

Collaborating in Context: Relational Trust and Collaborative Structures at Eight Wisconsin Elementary Schools

WCER Working Paper No. 2019-7 September 2019

H. Rose Miesner, Elizabeth E. Blair, Chiara C. Packard, Maria Velazquez, Lyn Macgregor, and Eric Grodsky

Wisconsin Center for Education Research University of Wisconsin–Madison hmiesner@wisc.edu

Keywords: teacher collaboration, relational trust, elementary education, teaching conditions, school climate, social capital, public schools, Wisconsin

Suggested citation: Miesner, H. R., Blair, E. E., Packard, C. C., Velazquez, M., Macgregor, L., & Grodsky, E. (2019). Collaborating in Context: Relational Trust and Collaborative Structures at Eight Elementary Schools (WCER Working Paper No. 2019-7). Retrieved from University of Wisconsin–Madison, Wisconsin Center for Education Research website: http://www.wcer.wisc.edu/publications/working-papers

© 2019 by H. Rose Miesner, Elizabeth E. Blair, Chiara C. Packard, Maria Velazquez, Lyn Macgregor, and Eric Grodsky. All rights reserved. Any opinions, findings, or conclusions expressed in this paper are those of the author and do not necessarily reflect the views of the funding agencies, WCER, or cooperating institutions. Readers may make verbatim copies of this document for noncommercial purposes by any means, provided that the above copyright notice appears on all copies. WCER working papers are available on the Internet at https://wcer.wisc.edu/publications/working-papers

Collaborating in Context: Relational Trust and Collaborative Structures at Eight Elementary Schools

H. Rose Miesner, Elizabeth E. Blair, Chiara C. Packard, Maria Velazquez, Lyn Macgregor, and Eric Grodsky

Abstract

Teacher collaboration is a key factor in improving instructional quality and promoting student achievement. Though research attests to the importance of school contextual elements for the work of teachers, few studies investigate how these factors interact to enable or constrain collaboration. This study examines teacher perspectives on collaborative practices by analyzing observations and interviews of teachers and other staff at eight Wisconsin elementary schools. It finds that structures for collaboration shape teacher participation in collaborative practices. The authors distinguish among three structures of collaboration—requisite, optional, and informal and explore how relational trust among teachers and between teachers and their administrators and colleagues affects collaboration. They find that teachers who attested to the presence of relational trust within their schools collaborated with colleagues, regardless of formalized times to do so. Conversely, teachers who described a lack of relational trust opted against collaborating with grade-level colleagues, despite, in some instances, having access to collaborative planning time. Instructional approaches influenced collaborative structures and relational trust, as some teaching formats fostered contact between practitioners while others separated teachers. The study concludes by discussing the implications of the findings for extant and future research regarding collaboration in context.

Collaborating in Context: Relational Trust and Collaborative Structures at Eight Elementary Schools

H. Rose Miesner, Elizabeth E. Blair, Chiara C. Packard, Maria Velazquez, Lyn Macgregor, and Eric Grodsky

Achieving educational equity remains a persistent challenge in the U.S. school system. Teacher collaboration can play an important role in supporting academic achievement of marginalized students (Berry, Johnson, & Montgomery, 2005; Strahan, 2003; Kraft, Papay, Johnson, Charner-Laird, Ng, & Reinhorn, 2015), and collaborative practices are an oft-promoted element of school improvement (Leana & Pil, 2017; Ronfeldt, 2017; Talbert, 2010; Hargreaves, 2007). However, despite the value of collaboration, the 2019 Survey of Wisconsin Instructional Practices indicates that 43% of elementary school teachers participated in more than 60 minutes of collaboration with their grade-level colleagues per week. A majority of the surveyed educators reported collaborating with colleagues for fewer than 30 minutes per week regarding instructional strategies (58%), student behavior management (58%), lesson plans (60%), academic interventions (69%), and academic assessments (70%). Further, though prior research identifies elements that support collaboration in schools, including common planning time (Kruse, Louis, & Bryk, 1994; Darling-Hammond & Richardson, 2009; Starr, 2017) and relational trust (Bryk & Schneider, 2002; Vostal, LaVenia, & Horner, 2019), few studies examine how teachers describe and make meaning of the relationships between these elements and their engagement in or divestment from collaborative practices.

We analyze staff interviews and school observations of eight diverse Wisconsin elementary schools, engaging staff understandings of collaborative practices at schools in order to investigate how common planning time and relational trust influence the process of teacher collaboration. Collaboration herein refers to time in which school staff members meet to discuss and develop approaches to their work with students, including sharing instructional strategies, developing lesson plans, and identifying student needs, among other topics. While collaboration typically occurs among teachers within single grade levels, it also can refer to work between teachers of mixed grade levels and between teachers and other staff members, such as social workers and psychologists. Our research questions include: How did school staff at eight Wisconsin elementary schools describe their engagement in collaborative processes? How did school staff describe contextual factors as enabling or constraining their collaboration? We find that teachers who attested to the presence of relational trust collaborated, regardless of formalized times to do so. Conversely, teachers who cited a lack of relational trust opted against collaborating with their grade-level peers, despite, in some instances, allocated time to do so. Relational trust and collaborative structures were in some instances related to instructional approaches within schools, as the varying foci of instructional approaches promoted or limited staff interactions.

Literature Review

A positive relationship exists between teachers' collaborative practices and student educational achievement. Research indicates that collaborative professional culture promotes achievement at elementary schools that serve high proportions of low-income students (Berry et al., 2005; Strahan, 2003). Studies find that students' academic achievement positively relates to quality of teacher professional development and collaboration (Phillips, 2003; Goddard, Goddard, & Tschannen-Moran, 2007; Ronfeldt, Farmer, McQueen, & Grissom, 2015; Schleifer, Rinehart, & Yanisch, 2017), collaboration around instruction (Little, 1982; Goddard et al., 2007; Johnson, Reinhorn, & Simon, 2017), and allocated time for collaboration (Johnson et al., 2017; Saunders, Goldenberg, & Gallimore, 2009). Scholars also link collaborative content to student achievement, showing positive relationships between student achievement and teachers' conversational routines (Horn & Little, 2010), examination of student equity (Friedrich & McKinney, 2010), and use of specific protocols to address students' academic needs (Saunders et al., 2009).

Studies have also explored how collaboration may improve instruction and bolster student achievement by promoting intermediary elements. These elements include increased retention of beginning teachers (Smith & Ingersoll, 2004), the development of collective efficacy beliefs (Goddard, Goddard, Kim, & Miller, 2015), and improved teacher quality (Ronfeldt et al., 2015; Ronfeldt, 2017). Kruse et al. (1994) indicate collaboration is an essential characteristic of a school-based professional community, along with focus on student learning, shared values, reflective dialogue, and de-privatized practice. Scholars assert that school-based professional communities can promote collective responsibility for student learning (Kruse et al., 1994; Newmann, 1996). Collective responsibility, or the collective staff commitment to the education of all students, is an organizational factor that fosters comparatively strong achievement for high school students (Lee & Smith, 1996), elementary English language learners (Jaffe-Walter, 2018), male students repeating algebra (Morales-Chicas & Agger, 2017), and students with disabilities (Edmonds & Spradlin, 2010; McLeskey, Waldron, & Redd, 2014).

Facilitating Collaboration

Although collaborative practices are important to teachers' work, they can be constrained or enabled by elements of the school context. Common planning time (Kruse et al., 1994; Darling-Hammond & Richardson, 2009; Starr, 2017) and physical proximity (Kruse et al., 1994; Spillane, Hopkins, Sweet, & Shirrell, 2017) are oft-identified structural supports of collaboration. Scholars also reference elements related to school personnel, namely social capital (Spillane et al., 2017; Smylie & Evans, 2006; Bryk & Schneider, 2002; Vostal et al., 2019), principals' instructional support (Goddard et al., 2015; Kruse et al., 1994), and supportive work environments (Johnson, Kraft, & Papay, 2012; Louis, Marks, & Kruse, 1996) in facilitating collaborative practices.

The extant body of research regarding teacher collaboration attests to the importance of collaborative practices within schools and identifies contextual factors that support these

practices. Our study extends and contributes to this scholarship in several ways. Primarily, we explore the process through which relevant contextual elements previously identified by scholars influence teacher engagement in collaborative practices. In doing so, we add complexity to assumptions within the existing literature regarding the relationship between contextual factors and collaboration in schools. Additionally, our study draws upon teacher understandings and descriptions of practice to foreground the lived experiences of educators within the research literature.

Conceptual Framework

We apply a social organizational lens to our examination of the work of teachers. Initially introduced by Bidwell and Kasarda (1980) to articulate the conceptual differences between schools as organizations and schooling as a process, this framework has been taken up by scholars to articulate the relationships between school contextual elements and instructional practice (Little & McLaughlin, 1993; Rosenholtz, 1989; Kraft, Marinell, & Yee, 2016; Papay & Kraft, 2017). We similarly employ the social organizational approach to examine how the structural context influences teacher engagement in collaboration.

We extend the social organizational approach to account for shifting contexts and the lived experiences of the teachers we observe by drawing upon the concept of policy as practice. Levinson and Sutton (2001) assert that policy is "a complex social practice, an ongoing process of normative cultural production constituted by diverse actors across diverse social and institutional contexts" (p.1). Research undertaken through this lens aims to account for the multiple contexts, actors, and motives that ultimately make up policy, thus more fully examining the elements that constitute schools as organizations and allowing for a more flexible understanding of how these elements relate to teaching and learning. We frame collaboration as a school-based policy to better understand the elements that do or do not lend to its implementation.

We specifically engage with the concept of relational trust within the school context. Bryk and Schneider's (2002) work shows the role of relational trust as one such resource for fostering reform and promoting student achievement. Their longitudinal analysis of 12 schools identified four components of relational trust: *respect*, or interpersonal exchanges marked by actively listening to and considering one another's ideas; *personal regard*, an individual's willingness to act beyond their immediate job responsibilities in supporting and serving others; *competence*, or the extent to which an individual can be relied upon to execute the responsibilities of their core role; and *integrity*, or the alignment of an individual's perspective and actions with a particular philosophical compass. Bryk and Schneider assert that, "good schools depend heavily on cooperative endeavors. Relational trust is the connective tissue that binds individuals together to advance the education and welfare of students" (p. 44). The concept of relational trust further focuses our study on interactions between teachers and their colleagues.

Social capital, which can foster both acceptance of and resistance to outside reform or influences consists of "the resources, real or potential, gained from relationships" (Lin, 2001,

p. 23). Clear communication enabled by relational trust among individuals can facilitate conditions for collective buy-in to new policies or practices. However, social capital can engender resistance to practices that counter a group's belief systems or come from a source distrusted by the group. As Smylie and Evans (2006) describe in reference to policy implementation, "[t]he relationship between social capital and implementation may not depend so much on policy type as on more situational matching of social capital in particular contexts to specific programs, policies and practices at hand" (p. 193). Consequently, we situate our examination of relational trust and structures of collaboration within a variety of school contexts.

Methods

We purposefully sampled and collected data in eight Wisconsin elementary schools during the 2017-18 school year. We selected schools for being geographically diverse and serving numbers of students receiving free and reduced lunch at or above the state average as part of a larger study. We grouped schools based on population density and proximity to urban center, focusing on four types of places: rural places outside a federally defined metropolitan statistical area, large cities (more than 250,000 people area), mid-sized cities (fewer than 250,000 people), and urban fringe (within a metropolitan statistical area of a large or mid-sized city). Student demographics and organizational characteristics are displayed in Table 1.

Table 1

Demographic and organizational features of schools

	Prairie	Sandhill	Langlade	Grant	Taylor	Jefferson	Stempel	Dewey
Location	Rural	Rural	Urban Fringe	Urban Fringe	Small City	Small City	Large City	Large City
Grades	4K-5	4K-4	K-5	K4-5	4K-5	4K-5	4K-8	4K-8
Enrollment	200	400	400	350	330	260	670	210
Principal Tenure	3 years	21 years	6 years	14 years	3 years	7 years	3 years	5 years
State Accountability Rating	Meets expecta- tions	Significantly exceeds expectations	Significantly exceeds expectations	Significantly exceeds expectations	Exceeds expectations	Significantly exceeds expectations	Meets few expectations	Fails to meet expectations
Students with Disabilities	12%	12%	12%	12%	10%	10%	20%	30%
Students Qualifying for Free or Reduced –price Lunch	35%	40%	45%	50%	55%	40%	95%	100%
English Language Learners or Students who are Limited English Proficient	0%	<5%	5%	0%	25%	5%	35%	0%
American Indian	0%	0%	<5%	<5%	<5%	0%	<5%	<5%
Asian American	0%	<5%	5%	<5%	20%	<5%	<5%	<5%
Black	<5%	0%	<5%	<5%	5%	<5%	10%	95%
Hispanic	0%	<5%	<5%	<5%	15%	10%	75%	<5%
Pacific Islander	0%	0%	0%	0%	<5%	0%	0%	0%
White	95%	95%	85%	95%	50%	80%	10%	0%
Multiracial	<5%	<5%	<5%	<5%	<5%	5%	<5%	<5%

Note: Approximate percentages are used protect the confidentiality of schools.

We conducted semistructured interviews with 82 staff members across eight schools, including second- and fourth-grade teachers, principals, and others who provide services to

students, such as social workers and special education teachers. We asked them to describe their schools, students, communities, pedagogy, behavioral management, collaboration, and interactions with colleagues. We conducted observations in 38 second- and fourth-grade classrooms, playgrounds, and informal school settings. We recorded observational field notes on teaching practice and classroom management, student experiences and engagement, staff interactions, and school climate.

We took up a phenomenological stance across our analysis, which centers on how staff make sense of their lived experiences within their school context (Creswell, 2013). Our analytic approach was grounded in a process of iterative, data-driven memo-writing and descriptive coding (Boyatzis, 1998; Corbin & Strauss, 2008; Saldaña, 2009). While we discussed and recorded our emergent ideas and intuitions across data collection, we began formal analysis by first reviewing the transcribed interview and field note data, jotting down emergent patterns, ideas, and intuitions (Saldaña, 2009), and developing memos on emerging patterns and ideas both within and across our school cases (Creswell, 2013). We delved into individual school cases, creating school profiles for each of the eight school sites in which we highlighted major patterns, initiatives, practices, and characteristics of school context that influenced our understanding of the schools and their work with students (Maxwell, 2005). We then developed a comparative matrix to note similarities and variations across sites (Corbin & Strauss, 2008).

Next, our research team began coding. We utilized our notes, memos, and school profiles to identify emerging codes and develop an initial codebook, which we tested on a subsample of our data (Boyatzis, 1998; Corbin & Strauss, 2008; Saldaña, 2009). We collaboratively refined the codebook and confirmed the dependability of the codes by engaging in constant comparison (Corbin & Strauss, 2008), then coded the complete data set using NVivo qualitative software. Throughout the coding, the research team wrote memos about the coding process and emergent findings to promote reflection and drive our analysis (Luttrell, 2010). We refined our understanding of the emergent themes by looking at the data parsed in each code, comparing the codes, and reflecting on the links, synergies, and patterns across them (Corbin & Strauss, 2008; Saldaña, 2009). As our interpretive findings developed, we returned to the literature to hone our analysis and explore how it extended or complemented existing research.

Throughout the process we shared our understandings and interpretations of the data with other research team members and created an audit trail of our analysis through individual memos and meeting discussion notes (Lincoln & Guba, 1985; Tappan, 2001). We relied on analytic and reflective memo-writing, review of rich data excerpts, and collaborative conversations with our interpretive community to enhance the trustworthiness of our analysis and to develop our findings (Maxwell, 2005; Tappan, 2001). Our subjectivities, experiences, and curiosities influenced the path of investigation, and we considered this influence reflexively across the analytic process (Luttrell, 2010).

Findings

Across the eight school contexts, teachers often described a relationship between engagement in collaborative practices and the presence or absence of relational trust among teachers, and between teachers and other staff members. In the following section, we first identify three structures of collaboration: requisite, optional, or informal. We examine how teachers described collaborative opportunities within these structures and how core characteristics of the instructional approaches framed these collaborative structures, highlighting the extent to which different approaches necessitated staff interaction. Second, we explore the ways in which relational trust and its four components (respect, personal regard, competence, and integrity) informed teachers' understandings of and engagement with collaboration.

Structures of Collaboration

We identify two dominant elements that shape the structure of collaboration within schools: access to collaborative time and administrative requirements for teacher participation in collaboration. The presence or absence of these elements at schools resulted in requisite, optional, and informal structures of collaboration. *Requisite* collaborative structures are scheduled and teacher presence is mandatory. *Optional* collaborative structures have common collaborative time, but teachers are free to choose whether to collaborate. *Informal* collaborative structures refer to times and spaces teachers create for collaboration, such as discussions at lunch or after contract hours. These teachers worked in schools that did not allocate time for nor mandated participation in collaboration.

We found examples of each of these approaches. Four of the eight schools, Prairie, Sandhill, Grant, and Stempel, adopted requisite structures of collaboration. Two schools, Taylor and Langlade, provided optional structures. The last two schools, Jefferson and Dewey, are characterized by informal collaborative practices linked to the instructional approaches of their schools. Access to common collaborative time, whether in requisite or optional forms, did not consistently promote teacher engagement in discussion with their grade-level colleagues. Teachers at three of the six schools with shared planning time opted against engaging in collaboration, despite this availability. Conversely, the absence of common collaborative time did not consistently deter teacher engagement in these practices, as teachers at the two schools in which there was no common planning time spoke to collaborating with colleagues during lunch or after school.

School-specific instructional approaches further complicated collaborative opportunities. Four of the schools demonstrated unique instructional approaches, prompting varying levels of involvement from principals and, in some cases, requiring additional or differing collaborative approaches. These variations and consequent teacher responses highlight the extent to which local policy contexts in the form of mandated vs. optional structures are essential to understandings of collaborative practices.

Requisite collaboration. Four schools required their teachers to participate in designated collaborative planning times. At Sandhill, teachers engaged in weekly professional learning communities (PLCs). A fourth-grade teacher there said:

The idea of the PLC is actually a good one. That, that would be, I would say the one fad, that in 20 years, that I think will stick and that is really good. Because it's an hour a week that you spend with your co-teachers, in elementary school with your other grade level teachers. And at that time, we will talk about curriculum, what is working, what isn't working. We'll check in with each other and see, "Well, where are you in math?" And if someone's ahead, "Well this worked and didn't work." Talk about different things that are challenging for this group of students. We'll come up with ways, you know, that we can help each other.

Though this teacher alluded to his skepticism regarding mandated practices, he engaged in his learning community readily and regularly. In describing the problem-solving and curricular updates that he discussed with colleagues during PLC time, he emphasized the utility of this collaborative practice that prompted his support in contrast to other "fads." Other staff voiced similar support for professional learning community time during which they consulted standardized test data and classroom observations to ascertain the areas in which students needed additional supports or challenges.

Staff at Grant participated in numerous iterations of requisite collaboration. Classroom teachers had some flexibility within these iterations; however, as they could choose when to conduct their professional learning community meetings and on which content to focus. Classroom teachers could work with their grade-level peers to plan instruction, develop common assessments, and brainstorm strategies to support the academic growth of struggling students. A second-grade teacher explained, "I think those relationships are crucial and I think that has just improved the last couple of years, too, with, with our journey as a school. With professional learning communities. Just that, they're just not my kids. They are truly our kids." Participants spoke enthusiastically about the professional learning community process and indicated that this time promoted shared responsibility for students across single grades and fostered positive staff relationships.

For each grade, Grant held required biweekly student support team meetings of grade-level teachers, a special education teacher, a speech and language pathologist, school counselor, psychologist, and teachers of special subjects such as art, music, and physical education. This meeting provided a venue through which professionals could share insights about students and discuss practices for responding to students. A school counselor spoke highly of this approach, noting:

I think that that collaboration around the table, it takes people who think in lots of different ways, whether it's the counselors or the art teachers or the music teachers or the special education specialists. Like, there's so much more enrichment that comes from that collaboration and the way that we think about things, to be able to offer new and exciting ideas.

This participant highlighted the range of experiences and ideas that her coworkers brought to collaborative meetings, and she attested to the benefit of regular times during which she can meet with other staff. These meetings also allowed practitioners to develop common understandings of and responses to student needs.

Prairie was in the midst of implementing inclusion, a special education approach in which staff largely worked with students with disabilities in their regular education classrooms. This initiative required teachers to collaborate more frequently to identify student needs and develop lessons to be co-taught. Further, equity initiatives regarding academic achievement of students from low-income households required teachers to engage with data in new ways. In addition to weekly scheduled collaboration, classroom teachers met monthly with the principal and school psychologist to discuss student data disaggregated by economic status to highlight trends in disproportionality and how teachers planned to address these issues in their classrooms. Teachers could identify students for interventions or special education during these meetings.

Teachers at Prairie spoke of collaborative practices as a process under development. Staff opinions of the recent approaches at times led to tension that obstructed collaboration, though variations in staff perspectives did not entirely stymie progress. In reference to professional collaboration, a second-grade teacher stated: "We've got a long way to go, but I feel like we are in a good place. I feel like we're all starting to speak the same language, most of us." A fourth-grade teacher echoed this framing: "I think always there was a level of doing that, teaming, but now our principal really has pushed us to be very intentional about how we team and how we plan and that's been such fun." Some staff perceived collaborative practices as growing, with increasing buy-in.

Stempel catered to its large English language learner population by offering bilingual and monolingual classrooms. The staff for each of these linguistic strands largely planned separately from one another. Bilingual teachers additionally attached elements of their professional identities to their linguistic strand, with one staff member asserting that monolingual teachers were typically less willing to engage in innovative teaching strategies. To increase communication among Stempel's "diverse staff with diverse opinions," administrators required weekly guided collaboration by grade across linguistic strands by bringing monolingual and bilingual teachers together for collaboration.

The principal, in her third year at Stempel, illustrated her rationale regarding this implementation:

I see the success as students actively excited about learning. Like when you walk in, you should see it, they should be happy. And right now, we're not where we need to be with that. And part of it is, we don't have the teacher-led instruction. The planning is, they're planning for an old way of teaching, you know, or lack of planning, one of the two.

She highlighted poor staff relationships and lack of initiative on the part of some teachers as obstacles to promoting student learning. Through guided collaboration, administrators instructed

grade-level teachers to sit together and led them through exercises related to the content they were teaching. Some staff appreciated the mandated approach, with one staff member stating, "[The principal] wants us to grow and she wants the students to grow and the school to grow. So that's why she's doing her best to maintain that, the environment like that, for us to collaborate with one another." However, other teachers felt that a mandatory approach to collaboration and professional development was unhelpful to their practice and overly bureaucratic, with a participant noting general frustration with top-down initiatives that felt unrelated to his personal practice. Despite attending meetings for requisite collaboration across linguistic strands, some teachers at Stempel described disengaging from these practices and instead collaborating informally within linguistic strands. Consequently, staff preparation and collaboration occurred in venues outside of those facilitated by administration, as some staff found this structure violative of their professional autonomy.

Teachers and staff across and within schools held varying perspectives regarding the utility of requisite collaboration. Perceived utility of collaboration appeared to relate to the extent to which staff supported the requisite collaborative practices within their schools. Additionally, whereas Sandhill's and Grant's districts mandated professional learning communities, requisite collaborative times at Prairie and Stempel came from administrative desires to change the nature of teacher planning. Staff at Stempel were also grappling with other district-based initiatives within a comparatively resource austere context in relation to the other schools, the demanding nature of which may have contributed to resistance by some teachers to engage in additional tasks.

Optional collaboration. Two schools, Taylor and Langlade, adopted optional collaborative structures. Classroom teachers at Taylor had common daily preparation times, with plans to implement requisite professional learning communities during the year after we completed our observations. However, at the time of observation, staff were not required to collaborate with colleagues. While some classroom teachers reported regularly working together to plan instruction and develop lessons during common preparation times, other teachers preferred to plan instruction for their students individually. One teacher explained, "You know, it's kind of hard if you don't have the same teaching style as the person you're teaching with." This teacher alludes to her understanding of collaboration as a practice for developing or affirming ideas within a particular pedagogical style rather than an opportunity for discussing alternate practices or developing new styles.

However, other staff members expressed a desire for a greater focus on collaboration. As another teacher stated, "I feel, and we kind of talked about this before, getting together and collaboratively coming up with improving assessment, improving curriculum, using data to drive instruction. I think that could, that is something that we could work on." This teacher's understanding contrasted with that of her colleague, who viewed collaboration as an opportunity to brainstorm new ideas for their classroom practices. While all teachers at Taylor had access to common planning times, participants held varied opinions regarding the purpose and utility of collaborative practices.

At Langlade, grade-level collaboration was at the discretion of teachers rather than an institutionalized practice, and teachers showed varied commitment to collaboration. All of the second-grade teachers met at least twice each week to discuss lessons, share instructional strategies, and collaborate on long-term projects. A participant articulated that members of this team shared their strengths and supported one another's weaknesses. She noted their perceived success in collaborating, stating, "between the three of us we have one awesome brain." However, teachers at another grade engaged in fragmented collaboration, with two teachers planning together and swapping classes for science and social studies instruction and the third checking in on occasion to ensure they were covering the same subject matter.

Structures of optional collaboration varied between the two schools, but did not consistently determine teacher engagement. In fact, teachers' collaborative practices at times varied within schools. Teacher participation in collaboration at Taylor and Langlade in part depended on the preferences of colleagues. The second-grade team at Langlade shared the desire to meet regularly and consequently prioritized this practice. However, as evidenced by the teachers at Taylor, the choice of one teacher to forgo collaborative practices effectively removed the option of collaboration for her colleague. While the exertion of one teacher's preferences in this instance resulted in an absence of collaboration, this mismatch of preferences in other instances could result in teachers collaborating in accordance with another colleague's preference despite a desire to work independently.

Informal collaboration. Jefferson was in its third year of implementing personalized learning during our time of observation. Through this instructional approach, some students learned in mixed-aged configurations, and personalized learning plans largely dictated their academic content rather than class-wide areas of focus. Additionally, students in Grades 2–5 received instruction in a large, open-concept space in which classrooms were delineated by furniture rather than walls. In this context, teachers could observe each other's practice, as the lack of walls meant the activities of other classes were apparent, and teachers in neighboring classes could easily chat during transitions. Though not formally scheduled, staff at Jefferson described working together and helping each other out by "sharing ideas of things that we've tried and things that have worked and haven't worked," as they adjusted to the personalized learning approach.

Classroom teachers at Jefferson also reported checking in with one another and other staff during lunch time, after school, or during preparation times during the day. During these informal collaborative times, teachers shared how they covered specific topics and tools they used to facilitate student learning, including software applications, and configured intervention groups. Some teachers reported meeting regularly to plan co-taught lessons with the special education teacher and media specialist, while others worked primarily with their grade-level colleagues. Staff expressed differing sentiments regarding opportunities for informal collaboration within the personalized learning structure. One teacher felt that the physical proximity of the open-concept space facilitated collaborative work, stating:

It really creates a better sense of community and you kind of see the collaboration and cooperation between different professionals within the building, not just the teachers, but the other staff members. And it lends a better hand into students being able to collaborate within grade levels as well.

Yet, the lack of a designated time for collaboration was lamented by a teacher, who stated:

I can easily go to one of the other fourth-grade teachers and be like, "Hey what are you doing for this? How'd you do it? It's not working." And then we can collaborate there on our own time, but there isn't necessarily a good amount of time set aside for that opportunity.

Both of these teachers worked in the same physical space. However, they held different perspectives regarding the adequacy of this space in affording collaborative opportunities. While they both spoke to the comfort they held in interacting with other professionals, they seemingly held different understandings of what was acceptable in terms of collaborative structures. One spoke to how the physical space of its own accord highlighted communication, while the latter noted that this shared space was not sufficient for her professional development.

Teachers at Jefferson often described the personalized learning approach as an impetus for them to collaborate with one another, despite the lack of formalized collaboration times. Most staff members reported reaching out to one another of their own accord to develop their practice. While the school's physical structure supported easy communication among teachers, some staff members suggested that the lack of formal structures to support collaboration was an obstacle to meaningful collaborative work. Though three district-level professional development sessions on personalized learning took place throughout the year, this opportunity did not adequately meet the learning needs of some staff members.

At Dewey teachers attended weekly professional development workshops with one another, in which they could make materials for their classrooms or otherwise engage in mandated professional development. However, there was no formal collaborative time, as the school's small size, with a single class per grade, precluded the ability of teachers to work with others at their grade level. One teacher said:

It's hard to collaborate curriculum-wise because I'm by myself. I'm the only second-grade teacher. So a lot of times we will, like first grade, like second and third, will talk and see what we're doing. But it's hard to kind of share ideas, but we still do say, "Hey, this is what we're doing."

Though this teacher does not have a grade-based collaboration partner or mandated collaboration, she speaks to her choice to work with colleagues at different levels to identify potential areas for collaboration. Though she noted the challenges inherent in this practice, she chooses to engage in collaboration to the extent she perceives possible. This contrasts with the teacher at Taylor who cited differing teaching styles as an obstacle to collaboration.

During informal collaboration at lunch times, after school, or overlapping preparation periods, teachers and staff at Dewey created and discussed multiage intervention groups. Staff

shared insights into behavior management and developed strategies for addressing problematic student behaviors, such as sending students to each other's rooms. Though this large-city school is contextually different from mid-sized city Jefferson in terms of locality and student body, staff similarly sought out one another to collaborate across grade levels and areas of expertise. Despite their informal engagement with each other, teachers noted that this lack of structure limited their ability to work with their peers. Consequently, though staff chose to collaborate without the supporting required or optional collaborative structures, several participants noted the extent to which this influenced the quality of collaboration to which they had access.

Relational Trust

Relational trust refers to the interactions among individuals within an organization or group and the consequent confidence that is fostered or eroded by these interactions. Teachers described complex relationships among school staff and varying iterations of relational trust, as evidenced by teachers' perceptions of respect, regard, competence, and integrity among their colleagues. We found evidence for a relationship between relational trust among staff and teachers' tendencies to embrace, ignore, or resist opportunities for collaboration. Teachers who described school environments as high in relational trust also tended to describe engagement in collaboration that took place whether or not formalized opportunities for collaboration were provided.

Respect. Teachers described how the character of their relationships with each other and other school staff shaped their collaboration. For example, varying levels of respect among staff members at Taylor affected if and how they chose to collaborate with one another. Some teachers described the presence of respect, evidenced by actively listening to and considering one another's ideas, in individual relationships. In reference to a special education teacher, a fourth grade teacher said: "[She] is my lifesaver. She is, she's a special soul. She is, has the patience. She keeps me in check. She brings me off my ledge." This relationship and the proximity of these teachers' classrooms facilitated frequent informal discussion regarding students. "[The special education teacher and I] are constantly talking about what we can do to make the kids successful," she continued. This teacher described how her respect for this special education teacher fostered communication and collaboration in the interest of meeting students' needs.

By contrast, at Stempel, general frustration and mistrust between teachers and school administrators created a climate of limited respect. As described by a staff member:

I would also tell a new teacher here to avoid the negativity because we have a negative force in the building and I guess, if you were to stick your fingers in the holes, I don't know where all those holes are, but there is a negativity and a fear of the administration.

Stempel staff held different understandings and perspectives regarding the source of these feelings, with some reporting differing perspectives between administrators and teachers regarding behavior management and student consequences as a factor that divided some teachers and administrators. However, other staff noted a culture of skepticism regarding administrative

leadership among teachers, with one participant stating, "Then we had a period of time, the administration was, it wasn't good. And a lot of people, and the people who are still here from that, are still trying to get over trust issues because of what happened in the past."

Staff also highlighted the influence of Stempel's instructional format on staff opportunities to cultivate respect and thus foster collaboration. As a participant observed, "I've been in two other schools, but the schools were smaller and they weren't bilingual. So, I think that at this school, I don't know, it's different because we have two programs and because it's so large, I don't feel like I know everyone as well." This participant referenced the extent to which the instructional approach departmentalized teachers into either the bilingual or monolingual programs, a separation of faculty further compounded by the sheer number of staff serving the large student body. The staff perspectives at Stempel suggest that respect plays a role among current staff members, within the historical context of leadership relationships at the school, and within the school organizational context.

Personal regard. Teachers spoke to how the presence or absence of personal regard, demonstrated by a perceived willingness of colleagues to go beyond their immediate responsibilities to support others, related to collaborative practices. At Dewey, teachers consistently worked with teachers across grade levels and shared students in intervention groups across grade levels in the interest of supporting one another and serving students. However, at Prairie, frequent leadership shifts presented challenges for professionals and limited the presence of personal regard, as staff adapted to the new strategies and ideas that accompanied each new principal over the previous 15 years. One participant said:

We've had a lot of turnover with administration and that has been really hard for us. I think I averaged it out and the average was like, principal here was 2.2 years, and so it was really hard to get a foundation and everybody brings in of course their own passions and their own ways of wanting to do things.

Staff members emphasized the frequent changes in focus and priorities as leaders cycled through their school. While the current principal had fostered good will among the staff, the persistent suggestion that his leadership and strategic priorities were likely temporary seemed to foster teacher push back and to undermine their regard for the principal and elements of the collaboration initiatives he was implementing. These suggestions were prescient, as the principal left upon the culmination of the school year.

At the time of study, Prairie's principal was in the third year of his tenure and was the driving force behind creating inclusion and data analysis initiatives at the school. He was actively involved in collaboration, meeting monthly with grade-level teachers to examine student data. Teachers and administration differently regarded this collaborative focus on student data. The principal cited teacher resistance to meaningfully examining and taking responsibility for equitable student achievement outcomes, noting that, "the guard went up" and teachers felt defensive when he initially presented the practice, indicating his lack of personal regard for teachers. However, a teacher explained their resistance to this work differently, stating, "I think

the emphasis on data is way overdone, and I think the idea of school report cards measure[s] one small slice of what we do."

Discord at Taylor similarly limited collaboration among professionals in the building. A special education teacher noted a perceived lack of interest from general education staff in collaborating around the needs of students with disabilities. She stated, "If they end up in special ed, they're not accepted by regular ed. It becomes, 'You're [the special education teacher's] problem.'" As such, the manner by which staff members perceived their responsibilities to students limited opportunities for effective collaborative partnerships among school staff by diminishing personal regard.

Competence. In two schools, teachers explicitly described mutual trust between principals and teachers regarding one another's professional capabilities, or competence. Sandhill's principal, who was on the cusp of retiring after 20 years at the school at the time of this study, demonstrated a fairly hands-off approach to managing the district-required professional learning communities. He rarely mandated specific meeting times or content for collaborative work; rather, he expected teacher teams to make these decisions. The flexibility the principal provided was viewed positively by school staff. They felt the principal believed them competent, and they valued his management style. One teacher described the latitude she had to adjust practice in accordance with her professional judgment:

I know in a lot of schools, principals are always trying to push the direction that every teacher should go, and he doesn't do that. He gives us a skeleton of where we need to be at the end and kind of lets us find our ways to get there as grade levels. And I think that's been successful.

This teacher emphasized the extent to which the principal recognized her competence as a professional, as he trusted teachers to identify how to meet goals in the manner that they see fit. This sentiment was echoed in other interviews. Though he involved himself with the professional learning community practice upon its inception years before, Sandhill's principal noted that teachers knew how they specifically needed to spend their planning time and withdrew his involvement. Another participant attested to this practice, noting, "He's gradually let us kind of take control of our in-services and work on what we need to, which is great. Because, because you know, teachers always have a ton of work to do and we never have enough time to do it. So, that's been really nice to have that trust." Teachers found the principal's approach empowering

This trust between the principal and teachers extended to staff work around data. Teachers, interventionists, and the library media specialist at Sandhill collaborated to analyze student data to help them configure and facilitate daily intervention groups. In this bottom-up approach, teachers convened these meetings and worked together to implement interventions. In reference to the breadth of professional staff involved in interventions, one teacher mentioned, "We've pulled all these different teachers. Not just second grade—the reading teachers are helping, library is helping, I mean, it's just ... I've never been in a school that had such schoolwide

collaboration like that. It's, it's so powerful." Staff expressed a sense of agency and mutual responsibility for student success as they organized and defined their work together.

Staff at Grant also spoke highly about their principal, in her 14th year, and her role in promoting trust and community. As a teacher summarized:

I feel like we have a great principal. She is awesome with coordinating and scheduling and being there for all the teachers and all the students. She knows all their names and she's able to greet them. I just feel like she does a really good job of making us all feel like a community. And we all communicate and work together.

This teacher described how the actions of the principal fostered community and created a sense of support for staff and students. Unlike Sandhill's leader, Grant's principal took a more handson approach to scheduling, requiring staff participation in collaboration on most mornings. However, staff consistently attested to how her leadership practices fostered a communal environment in which teachers willingly and frequently worked with one another. Though the seasoned leaders of Sandhill and Grant managed teacher collaboration with different levels of intensity, staff at both schools shared their trust and respect for their principals and praised the inclusive opportunities for collaboration at their schools.

At Prairie, by contrast, some staff alluded to doubting the competence of their colleagues. One teacher explicitly cited friction among peers regarding collaborative content and format. She explained, "We're all different. So I've had to really slow down and wait for [other staff] to embrace some of these things, and that's hard. That's really hard. Especially if it's not best practice." This participant expressed doubt regarding her colleagues' competence in identifying how to best serve students. Consequently, while Prairie featured requisite opportunities for collaboration, the absence of trust amongst colleagues and the principal fostered skepticism regarding the utility of collaboration for this senior teacher.

More generally, collaborative practices around student data seemed to send implicit messages to school staff about who was capable of identifying and responsible for meeting the needs of struggling students. In contrast to Grant's cooperative approach, examination of student data at Stempel was left to a team of administrative and support staff and rarely involved teacher input. Conversations regarding support for struggling students largely excluded the teachers who worked directly with these students. At Taylor, the data team comprised the school psychologist, instructional coach, interventionists, English language learner teachers, and the principal. Gradelevel teachers were included in these weekly meetings only up to four times a year to determine which students should be placed in or exited from intervention groups. These practices may reflect administrative perception of teacher competence and, consequently, relational trust within schools. They may also reflect the manner by which attempts to improve instructional efficiency undermine or fail to facilitate the establishment of relational trust.

Integrity. Other staff expressed that philosophical differences regarding teaching practices and the manner by which students learn impacted the extent to which some professionals

engaged in meaningful collaboration. At Jefferson, some staff spoke to their shared commitment to the personalized learning instructional approach as driving collaboration. However, in reference to a perceived lack of integrity, or alignment of perspective with her colleagues, a teacher at Taylor expressed:

One teacher that I work with is not quite ready yet to accept the idea that our kids are not all the same. ... And I've been trying to work with baby steps and my, my principal is encouraging to have conversations within that, because [the principal] doesn't see the same thing that I do.

Though this participant frames the teaching approach of her colleague as inadequate, she also noted feeling limited in fostering change in her colleague, alluding to the absence of a shared sense of purpose. Further, this teacher identified a perceived lack of support from her principal, who also does not share her perspective. This perceived misalignment of educational philosophies limited the extent to which these teachers collaborated.

The administrative-driven nature of collaboration at Stempel and Prairie also contributed to a lack of perceived integrity among staff. Collaborative structures were heavily dictated by principals, though teachers in both schools spoke to feeling as though the structures in place did not actually facilitate the work that was relevant to their classrooms. This contrasts with the experience of teachers at Grant, who reported feeling positively about the collaborative structures in place despite the heavy involvement of their principal in requiring collaboration. These different perspectives and consequent varied responses of staff to collaboration may reflect how staff perceptions of alignment between their philosophies and that of their principals engender participation or resistance to their engagement in mandated practices

Variations in relational trust among school staff members, along with specific opportunities and structures for collaboration in school contexts, influenced if and how collaboration took place among colleagues. For example, within a context of high relational trust, teachers at Sandhill reported exercising autonomy in their professional learning communities by choosing content and engaging in collaboration with minimal oversight. By contrast, in a context of low relational trust, increased administrative control over collaboration at Stempel may have intensified instructional issues it was intended to resolve, as teachers articulated actively disengaging from a process in which they did not feel respected as professionals. At Taylor, relational trust emerged among some groups of teachers and was notably absent for others. The presence or absence of relational trust related to the extent to which teachers were willing to engage in collaborative opportunities with other staff.

Discussion

Perceptions of structures for collaboration and relational trust among school staff influence if and how they participate in collaborative opportunities. Teachers who attested to the presence of relational trust within their schools collaborated regardless of formalized times to do so. Conversely, teachers who cited a lack of relational trust opted against collaborating with their grade-level peers in some instances, despite the presence of optional collaborative structures.

Teachers sometimes linked collaborative structures and relational trust to instructional approaches. In this discussion we identify how our findings contribute to and complicate understandings of collaboration in schools, and we highlight implications for research and practice.

Our framing of collaborative practices as requisite, optional, or informal complicates extant research regarding teacher collaboration. Rather than approaching collaboration as a monolithic practice, we acknowledge that collaborative practices can take on different forms. Such collaborative structures are context-specific and further influenced by other elements at the local level.

Our study goes beyond earlier efforts to identify structures for collaboration and components of relational trust as relevant contextual factors (Kruse et al., 1994; Darling-Hammond & Richardson, 2009; Starr, 2017) by illuminating the interaction among these elements to promote or constrain collaboration. Relational trust may not be necessary for teachers to participate in requisite collaborative planning time, as exemplified at Prairie and Stempel. However, teachers who attested to respect and competence within their schools generally expressed more support of and engagement in formal collaborative processes than staff who did not. Staff access to optional collaborative structures may be mediated by the presence or absence of relational trust, as at Taylor. These findings suggest that relational trust is an essential, rather than preferable, element to foster staff engagement in collaborative practices in schools, regardless of available structure.

Further, staff at half of our study sites navigated the additional contextual layer of a specific school-wide instructional approach. The relationship between instructional approaches and collaboration is understudied, though these elements clearly relate to the presence and nature of collaborative practices within schools. Some instructional approaches were actively pursued by administration, such as inclusion and personalized learning, while others reflected material and demographic realities of schools, such as single classes per grade level and bilingual education. In some instances, instructional approaches explicitly or implicitly fostered particular collaborative structures. These varying approaches must be considered when evaluating schools' collaborative practices, as they inform goals and outcomes of interest for schools that may be distinct from those measured by researchers. Additionally, the nature of instructional approaches may have put constraints on teachers' time left unexplored by the scope of this study, thus compromising opportunities for collaboration.

Other contextual factors beyond the scope of this study may further influence the manner by which teachers engage in collaboration. The availability of personnel, temporal, and material resources, for example, was drastically different across our schools. Resources do not guarantee the presence or absence of specific practices. However, resources can bolster or constrain the existence or format of practices (Cohen, Raudenbush, & Ball, 2003). For example, a fourth grade classroom at Stempel had more than double the amount of students assigned to a single fourth grade teacher than did the fourth grade classrooms at Sandhill. While the notion that schools face material challenges unique to their locales is not new, this reality may hold as yet under-

investigated implications for how teachers do and do not engage in collaboration with ramifications for equitable achievement amongst students.

This study identifies several implications regarding teacher engagement in collaborative practices. Staff in our study, even those within requisite collaborative structures, exercised significant amounts of agency and autonomy in their participation in collaboration. In some instances such exertions broadened collaborative opportunities, while in others they constrained collaborative opportunities. Though our findings suggest that teacher agency mediates the relationship between relational trust and engagement in collaborative practices, this area requires further research to articulate why some teachers choose to work together despite obstacles to doing so, while others choose to work alone.

Though our study highlights the presence of informal collaborative engagement, it also recognizes the precarious conditions under which this type of collaboration emerges. Informal collaboration at Dewey and Jefferson highlights logistical flaws within the contexts of these schools, as collaboration depended on staff member's personal motivation and capacity to work outside of their contract hours to consult with and receive feedback from peers. Other elements of the school context beyond logistic and individual qualities must, however, be considered to ensure staff engagement with collaboration. The presence of a designated collaborative time could allow for professionals at Dewey and Jefferson to plan more consistently and with greater effect for their students. However, implementation of mandated collaboration at Taylor, where teachers attested to a lack of personal regard, could result in frustration and "contrived collegiality" (Hargreaves, 1994) akin to the reactions to mandated staff collaboration time at Stempel.

Administrative tenure was strongly related to relational trust in our study. Schools in which participants attested to the presence of relational trust were under the leadership of principals with tenures ranging from 5 to 21 years. Lack of relational trust at some schools may drive principal turnover or it may reflect the particular developmental stage of staff relationships with their relatively new principal. Though establishing trust may be a requisite stage in the tenure of a principal, it carries consequences for teacher engagement in collaboration.

Further, schools that lacked relational trust among some staff did not necessarily lack social capital. Smylie and Evans (2006) note that social capital can be leveraged in support of or in opposition to policies and practices. As evidenced by staff at Stempel, teachers worked together optionally and informally within linguistic strands, speaking to the utility of doing so. These positive relationships amongst colleagues within linguistic strands functioned as a form of social capital, which may have further solidified resistance to collaborative grade-level practices introduced by the principal. The educators, who formed communities separated by linguistic strand, leveraged their social capital to maintain the practices they deemed helpful to their group and to some extent resist the interference presented by the guided collaboration initiative.

These findings also carry implications for understanding how collaboration relates to student achievement. As Ronfeldt (2017) notes, "If collaboration is in fact causing achievement to increase, then the most likely explanation for the rise in achievement rates is the improved quality of instruction among teachers participating in this collaboration" (p. 81). However, our findings suggest an alternative in which collaboration facilitated through relational trust resulted in numerous professionals working with one another and with students. Though our data regarding student achievement is limited and numerous other contextual elements contribute to these outcomes, schools in which staff engaged in regular collaboration with environments marked by relational trust typically had higher rankings on the school report card than those who did not. Additionally, since past research suggests that student-teacher relationships relate to the educational achievement of underserved students (Rojas & Liou, 2017; Roorda, Koomen, Spilt, & Oort, 2011), it is possible that contexts with high relational trust among teachers facilitate higher quality relationships with students. The presence of relational trust amongst teachers may have an as yet unmeasured impact on the emotional well-being of students by facilitating a particular school climate, with consequent ramifications for student achievement.

Staff at some of ours schools also described the presence of a collective staff commitment to caring about students, which Lee and Smith (1996) refer to as "collective responsibility." Although Lee and Smith consider collective responsibility to be an attribute of the school, Taylor's fractured approaches to collaboration and teacher responsibility for the education of students indicated that collective responsibility could emerge amongst smaller groups of staff who worked with one another in communities of practice (Wenger, 1999)—practitioners who collectively engage in policy negotiation and reification—within schools, in light of perceived collegial integrity. This pattern is consistent with Grodsky and Gamoran's (2003) finding that professional community varies more within than between schools and attests to the ability of teachers to build collective responsibility and relational trust from the classroom up rather than from the principal down, contributing to studies of teachers as instrumental to the development of school culture.

The relationship between student performance and collaborative practices that facilitate discussion of students from a holistic, rather than solely academic, standpoint requires further exploration, particularly given the importance of student-teacher relationships for student achievement. The notable presence of collective responsibility at Grant suggests the importance of collaborative practices built around student cohorts through the student services team, akin to those described as "cohort teams" by Johnson et al. (2017, p. 54). Though the educators at Grant spoke highly of this practice, they were the only study participants who reported engaging in such practices regularly. Further research that focuses on this type of collaboration is therefore necessary to understand how it is fostered and to what effect.

The interaction between collaborative structures and relational trust and the potential for fostering collective responsibility shed new light on previous collaboration research. By adhering to outdated egg-crate narratives that assert that instruction happens between one teacher and the students in the classroom (Lortie, 2002), studies that assess the relationship between

collaboration and student performance may erroneously attribute achievement to the improved quality of one teacher, as opposed to the increased involvement of multiple professionals in the educational experiences of students. This dynamic further problematizes the frequent adherence to test scores as a measure of teacher quality. Future research into teacher collaboration must further contend with the relevance of how messy contextual elements, ranging from school level factors to accountability systems and legislation, interact to shape the environment in which teachers collaborate.

This study holds several implications for practice. While numerous researchers (Kruse et al., 1994; Darling-Hammond & Richardson, 2009; Starr, 2017) assert the necessity of protected time for collaboration in schools, we find that time of its own accord is not sufficient for facilitating collaboration among teachers and among staff more generally. Relational trust must be prioritized within schools that aim to promote collaboration. In the schools we studied, staff who attested to the presence of relational trust also spoke to a level of administrative trust in teachers. This relationship highlights how both administrative trust in teachers and teacher trust in administrators can foster collaborative climates. This finding holds implications for the importance of teacher autonomy at the school level and teacher professionalization on a broader scale, as efforts to increase student achievement by standardizing teaching practices may have the opposite effect by eroding the basis of professional capacity and discretion on which teachers build trust.

Relational trust and collaborative structures relate to the manner by which teachers engage with and share information regarding teaching and students. Though the role of social capital in collaboration is heavily documented (Spillane et al., 2017; Smylie & Evans, 2006; Bryk & Schneider, 2002; Vostal et al., 2019), this contextual element does not exist in a vacuum. Proponents of school reform and educational equity must consider the contextual overlap of relational trust and collaborative structures, as these elements can both elevate and undermine the practice of teaching.

References

- Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership*, 62(5), 56–60.
- Bidwell, C. E., & Kasarda, J. D. (1980). Conceptualizing and measuring the effects of school and schooling. *American Journal of Education*, 88(4), 401–430. doi:10.1086/443540
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and coded development.* Thousand Oaks, CA: Sage Publications.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York: Russell Sage Foundation.
- Cohen, D. K., Raudenbush, S., & Ball, D. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis*, 25(2), 1–24. doi:10.3102/01623737025002119
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). Los Angeles: Sage Publications.
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among the five approaches* (3rd ed.). Los Angeles: Sage Publications.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters. *Educational Leadership*, 66(5), 46–53.
- Edmonds, B., & Spradlin, T. (2010). What does it take to become a high-performing special education planning district?: A study of Indiana's special education delivery service system. *Remedial and Special Education*, *31*(5), 320–329. doi:10.1177/0741932508327451
- Friedrich, L., & McKinney, M. (2010). Teacher inquiry for equity: Collaborating to improve reaching and learning. *Language Arts*, 87(4), 241–251.
- Goddard, R., Goddard, Y., Kim, E. S., & Miller, R. (2015). A theoretical and empirical analysis of the roles on instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, 121(4), 501–530. doi:10.1086/681925
- Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record*, 109(4), 877–896.
- Grodsky, E., & Gamoran, A. (2003). The relationship between professional development and professional community in American schools. *School Effectiveness and School Improvement*, 14 (1), 1–29. doi:10.1076/sesi.14.1.1.13866
- Hargreaves, A. (1994). Changing teachers, changing times: Teachers' work and culture in the post-modern age. London: Cassell.
- Hargreaves, A. (2008). Sustainable professional learning communities. In L. Stoll & K. S. Louis (Eds.), *Professional learning communities: Divergence, depth and dilemmas* (pp. 181–195). Maidenhead: McGraw-Hill/Open University Press.
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181–217. doi:10.3102/0002831209345158

- Jaffe-Walter, R. (2018). Leading in the context of immigration: Cultivating collective responsibility for recently arrived immigrant students. *Theory Into Practice*, *57*(2), 147–153. doi:10.1080/00405841.2018.1426934
- Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 114(10), 1–39.
- Johnson, S. M., Reinhorn, S. K., & Simon, N. S. (2017). Reaping rewards for students: How successful urban schools systematically invest in teachers. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 37–70). Cambridge, MA: Harvard Education Press.
- Kraft, M. A., Marinell, W. H., & Yee, D. S. (2016). School organizational contexts, teacher turnover, and student achievement: Evidence from panel data. *American Educational Research Journal*, *53*(5), 1411–1449. doi:10.3102/0002831216667478
- Kraft, M. A., Papay, J. P., Johnson, S. M., Charner-Laird, M., Ng, M., & Reinhorn, S. (2015). Educating amid uncertainty: The organizational supports teachers need to serve students in high-poverty, urban schools. *Educational Administration Quarterly*, *51*(5), 753–790. doi:10.1177/0013161X15607617
- Kruse, S. D., Louis, K. S., & Bryk, A. S. (1994). An emerging framework for analyzing schoolbased professional community. In K. S. Louis & S. D. Kruse (Eds.), *Professionalism and community: Perspectives on reforming urban schools* (pp. 23–42). Thousand Oaks, CA: Corwin.
- Leana, C. R., & Pil, F. K. (2017). Social capital: An untapped resource for educational improvement. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 113–130). Cambridge, MA: Harvard Education Press.
- Lee, V. E., & Smith, J. B. (1996) Collective responsibility for learning and its effects on gains in achievement for early secondary school students. *American Journal of Education*, 104 (2), 103–107. doi: 10.1086/444122
- Levinson, B. & Sutton, M. (2001). "Policy as/in practice: Developing a sociocultural study of educational policy." In M. Sutton & B. Levison (Eds.), Policy as practice: Toward a comparative sociocultural analysis of educational policy (pp.1-22). Westport, CT: Ablex.
- Lin, N. (2001). *Social capital: A theory of social structure and action*. New York, NY: Cambridge University Press. doi:10.1017/CBO9780511815447
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications. doi:10.1016/0147-1767(85)90062-8
- Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19(3), 325–340. doi:10.3102/00028312019003325
- Little, J. W., & McLaughlin, M. W. (1993). *Teachers' work: Individuals, colleagues, and contexts*. New York: Teachers College Press.
- Lortie, D. C. (2002). *Schoolteacher: A sociological study* (2nd ed.). Chicago: University of Chicago Press.

- Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, *33*(4), 757–798. doi:10.3102/00028312033004757
- Luttrell, W. (2010). Introduction: The promise of qualitative research in education. In W. Luttrell (Ed.), *Qualitative educational research: Readings in reflexive methodology and transformative practice* (pp.1–17). New York: Routledge.
- Maxwell, J. (2005). *Qualitative research design: An interactive approach*. London: Sage Publications.
- McLeskey, J., Waldron, N., & Redd, L. (2014). A case study of a highly effective, inclusive elementary school. *The Journal of Special Education*, 48(1), 59–70. doi:10.1177/0022466912440455
- Morales-Chicas, J., & Agger, C. (2017). The effects of teacher collective responsibility on the mathematics achievement of students who repeat algebra. *Journal of Urban Mathematics Education*, 10(1), 52–73.
- Newmann, F. (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco: Jossey-Bass.
- Papay, J. P., & Kraft, M. (2017). Developing workplaces where teachers, stay, improve, and succeed: Recent evidence on the importance of school climate for teacher success. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 15–36). Cambridge, MA: Harvard Education Press.
- Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision*, *18*(3), 240–258.
- Rojas, L., & Liou, D. D. (2017). Social justice teaching through the sympathetic touch of caring and high expectations for students of color. *Journal of Teacher Education*, 68(1), 28–40. doi:10.1177/0022487116676314
- Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, 52(3), 475–514. doi:10.3102/0002831215585562
- Ronfeldt, M. (2017). Better collaboration, better teaching. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 71–94). Cambridge, MA: Harvard Education Press.
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493–529. doi:10.3102/0034654311421793
- Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools*. White Plains, NY: Longman.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Los Angeles: Sage Publications.

- Saunders, W. M., Goldenberg, C. N., & Gallimore, R. (2009). Grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title I schools. *American Educational Research Journal*, 46(4), 1006–1033. doi:10.3102/0002831209333185
- Schleifer, D., Rinehart, C. & Yanisch, T. (2017). *Teacher collaboration in perspective: A guide to research*. Brooklyn, NY: Public Agenda.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714. doi:10.3102/00028312041003681
- Smylie, M. A., & Evans, A. E. (2006). Social capital and the problem of implementation. In M. I. Honig (Ed.), *New directions in education policy implementation: Confronting complexity* (pp. 187–208). Albany: State University of New York Press.
- Spillane, J. P., Hopkins, M., Sweet, T. M., & Shirrell, M. (2017). The social side of capability: Supporting classroom instruction and enabling its improvement. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 95–112). Cambridge, MA: Harvard Education Press.
- Starr, J. P. (2017). Organizing adult learning for adaptive change management: A systems approach. In E. Quintero (Ed.), *Teaching in context: The social side of education reform* (pp. 163–180). Cambridge, MA: Harvard Education Press.
- Strahan, D. (2003). Promoting a collaborative professional culture in three elementary schools that have beaten the odds. *The Elementary School Journal*, 104(2), 127–146. doi:10.1086/499746
- Talbert, J. (2010). Professional learning communities at the crossroads: How systems hinder or engender change. In M. Fullan, A. Hargreaves, & A. Lieberman (Eds.), *Second international handbook of educational change* (pp. 555–571). Dordrecht, Netherlands: Springer.
- Tappan, M. (2001). Interpretive psychology: Stories, circles, and understanding lived experience. In D. Tolman & M. Brydon-Miller (Eds.), *From subjects to subjectivities: A handbook of interpretive and participatory methods* (pp. 45–56). New York: New York University Press.
- Vostal, M., LaVenia, K. N., & Horner, C. G. (2019). Making the shift to a co-teaching model of instruction: Considering relational trust as a recursor to collaboration. *Journal of Cases in Educational Leadership*, 22(1), 83–94. doi:10.1177/1555458918796876
- Wenger, E. (1999). *Communities of practice: Learning, meaning, and identity* (16th printing), Cambridge: Cambridge University Press. doi:10.1017/CBO9780511803932