarily low-income Latinx youth. The first RPP most closely resembles a “research alliance” configuration (Coburn et al., 2013) and is situated at a STEM-focused charter school, California Academy. The other two RPP sites are linked: a Title I public middle school (Magnolia Middle) and a nonprofit organization (College Insight) that provides services for would-be first-generation college students, with all program participants drawn from the middle school. The work at the latter two sites is based on a model of community-based and participatory research (Minkler, 2004). The partnerships were initiated by the researchers after collaborative discussions between the University of California, Irvine School of Education, California Academy, Magnolia Middle, and College Insight. The particular projects undertaken were coconstructed by researchers and practitioners. We were employed as graduate student researchers by the University of California, Irvine, to perform the bulk of the partnership tasks. First author, Chris Wegemer, worked with California Academy, whereas second author, Jennifer Renick, worked with Magnolia Middle and College Insight. All partner organization names are pseudonyms.

Data Sources

We used artifacts and field notes from partnership meetings as data sources for the present study. Artifacts consisted of meeting agendas and minutes (either drafted by ourselves or others) as well as corresponding images, tables, or presentations that were the subject of meeting discussions. We collected field notes during and after partnership meetings. Our data spanned 3 years at California Academy and 2 years at Magnolia Middle and College Insight, encompassing 269 meetings between the three sites. Over a third of these meetings (106) were one-on-one sessions between one of the authors and their respective professor overseeing the particular partnership. Meetings with administrators, staff, and faculty at the sites constituted the next largest category (71).

Nearly a quarter (63) were institutional governing board meetings of the partner organization. The remaining meetings (29) included presentations to partners, fundraising meetings with potential donors, and youth participatory action research sessions (YPAR, see Ozer, 2016, 2017).

Analytical Strategy

We structured the present research as a longitudinal comparative case study (Creswell & Poth, 2018). Our data sources reflected “moment in time” snapshots of partnership activities, which we analyzed by contextualizing prior activities within the history of each RPP. We focused primarily on identifying commonalities in our experiences across the sites, which was appropriate for answering our particular research questions and developing a conceptualization of boundary spanning.

Our analytic approach included both individual and joint processes. First, we individually organized and categorized all of our data materials by type of meeting. We then inductively generated codes from each type of meeting based on features that we identified as relevant to partnership boundaries, specifically: *contexts* of interaction, *stakeholders* we engaged with and their positionality, our *actions* in relation to the meeting functions, and our experiences of *challenges and perspective differences* that indicate boundaries. At this point in the analysis, no formal scheme was applied; our coding was emergent and grounded in the data (Saldaña, 2016). When applicable, we used triangulation to compare information across multiple artifacts and notes for each partnership meeting in order to validate, deepen, and add nuance to inform revisions to our coding (Yin, 2016). Boundaries are defined in terms of subjective experiences (Akkerman & Bakker, 2011), and accordingly, we drew from personal reflections of our lived experiences as an interpretive complement to artifacts and field notes. In this sense, our qualitative approach supported a reflexive self-study, capable of disaggregating patterns in our actions, attitudes, and responsibilities related to our situational roles (Pinnegar & Hamilton, 2009).

After we completed our individual analyses, we combined our results to examine both commonalities and divergences through joint iterative rounds of review, which enhanced cohesion and accuracy (Creswell & Poth, 2018). We then constructed larger themes from our aggregate codes, guided by existing literature on boundary spanning and RPPs. For example, we coded a variety of actions in our respective meetings, such as managing stakeholders in a project task, analyzing data, and engaging in informal conversations. Through joint review, we realized that our codes represented two latent categories, technical and socioemotional, which reflected a particular type of role. We recognized that this theme was consistent with the findings of Weerts and Sandmann (2010), who distinguished between

technical/practical tasks and socioemotional/leadership tasks in community engagement initiatives of universities, which helped us consolidate our findings.

We discussed the ways in which themes manifested across the three partnerships to confirm the trustworthiness and consistency of our findings (Lincoln & Guba, 1985). We also considered patterns in our codes that suggested the ways in which the themes could potentially be related to each other. The large number of artifacts and field notes for each type of meeting allowed for robust validation of the conceptual patterns we identified. The different types of meetings we captured in our data allowed for examination of within-RPP differences as well as between-RPP differences. Our final themes reflected both the most prevalent patterns in the data and the most conceptually salient.

Last, once we finalized the themes, we applied additional reflexivity to identify potential limitations in perspectives and further refine our findings, as we occupied dual positions as participants and analysts (Eriksson et al., 2012). Our approach utilized aspects of critical ethnographic methodology to examine the emergent themes in light of power dynamics and structural oppression, as well as establish linkages between our experiences and the social contexts in which we were embedded (Anderson, 1989; Carspeken, 1996). We employed this lens to critically situate our research focus and our interpretation of events, although our perspectives were inherently bounded by our personal identities (Eriksson et al., 2012). Regardless of limitations, our qualitative approach was appropriate and sufficient for answering our research questions, as the lack of existing literature required a method that supported conceptual exploration and consolidation.

Findings

We investigated our three research questions regarding boundary spanning roles, partnership features, and manifestations of power. In turn, we describe our findings from each with illustrative examples.

Boundary Spanning Role Spectrums

Through our analyses, we identified common themes in our boundary spanning roles. Importantly, our roles changed along five distinct spectrums according to particular partnership needs and contextual conditions: institutional focus, task orientation, expertise, disposition, and agency. We elaborate on each of these spectrums, as well as the implicated variance in our roles.

Focus: Partner Focused Versus University Focused. Our partnership activities invoked boundary spanning functions that ranged from centering the needs of the practitioners to prioritizing the goals of the researchers. For example, we

regularly attended meetings at our respective school sites that were organized and led by school personnel, with meeting agendas solely informed by school programming and operations. Our contributions in these meetings were usually focused on the work and the needs of the practitioner partners. In contrast, we also attended meetings at the university that included only researchers in the partnership. Although these meetings often balanced attention on the school partners and the university, our roles typically emphasized university concerns compared with meetings at the partnership site. Our findings are consistent with the community-focused and institutionally focused distinctions made by Weerts and Sandmann (2010).

Task Orientation: Technical Versus Socioemotional. The task orientation of our roles varied, as nearly all of the tasks that we engaged in could be classified as technical (e.g., data analysis, writing documents) or socioemotional (e.g., organizing stakeholders, running meetings). For instance, one particular meeting between the first author, Chris Wegemer, and an administrator of California Academy involved both types of tasks at different times. The meeting began by jointly analyzing school record data, then reflecting on practical applications of survey results. As the interaction progressed, the conversation shifted to personal reflections, experiences at the school, and informal advice sharing, and in this sense, Chris acted as a thought partner. Within a single meeting, Chris's task orientation changed from technical to socioemotional, representing distinct skill sets employed through different roles. This type of meeting was relatively uncommon, as our roles were usually either technical or socioemotional in a particular partnership interaction. Our categories are consistent with Weerts and Sandmann's (2010) conceptualization of task orientation.

Expertise: Experienced Expert Versus Inexperienced Novice. Our roles fluctuated between that of an experienced expert and an inexperienced novice. The second author, Jennifer Renick, had occasional meetings with a community member who provided financial support to the RPPs with Magnolia Middle and College Insight. In these meetings, Jennifer positioned herself as an expert, to instill confidence in the community member that their financial contributions were being put to good use, which, in turn, served the interests of the partnership. Conversely, in the one-on-one meetings with her professor, Jennifer almost always assumed a role as an inexperienced novice, even regarding the same topics of discussion. For instance, with both individuals, Jennifer would discuss research projects and data analysis, but with the professor, the purpose of these meetings was to critically discuss progress and opportunities for improvement. These differences highlight the socially constructed nature of expertise and necessary role adaptations.

Disposition: Advocate Versus Critic. In some circumstances, we enacted a role as a partnership advocate and champion, whereas in other situations, a critical perspective was required. For instance, Chris was responsible for leading an activity during a large gathering of multiple school partners, including several practitioners from California Academy. In this case, Chris embodied the role of an enthusiastic advocate for partnership work and emphasized the potential for RPPs to benefit practitioners and advance research knowledge. On a separate occasion in a meeting with his advising professor, Chris voiced concerns regarding a lack of practical impact and relevance of research to the partner. Both of these roles were sincere and accurate representations of Chris's own epistemological convictions and attitudes toward the partnerships; the variance in roles between each situation was necessary to advance the partnership work.

Agency: Decision-Making Authority Versus Passive Recipient. Agency, which we conceptualized as volition in partnership decisions, emerged as another category that described our roles. Sometimes, we took on (or were given) a role as an authority with decision-making responsibility, whereas in other instances, we were submissive or passive recipients of the partnership direction. Consider two examples that emerged from our analysis of our meeting data. First, Chris met with an administrator of California Academy to discuss changes to the annual survey of students conducted at the school. As an expression of both trust and time limitations, the administrator allowed Chris to design the survey. In a subsequent meeting with a professor who managed the partnership, the professor gave Chris the authority to choose which survey results to highlight in a report to the board. Chris had bounded decision-making freedom conferred by supervisors.

Second, in a meeting between Jennifer and partners from the College Insight program, Jennifer volunteered to update an online application system to demonstrate her commitment to the partnership and to strengthen relationships. Because the task was conducted as a service to the school, Jennifer completed the requests of College Insight staff to construct the online platform in a way that was amenable to them. In these cases, we both expressed a technical orientation, but our respective roles differed in degree of agency.

Partnership Dimensions

In response to our second research question, we identified patterns in how our boundary spanning roles were shaped by partnership characteristics and contexts of interaction. We defined contexts of interaction as the physical locations where we jointly conducted work with others that was salient to the partnership. In our partnerships, contexts included the practitioner site, the university site, and informal spaces

(e.g., a coffee shop or a practitioner's home). Emergent patterns from our qualitative analyses suggest that contexts carried characteristics and norms that partially determined the features of the partnership (and particular partnership interactions), which, in turn, were associated with our boundary spanning roles. The features of the partnerships relevant to our roles fit into four dimensional categories: organizational, cultural, relational, and historical. Each are described below through illustrative examples.

Organizational. Our roles were shaped by organizational features of the particular context of interaction, such as institutional goals, management structures, and routines. For example, Chris regularly met with a supervising professor on the university campus throughout the duration of his participation in the partnership. A meeting in the winter of 2020 exemplified two ways in which roles were associated with organizational features of the university context. First, by virtue of being a graduate student, Chris was positioned an inexperienced novice within the academic hierarchy. He gained expertise after working on partnership projects at California Academy for 3 years, and on this particular occasion, Chris advocated for his capability by taking the initiative to expand the scope of the partnership. The professor recognized his expertise in partnership work and supported Chris's agency. Second, the university's explicit goal of advancing knowledge through research privileged a technically oriented role for Chris in meetings with the professor. Chris was more deeply embedded at California Academy than the professor, which required that Chris make a conscious effort to describe the socioemotional tasks necessary to organize projects at the partnership site, essentially translating the perspectives of practitioners into terms related to research contributions that could justify project changes to the professor.

Cultural. We found that partnership interactions were dependent on the cultural features of each context, such as social norms, values, language, and status. In her work with College Insight, second author Jennifer helped facilitate a YPAR project on weekday afternoons in a classroom on Magnolia Middle's campus. The university supervisor was the director of the project, with Jennifer cofacilitating under the supervisor's guidance and direction. Jennifer occupied the role of a novice relative to her supervisor; however, the nonhierarchical structure of the YPAR project disrupted hierarchies between researchers and communities, as well as adults and youth. The classroom context was imbued with social norms and values common to a high-quality middle school classroom, such as adults directing work and discussion. Jennifer worked with adults and students in the classroom to facilitate the transition to norms that supported a liberational environment consistent with YPAR, for example, allowing the students to lead the direction of the project.

For example, Jennifer utilized both her socioemotional and relationship-building skills to redistribute decision-making agency between the staff, researchers, and students.

Relational. In our partnerships, different contexts were imbued with different relational features (e.g., communication styles, personality differences, social network configurations), which required role negotiation and adaptation. For example, we attended a fundraiser to support our university's education-related partnerships, hosted at the home of a community leader. Several dozen individuals attended, including wealthy philanthropists, district officials, school leaders, site partners, and university professors. We were the only graduate students invited, and we were responsible for delivering presentations to the attendees. Appropriately, we were explicitly positioned as RPP advocates. We balanced our focus between highlighting the impacts of our partnerships and praising the quality of our partners' work, which was necessary to support our partners' interests and ensure that our fundraising was not trivializing, commodifying, or compromising their school practices. Informal socializing at the event required a substantial degree of role fluidity because the roles that we enacted were largely determined by the positionality and particular interests of each stakeholder that we were conversationally engaged with. In this sense, our role negotiation was embedded within broader advocacy and socioemotional roles that the event required. As graduate students, we held the lowest socioeconomic status of the attendees. The event was imbued with upper-class relational expectations and communication styles, which were to some degree unfamiliar to us. Navigating complex roles while fulfilling our fundraising responsibilities in a sociocultural environment different from our own proved challenging, but it was a valuable learning experience.

Historical. We found that our boundary spanning roles were dependent on the historical features of institutions, such as each school site's previous relationships with researchers or manifestations of long-standing oppression among stakeholders. Historical features were particularly salient in one faculty meeting at Magnolia Middle, where Jennifer presented research findings from a survey to all teaching staff. This presentation was relatively high-stakes because it was the first time that Jennifer presented to the entire faculty; it served as an opportunity to showcase the relevance of the partnership to the school's teaching staff and it had the potential to damage the partnership if poorly handled. Jennifer was aware that some of the staff previously had negative experiences with outside researchers evaluating them and, consequently, tried to act as a soft expert in this presentation. Specifically, Jennifer highlighted her expertise with regard to the technical tasks she had completed (e.g., statistical analysis, qualitative coding, etc.) to help assert her legitimacy, in anticipation that some teachers may be skeptical of

her abilities due to her young age. However, she was also careful not to lean too far in the role of a technical expert and appear removed from the practitioner perspective or closed off to feedback. In her presentation, Jennifer included gratitude to the teachers for completing the survey, acknowledged the limitations of the results, and allowed time for questions, while consistently emphasizing humility (e.g., her limited perspective as an outsider) and accessibility (e.g., her openness for further conversation). The teachers' responses were positive, with some expressing surprise that the results were useful and engaging; the presentation seemed to set a positive precedent that contrasted from the previous reputation of researchers at the school.

Power

We explored manifestations of power in our boundary spanning interactions to answer our third research question. Our treatment of power is aligned with other scholars who study educational partnerships (Denner et al., 2019; Vakili et al., 2016) and is consistent with Weber's (1978) classic conceptualization of power as "the probability that one actor within a social relationship will be in a position to carry out [their] own will despite resistance" (p. 53). We found that power was imbued in all aspects of partnership interactions but manifested most clearly when resources and role negotiation were implicated, described below in turn.

Resources. Perceived control over resources across boundaries conferred power to particular stakeholders in our partnerships. Each institution in the partnerships (and their respective leaders) commanded several related forms of resources, including financial means, institutional legitimacy, social capital, labor capacity, and time. In our roles as graduate student boundary spanners, time emerged as the most common currency of power. For instance, at Magnolia Middle, speaking time in the packed agendas of faculty meetings was a proxy for institutional importance. Jennifer was only invited to share results at a staff meeting after substantial trust was built over a year and a half. In the university context, Jennifer's supervising professor voluntarily participated in California Academy's governance meetings at the partners' request and readily offered his time to mentor Jennifer. This practice helped neutralize potential power imbalances in relationships and established a precedent for reciprocated accessibility. Generally, we recognized that leaders of partnering organizations may exert relational power over a boundary spanner because of perceived control of their time. In our partnerships, we intentionally clarified expectations regarding time usage and then established routines aligned with these expectations.

Role Negotiation. We found that we held varying degrees of power in our partnerships depending on the particular boundary spanning roles that we enacted, which were shaped by the specific contexts and circumstances. For example, Chris felt that assuming a technically oriented role conferred greater power in university interactions but lesser power in meetings with faculty at the school site, compared with the power associated with socioemotional roles. As a second example, we found that decision-making authority was strongly related to experiences of commanding power (although there were exceptions). For instance, Chris had autonomy over presentations to the school board that allowed him to guide board meetings and shape the focus of future school improvement efforts.

More generally, negotiating our fluid boundary spanning roles required navigating power differentials and balancing competing interests of stakeholders. At Magnolia Middle, faculty meeting agendas were primarily determined by school administrators, while the outcomes of the meetings typically had the greatest impact on teachers. Jennifer needed to navigate her presentations to both attend to the desires of the administrators and those of the teachers, two groups she worked with closely.

We found that a degree of power was necessary to support the freedom to explore different roles and openly discuss our roles with others. Role flexibility and explicit conversations regarding roles were essential to the effectiveness of our partnership work. Additionally, our results validated previous scholarship that suggests that intentional actions and relational moves can level power inequities. For instance, the practitioners of College Insight were eager to collaborate with Jennifer and her supervising professor. This immediate trust made it easier to mutually establish norms about roles and responsibilities. Aided by the implementation of YPAR infrastructure, both Jennifer and College Insight staff were positioned as equal contributors on this project, each recognized as having relevant expertise.

Discussion

The findings presented in this article characterize boundary spanning roles in RPPs and address our research questions. Our study builds on emerging RPP literature regarding boundary work (Penuel et al., 2015), roles (Farrell et al., 2019), and power (Denner et al., 2019). The results clarify roles in partnerships, inform potential directions for the support and training of boundary spanners, and advance understanding of power and equity in RPPs. Each of these topics is discussed relative to existing boundary spanning research.

Boundary Spanning Roles

Literature traditionally centers bridging functions in boundary spanning roles, such as communication of interests or representation of influence between different partners (Aldrich & Herker, 1977; Friedman & Podolny, 1992). In our RPP work, we recognized that others perceived us as a bridge, but we did not identify bridging functions as core features of our boundary spanning roles. Bridging tasks were initially prominent responsibilities, but management and operation of school projects defined our roles as we became more deeply embedded in the school sites, even though we continuously served some bridging functions. This may not hold true across partnership projects generally, but our findings provide tentative evidence that RPP boundary work is categorically different from widely studied organizational contexts, such as labor union negotiations (Friedman & Podolny, 1992). Aldrich and Herker (1977) recognized that the structure of boundary spanning roles depended on organizational size and complexity. Our RPPs were characterized by small networks with strong relational connections and robust organizational coherence in values and goals, which may make traditional bridging functions less salient.

In our respective partnerships, our roles did not match the initial expectations of other stakeholders. Substantial investments of time and energy were required to communicate perspectives and develop routines that secured trust and enabled productive work, especially in sites where practitioners previously had negative experiences with researchers. Consistent with research on roles in RPPs (Coburn et al., 2008; Farrell et al., 2019), as well as literature on boundary work more broadly (Friedman & Podolny, 1992; March & Olsen, 1989), we found that unclear roles or conflicting role expectations were a critical obstacle to progress in partnership tasks. In some instances (e.g., fundraising events), our role expectations complicated our loyalty to partners, echoing earlier work on competing values in organizations (Quinn & Rohrbaugh, 1983). As suggested by Weerts and Sandmann (2010), productive partnership relationships required harmony between roles.

Support for Boundary Spanners

Our study validates previous research that emphasizes the importance of training in boundary work (Adams, 2014; Dostilio & Perry, 2017; Edwards, 2017; Fortuin & Bush, 2010; Morse, 2010; Walker & Nocon, 2007; Warren et al., 2016). However, rather than focus on the development of knowledge and skills, we advocate for explicit attention to role construction, critical reflections on relational power, and structural support for boundary spanning. Knowledge and skills are certainly important (Davidson et al., 2020), but

situational and structural factors may be more crucial, especially for determining equity in partnerships.

Boundary work requires critical reflexivity that makes roles explicit, a process of identification which is itself a boundary spanning practice. Scholars have developed strategies to overcome cultural challenges and facilitate collaboration in partnerships, but this requires an inclusive environment open to difficult conversations and hybridization of cultural scripts (Gutierrez et al., 1995; Klar et al., 2018). Adopting practices to support boundary spanning may be difficult for researchers (Muñoz & Jeris, 2005). Borrowing from boundary spanning literature in other disciplines, there is potential for inward-facing “boundary reinforcement” practices that help identify boundaries (Faraj & Yan, 2009). We found that our conceptualization of boundary spanning helped us develop awareness of our own roles and potential influencing factors, which facilitated our role negotiation.

On a personal level, we dedicated substantial time to cultivating self-awareness and being honest with ourselves about our positionality and expertise, especially in situations that were unfamiliar. This was particularly important as outsiders doing research with communities we were not a part of, and as White graduate students working with partnership sites primarily serving students of color. Consistent with the assertions of Akkerman and Bakker (2011), we did not consider boundaries (or associated tensions) as barriers, but rather as potential areas for exploration and growth. We found that the experience of tensions spurred us to give greater attention to details and deeper consideration of relational dynamics. Our capacity to mediate differences and establish trust was dependent on our abilities to recognize tensions in a way that did not internalize self-assessments as judgments of worth.

Ideally, boundary spanners would be supported by mentors who help identify and recognize differences that constitute boundaries (Davidson et al., 2020; Ghiso et al., 2019). In the present study, we found that guidance and modeling from our respective supervisors were crucial for determining the quality of our work. More broadly, mentoring has been encouraged as a successful strategy for supporting graduate students working in educational partnerships (Danzberger et al., 1996; Ghiso et al., 2019). Our experiences also varied depending on the particular project and our supervisors’ backgrounds. In some cases, their positive influence was a necessary but insufficient condition for our success, while in others, it was our advisor’s expertise that made role negotiation possible. Additionally, our efficacy in boundary work was partially attributable to capacities we had the privilege of developing over many years prior to entering graduate school. Cultivation of boundary skills requires a substantial amount of time in a stable environment, conditions that are not often afforded to boundary spanners (especially graduate

student boundary spanners). We are fortunate to be part of a unique initiative that funded a large network of long-term partnership sites supported by the administration of our university, which enabled us to receive mentoring and develop our skills over several years.

In addition to critical reflection, mentorship, and structural support, another potential strategy for facilitating the success of boundary spanners is maintaining a network of peers engaged in similar work. At an RPP-oriented conference in the summer of 2019, a group of graduate students began to form a nation-wide network for emerging scholars who engage in educational partnerships and community-based work. With six other graduate students¹ leading the network, we recruited members and organized workshops to support one another. Such graduate student-led support organizations have been found to be a useful strategy for encouraging the success of individuals from marginalized backgrounds (Granados & Lopez, 1999).

Concerns Regarding Power and Equity

Our conceptualization of boundary spanning is grounded in our experiences as graduate students. An underlying assumption of this study is that graduate student perspectives on RPPs may yield unique insights. To the extent that graduate student voices are deprioritized in research about partnerships, this work represents an axiological innovation that supports equity (Bang et al., 2016).

Our findings suggest that tensions regarding power that emerged in our role negotiation provide information for equitably structuring partnerships and forming routines at boundaries, consistent with scholarship on boundary spanning (Christenson et al., 2008; Fortuin & Bush, 2010; Walker & Nocon, 2007). Generally, increased attention to power may not only orient the partnership toward its goals more effectively, but it could also surface underlying issues that are at the root of problems of practice (Denner et al., 2019). When partnership-based research fails to embrace boundary work, it becomes vulnerable to the many shortcomings that befall traditional forms of “translational” research (Penuel et al., 2015), including perpetuating inequities (Denner et al., 2019). For these reasons, support for equitable boundary work is important not only for supervisors to consider but also for funders (Penuel et al., 2015).

The implications of tensions due to power differences should not be understated for boundary spanners. We found that negative experiences had the potential to undermine sense of belonging and self-efficacy. For graduate students, these potential consequences may also extend to graduate school. Perceptions of equity at boundaries are shaped by the specific backgrounds of each partnership member; we are constrained by our identities as White individuals. Nondominant boundary spanners may identify tensions and power differentials that we did not. Generally, we perceive a

need for more inclusivity in partnership research, which includes an imperative to broaden the field in order to include other cultural contexts and international perspectives.

An Organizing Framework

As a foundation for future work, we propose a tentative model of boundary spanning that organizes the themes we identified regarding our roles and the features of our partnerships (see Figure 1). The outermost edge of the diagram shows the physical contexts where our partnership work was conducted. Moving inward, we display the four dimensions that characterized partnership features in each context. At the innermost level, located within the physical contexts and overlapping with the partnership dimensions, we present the five boundary spanning role spectrums that we identified across our experiences.

Our interpretation of our findings highlights how joint work in partnerships is embedded within broader organizational, cultural, relational, and historical systems. These four partnership dimensions loosely parallel a framework of community-based research described by Palinkas et al. (2015) and echo the work of Bang et al. (2016) who stress the interconnectedness of historicity, relational dynamics, and power. We found that each context of interaction (university, school site, informal settings) had a profile of features across all of the partnership dimension categories. Consistent with Akkerman and Bakker’s (2011) conceptualization of boundaries, our experiences of discontinuities in our roles indicated the presence of boundaries associated with differences in partnership features between contexts.

Throughout our coding process and associated reflections, we could characterize our boundary spanning roles on each of the five spectrums in any given partnership situation. Some of our roles were enduring over time and contexts, while others changed dynamically depending on the particular situation and the salience of a particular role. For instance, our agency generally increased in our respective partnership over time as we “proved ourselves” and gained expertise. Power shaped all of the boundary spanning roles we enacted and permeated each of the dimensions of our partnerships.

Limitations and Future Directions

Our exploratory research should be followed by studies that are explicitly designed to examine the themes that emerged from our analyses. We used artifacts and field notes from partnership meetings, which only captured a portion of the boundary spanning phenomena under investigation. Relatedly, our work focused on three sites within the same university initiative, which may limit the range of features and roles that we could have identified. For example, we found evidence that our boundary spanning roles were

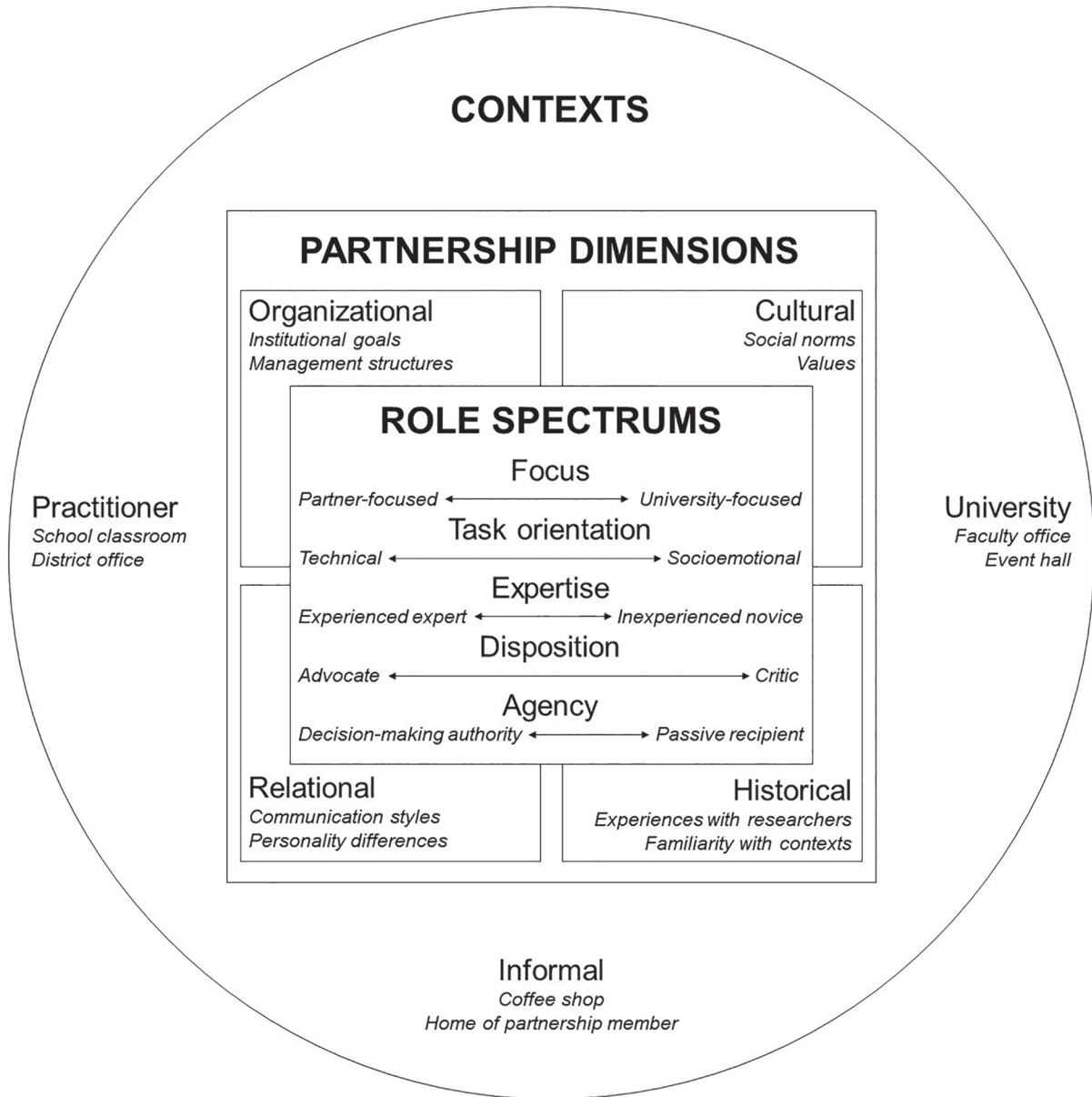


FIGURE 1. *Diagram of boundary spanning model with contexts, partnership dimensions, and role spectrums relevant to research-practice partnership work at boundaries. Examples of each feature are provided in italics.*

dependent on the particular organizational infrastructure of our partnerships (e.g., research alliance, community-based participatory approach), and furthermore, the roles that we asserted had the potential to reinforce or shift the infrastructure of the partnership. However, our partnerships lacked enough variance to examine associations between boundary spanning roles and infrastructure. Future work will use different methods (e.g., longitudinal interviews, mixed-methods approaches) across a larger sample of graduate student boundary spanners to draw more robust and nuanced

conclusions. More research is needed to distinguish the characteristics of graduate students from broader boundary spanners and examine the ways in which graduate students may be well-suited for the position.

Equity-focused studies that highlight the perspectives of boundary spanners of color are imperative, especially considering the centrality of power and sociocultural differences to the concept of boundaries. An asset-based approach to understanding the experiences of diverse graduate students across different types of RPPs would fruitfully complement initiatives that are

currently being developed to support emerging scholars (Davidson et al., 2020; Ghiso et al., 2019). Relatedly, our data and methodology were not capable of comprehensively characterizing equity and power, but our limited findings suggest that this is an important direction for future research. Future studies should examine the specific ways by which power shapes boundary spanning roles and practices.

Conclusion

The present study leverages the perspectives and positionality of graduate students to advance understanding of boundary spanning roles. Within the methodological limitations of our analyses, our results suggest that responsively acting in a partnership entails intentionally adopting roles to meet the conditions of the context and characteristics of the partnership. Attention to roles and power at boundaries provides a foundation for developing strategies that may improve the efficacy of educational partnerships and facilitate the cultivation of emerging scholars. We propose a tentative boundary spanning model to guide future studies.

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Note

1. Adam Bell, Ari Hock, and Lindsey Kaiser at the University of Washington; Robbin Reidy at the University of Colorado Boulder; Carlos Sandoval at the University of California, Irvine; and Wade Berger at Northwestern University were supported by postdoctoral researcher Kristen Davidson at the University of Colorado Boulder.

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