Ending Isolation:

The Payoff of Teacher Teams in Successful High-Poverty Urban Schools

Susan Moore Johnson

Stefanie K. Reinhorn

Nicole S. Simon

1

Many urban schools today look to instructional teams for teachers as a central component of their improvement strategy. Teams are intended to decrease professional isolation, promote teachers' ongoing development, and substantially reduce well-documented variation in teachers' effectiveness across classrooms (Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004). As they collaborate, teachers with different skills, areas of expertise, and levels of experience may find that teams not only support them in curriculum development, lesson planning, and pedagogy, while also offering professional relationships that sustain them and improve the instructional capacity and professional culture in their school (Newmann, King, and Youngs, 2000; Goddard, Neumerski, Goddard, Salloum, & Berebitsky, 2010).

Despite such promise and concerted efforts by many to create teams, most schools are not currently organized to ensure that teachers can collaborate regularly and intensively. Teachers experience many competing demands for their scarce non-teaching time and academic schedules often fail to align their "free" time with that of their colleagues who teach the same students, grade level, or subject. Also, past research suggests that teachers may resist expectations for the interdependence that serious collaboration calls for because it runs counter to professional norms of autonomy and privacy that have long defined teachers' work (Huberman, 1993; Little, 1990; Lortie, 1975). Therefore, research suggests that when teachers do participate on teams, they often tend to protect their time and the core of their work from interference (Neil & Johnston, 2005; Troen & Boles, 2012). Although they may discuss curricular options or suggest promising techniques during meetings, many remain reluctant to relinquish their instructional autonomy. When they return to their classrooms, they are likely to teach much as they have in the past.

However, the prominence of teacher teams is rapidly growing and evolving in many urban schools. In a recent study of teachers' experiences in six high-poverty schools of one urban district (Charner-Laird, Ng, Johnson, Kraft, Papay, & Reinhorn, 2015), all teachers interviewed reported having time allocated weekly for team meetings. Rondfelt, Farmer, McQueen, and Grissom (2015), who surveyed over 9000 teachers in Miami-Dade County, report that 84% were "part of a team or group of colleagues that works together." Given such high levels of teachers' participation on teams, it is important to know more about how teams function and how teachers view their experience in them.

This study focuses on teachers' experiences collaborating with colleagues in six elementary and middle schools (traditional, turnaround, and charter schools), all located in one large Massachusetts city. Each school served large proportions of students from high-poverty, high-minority communities. Notably, each had demonstrated success with its students by achieving the highest performance rating in the state's accountability system. Initially, we sought to learn whether and how teachers collaborated. When we discovered that teams were central to the improvement efforts in five of the six schools in our study, we focused on learning from teachers and administrators about how and how well those teams worked. We hoped that we might identify effective practices used by these successful schools, which then could inform the work of others.

We were surprised to see how similarly teams functioned across these five schools. Teams had two areas of focus. The first, *academic content*, included curriculum development, lesson planning, and ongoing review of data about students' learning and achievement. The second area of focus, the *student cohort*, focused on individual students' well-being and progress, the cohort's behavior and compliance with rules, and the organizational culture that students in

the cohort experienced. Teachers and administrators reported that these teams effectively addressed both individual teachers' instructional needs as well as their school's organizational needs for improvement. In the current context of high-stakes accountability, their accounts offer both broad confirmation about the potential of teams to support teachers in urban schools and specific evidence about the features of teams that teachers and administrators said contributed to their success.

In what follows, we first review the research context of this study, including evidence about collaboration among teachers and its benefits for students, the emergence of teams as a response to accountability policies, and recent studies of teachers' collaboration and teams as well as the factors that affect their development in education and other sectors. After describing our research methods, we introduce the schools we studied. We then present our findings, explaining how teams were organized, what they focused on, and how teachers and administrators assessed their effectiveness. In doing so, we note important school-to-school differences. After discussing the factors that we found contribute to a school's effective support for teams, we conclude by discussing our findings and considering their implications for practice, policy, and research.

Research Context

Evidence about teachers' attitudes toward collaboration has long been mixed. National surveys conducted annually for 55 years by the National Education Association document clearly that teachers depend on their colleagues and value working with them (Drury & Baer, 2011). Historically, however, such collaboration among teachers was largely informal, and administrators' efforts to establish common practices and continuity across classrooms often were unsuccessful, in part due to teachers' isolation in the "egg-crate" school (Lortie, 1975). In

4

1990, Little observed, "Schoolteaching has endured largely as an assemblage of entrepreneurial individuals whose autonomy is grounded in norms of privacy and noninterference and is sustained by the very organization of teaching work" (p. 50). This legacy strongly suggests that simply assigning teachers to work together during common planning time provides no assurance that practice will change, either in the classroom or across the school. Teams are no sure-fire mechanism for teachers' engagement with school improvement.

Growing Reliance on Teacher Teams

Nonetheless, since 2000, teacher teams—also called 'professional learning communities'—have rapidly emerged as a means to establish and manage collaboration among teachers, especially in urban schools. Some analysts suggest that state and federal accountability policies have accelerated this development by requiring schools to document achievement for all subgroups of students and then imposing sanctions for those that fail to improve, thereby increasing the stakes that individual teachers have in their colleagues' success (O'Day, 2003). Despite teachers' longstanding concerns about protecting their time and maintaining their professional autonomy, teachers often see potential benefits of such teams (Charner-Laird et al., forthcoming). Although past research makes it clear that teams may encounter difficulties, we are only beginning to learn how effective teacher teams work (what they focus on, who facilitates them, how principals interact with them) and what factors contribute to their success.

Teachers' Collaboration and Their Students' Learning

Meanwhile, evidence grows that ongoing collaboration among teachers benefits not only them, but also their students. Studies of school improvement and effective schools over three decades repeatedly report strong correlations between reported or observed levels of collaboration among teachers and their students' achievement (see, for example, Gallimore,

5

Ermeling, Saunders, & Goldenberg, 2009; Goddard, Goddard, Tschannen-Moran, 2007; Louis, Marks, and Kruse 1996; Newmann & Wehlage 1995; and Rosenholtz, 1989). In a very influential, large-scale analysis of statewide data from North Carolina, Jackson and Bruegmann (2009) found that, when a more effective teacher (based on her students' standardized test scores) joins a school's grade level, students in all classes of that grade make larger achievement gains in English language arts and mathematics, both initially and over time. The authors estimate that 20% of an individual teacher's value-added score is explained by the value added by his or her grade-level colleagues. Jackson and Bruegmann call these widespread, positive effects "peer-induced learning" (p. 87), but they do not explain the mechanism that generates such learning.

In a series of studies, Goddard and his colleagues have used teachers' reports of self-efficacy and collective efficacy, which Bandura (1993) defined as "the performance capability of a social system as a whole" (p. 469), to explore whether and how collaboration among teachers benefits students. These researchers found that, after accounting for the effects of student gender, race, social-economic status, and prior academic success, teacher collaboration is positively related to school-level differences in student achievement in mathematics and reading (Goddard, Goddard, & Tschannen-Moran, 2007). Again, however, these studies do not explain what teachers do when they collaborate or how their interaction might improve practice.

A number of studies highlight the importance of school leaders in teachers' collaboration. For example, Goddard, Goddard, Kim, and Miller (2015) used teachers' reports of their principals' approaches to leadership to test the relationship between instructional leadership, teacher collaboration for instructional improvement, collective efficacy beliefs, and differences among schools in students fourth-grade mathematics and reading scores. They found that the

6

degree to which teachers collaborated to improve instruction was strongly predicted by principals' instructional leadership. Bryk, Sebring, Allensworth, Luppescu & Easton (2010) analyzed extensive data about school practices and student achievement in Chicago and found that student performance improves when teachers work together on curriculum, instruction, and problems of practice within a school context that is grounded in strong norms of trust, respect and continuous improvement. They concluded that school leadership is an essential support in promoting and sustaining such collaboration. Together, these studies provide considerable evidence that collaboration among teachers can increase students' learning, that the benefits of collaboration extend beyond an individual teacher's classroom, and that principals are key agents in promoting and supporting that process.

Investigating What Works

Ronfeldt et al.'s (2015) recent large-scale survey study of Miami-Dade County Public School teachers provides additional information about how teachers in those schools collaborate. Nearly 90% of the surveyed teachers who were participating on teams reported finding them "helpful" (39%) to "very helpful" (49%) (p. 493). The survey asked teachers to assess various team activities based on two factors—how extensively they experienced them and how useful they found them. The authors then judged the activities that teachers reported were "both extensive and helpful" to be "better quality collaboration." Notably, they found that teachers who experienced better quality collaboration had higher student achievement in both math and literacy.

Based on the literature, Ronfeldt et al. considered three topics about which teachers might collaborate on teams: (1) Collaboration about instructional strategies and curriculum (including coordinating curriculum across classes, developing pedagogical materials, and developing

aligned materials); (2) Collaboration about assessment (including reviewing state test results and formative assessments); and (3) Collaboration about students (including needs of individual students; reviewing classroom work, and addressing student discipline and classroom management). Teachers reported much more extensive levels of collaboration about instruction and assessment than about their students. Of all the activities listed, teachers reported that they found "developing instructional strategies" to be the most helpful focus of their team's work. In an intriguing finding, teachers reported that, although their teams focused extensively on the results of standardized tests and formative assessments, they assessed this activity to be far less helpful than others, even though it "was more often predictive of test score gains [in mathematics] than collaboration in other instructional areas" (p. 507). Also, the overall collaborative quality of the school proved to be important in predicting an individual teacher's achievement gains, whether or not that teacher participated in high-quality collaboration, suggesting as Jackson and Bruegmann's (2009) study had, that all teachers and their students benefit from working in a collaborative environment.

In 2010-11, Charner-Laird, Ng, Johnson, Kraft, Papay, & Reinhorn (forthcoming) investigated how teachers worked with colleagues in six elementary and secondary schools serving high-poverty, high-minority communities in one district where accountability pressures were intense. The schools had achieved different levels of success on the state's assessment. Notably, teachers in all schools spent at least one block of time each week working with colleagues on an instructional team. Based on other studies of collaboration, the researchers had expected teachers to evaluate their team largely by whether it supported their instructional needs. However, interviews revealed that teachers assessed their team with two criteria in mind: (1) Does my team help me to teach better? (2) Does it advance our efforts to improve the school?

8

Distinct school-to school patterns of either favorable or unfavorable responses to their teams emerged. Although virtually all teachers reported believing that teams had great potential to improve instruction at their school, those in only three schools judged the teams in their school favorably. Most teachers in the other three schools said their teams were ineffective either because their principal did not establish a meaningful purpose for teamwork, failed to support teachers who took risks to improve their practice, or micro-managed what teachers did during team time.

In the three schools where teachers assessed teams favorably, principals frequently observed or participated in team meetings and teachers said they appreciated their administrators' involvement. Edmondson (2012), who has studied teams in other sectors such as health care, views the manager as a team's "crucial partner" (p. 102). In the teams we studied, the principals encouraged teachers to focus on their own learning as they sought to improve performance together.

Together, these studies suggest not only that teams are increasingly common in urban school districts today, but also that teachers are more likely than in the past to engage seriously with them. Moreover, evidence is building that sustained, effective collaboration among teachers leads to more learning for students. Teams within a school may vary in quality, but school-to-school differences appear to be more distinctive. Teachers' endorsement of teams depends on specific conditions that support teamwork, many of which appear to depend on the principal's approach to leadership and management. These include providing regularly scheduled time for meetings, defining a worthwhile purpose for the teams' work, granting teachers sufficient agency in their shared efforts, and ensuring that teachers can count on what Edmondson (2012) calls a "psychologically safe" environment, where members can examine their practice openly and

experiment with ways to improve it without risk. We are still only beginning to learn about the relative benefits—both for teachers and students—of whether teacher teams focus their limited time and efforts on curriculum and instruction, student assessment data, and/or students' experiences in school.

Methods

Data for this analysis are drawn from a larger study in which we broadly examine the human capital practices of six successful high-poverty, urban schools. Here we focus on the schools' approaches to collaboration among teachers. We address the following research questions:

1. Do these six successful schools rely on teams to develop teachers' practice and increase the school's instructional capacity and success? If so, what purposes do the teams serve and how are they organized?

2. How do teachers assess their experience with teams in their school? What role do administrators play in teachers' judgments about the value of teams?

3. Are there notable school-to-school differences in how these teams are organized and managed? If so, what are they and what accounts for them?

Sample Selection

For this exploratory study, we sought a sample of schools that successfully serve high-minority, high-poverty student populations, all within a single city. We considered only schools where at least 70% of students were eligible for free- or reduced-priced lunch. We used the state's accountability ratings as a proxy for school success. The Massachusetts Department of Elementary and Secondary Education (DESE) rates every school on a scale from 1 to 5 (with 1 designating the highest performing schools), largely based on results of the Massachusetts Comprehensive Assessment System (MCAS), administered annually to all students in district and state charter schools. The state's formula accounts for growth in student performance on the

10

MCAS and the school's progress in narrowing proficiency gaps among subgroups of students. Recognizing that this definition of success is limited because it relies primarily on standardized test scores, we used it because it was the best proxy available for identifying schools that have a positive impact on students' learning.

We considered only elementary and middle schools, in order to permit meaningful cross-case comparisons. However, because we wanted to include schools that might use different approaches to attracting, developing, and retaining their teachers, we considered both traditional district schools and state charter schools. To achieve variation in the sample schools' missions, policies, and human resource practices, we reviewed available reports and websites, and consulted our professional networks.

Based on our analysis of documents and advice, we drew up a proposed sample of six elementary and middle schools—all located within the boundaries of the Walker City School District (WCSD).[1] Three were district schools and three were state-authorized charter schools. To recruit schools, we contacted school officials, explaining our study and requesting their participation. All agreed to participate. (For descriptive statistics for sample schools see Table 1 in Appendix A.) The purposive nature of our sample allowed us to conduct an informative exploratory study of these schools. However, because the sample is small and was deliberately chosen, our findings are not generalizable.

Data Collection

Interviews. Between March and June 2014, we conducted semi-structured interviews with 142 teachers, administrators and other staff in the six schools. Interviews lasted approximately 90 minutes with administrators and 45 minutes with teachers. At most schools, all

---

[1] All names of schools, districts and individuals are pseudonyms. Some details have been changed to protect anonymity.

members of the research team attended interviews with the principal and with the directors of Charter Management Organizations that managed two schools. In addition, all three researchers interviewed some teachers at each school, which facilitated cross-site comparisons, improved inter-rater reliability in coding data, and ensured that each researcher had informally observed elements of every school's structures, practices, and culture.

We also purposively constructed our interview sample at each school, recruiting a wide range of teachers, who varied in demographics, teaching experience, preparation, and teaching assignment. We solicited teachers' participation by email, through flyers placed in their mailboxes, and by responding to the recommendations of other teachers and administrators. In addition, we interviewed key staff members (e.g. curriculum coaches, program heads, and family coordinators) when it became apparent that their work and views might inform our understanding of teachers' experiences. We granted participants assurances of confidentiality.

In each school, we interviewed between 31% and 56% of the teachers, depending on the school's size, its complexity, and the practices used. (For descriptive statistics about the interviewees, see Table 1, 2 and 3 in Appendix A). We used semi-structured protocols (Appendix B) to guide our interviews and elicit comparable data across sites and across interviewers (Maxwell, 2012). Interviews were recorded and transcribed verbatim.

The interview protocols that are relevant to this analysis include questions asking about their school's approach to teachers' professional learning, including their work with colleagues. We asked whether teachers participated in teams and, if so, what the team focused on, how the team functioned, and whether they found their team worthwhile. In asking teachers to describe what it was like to work in the school, we encouraged them to describe the school's professional culture, from their point of view. Because our interviews addressed a range of related topics, we

could learn whether and how the teachers' work with their colleagues related to other activities. In our school visits, we also observed a wide range of day-to-day practices and looked for evidence about the school's organizational culture.

Document collection. Although interviews were the main source of data for this study, we also gathered and analyzed many documents describing school policies and programs related to recruiting, developing and retaining teachers, such as teacher handbooks, school policies, schedules, meeting agendas, lesson planning templates, and formats for analyzing student assessments.

Data Analysis

After each interview we used a common template to summarize the participant's responses about a standard set of themes. These included: personal background, school overview, school culture, recruitment and hiring, induction, professional development, curriculum, supervision, evaluation and dismissal, student supports, pay and benefits, retention, and teacher voice. We also maintained a confidential chart that included personal and professional information about each participant, including age, years of experience teaching, years at the school, and instructional assignment (For a list of these descriptors see Appendix C). We then used these analytic summaries to identify similarities and differences within and across schools as well as emerging themes in our study.

We subsequently developed a list of thematic codes to use be used in labeling segments of our interview data for close analysis. These included etic codes, drawn from the research literature and emic codes that emerged as we analyzed our thematic summaries. For example, two etic codes that related directly to the topic of teacher collaboration were "PROFCULTURE (the norms of being a teacher or administrator in this school)" and "COLLEAGUES

13

(commentary on the teacher's colleagues and their characteristics—'what I think about the people I work with')." We then supplemented these etic codes with a small number of emic codes that emerged from our initial analysis and practice coding (Miles & Huberman, 1994). For example, we created an emic code, "DEMANDS (teachers' professional responsibilities and expectations, such as work hours, and teachers' views of those demands)." Another, "INFLUENCETEACH (Teachers' opportunities as brokers of influence, including committees where they can voice their concerns)," supplemented the etic code ROLESTEACH (Formal roles and responsibilities for career advancement). We reviewed a small sub-set of the transcripts, individually and together, in order to refine our definitions and calibrate our use of the codes. We then used the software, *Dedoose,* to code all segments of each interview. Having coded the data, we could then locate and review data across interviews about one or several topics. (For a list of codes see Appendix C.)

Based on our coded interviews, we created data-analytic matrices (Miles & Huberman, 1994) to consider components of our research questions. We analyzed the data for each school separately, completing a number of data analytic matrices, and eventually creating more extensive cross-site analyses (Miles & Huberman, 1994). For example, because we wanted to understand the role that administrators play in teacher teams, we considered both teachers' and administrators' responses coded "FORMALCOLLAB (formal work groups, organized by the school)" and "ADMINTEACH (interactions between administrators and teachers). *Dedoose* allowed us to simultaneously sort data by code, school, and participants' characteristics. Based on these analytic matrices, we began to formulate emerging findings, which we then tested against our coded data for accuracy and completeness.

We addressed risks to validity by returning to the data to review our coding and emerging

14

findings, as well as seeking rival explanations and disconfirming data (Miles & Huberman, 1994). We also conducted member checks by sharing our initial findings with principals from all schools and by providing all participants with on-line links to our working papers. In each case, we invited participants' responses.

The Sample: Three District Schools and Three Charter Schools

When we collected data in 2014, our sample of six high-poverty schools included three district and three charter schools. This seemingly balanced and straightforward count masks the schools' complicated and consequential histories. Two of the three district schools had recently emerged from turnaround status and one of the three charter schools had been a persistently under-performing district school that the state designated for restart. Rapid changes in status, resources, and school-based authority reveal the substantial impact of policies intended to equalize learning opportunities for students who live in high-poverty, high-minority communities. By 2014, all six schools had achieved Level 1 in the state's accountability system.

Dickinson Elementary, a century–old district neighborhood school served a largely immigrant student population. Well regarded within WCSD, Dickinson experienced very low teacher turnover; in 2014, over half of Dickinson's teachers had taught there more than 20 years. As the sole administrator of this traditional district school, Dickinson's Principal Davila complied with the WCSD teachers contract, as well as other district and state policies. She had no special autonomy in staffing or scheduling.

Hurston PK-8 School and *Fitzgerald Elementary School PK-5*, also part of WCSD, each had been placed in turnaround by the state in 2010 because of persistent failure. Under federal Race to the Top guidelines, the newly appointed principals, Hurston's Roger Hinds and Fitzgerald's Sharon Forte, had the right to replace all teachers, but could retain no more than half.

15

Hinds replaced about 80% of the staff and Forte replaced about 65%. Each school continued to enroll students from the same local community as before turnaround. Subsequently, both showed substantial growth on MCAS, allowing them to exit turnaround status at Level 1 of the state's accountability rankings. After turnaround, both Hurston and Fitzgerald remained WCSD district schools, although each retained significant school-based control of its organization and management, making it possible to continue many of its initiatives.

Naylor Charter School (K-8) and *Rodriquez Charter School* (PK-8) opened in Walker City 10 and 20 years earlier as freestanding state charter schools. In 2014 Naylor was one of three schools in the expanding Naylor Charter Network. Although located within WCSD boundaries, these schools were exempt from local district policies.

Kincaid Charter School (6-8) was part of The Kincaid Charter Network, a CMO the state selected to restart a failing WCSD middle school in 2011. All of the school's teachers could reapply for positions in the new charter school, but few did and none was rehired. All administrators, teachers, and staff were new to Kincaid Charter when it opened, although approximately 80% of the students returned, a higher proportion than typically re-enrolled in prior years. As a restart school, Kincaid functioned as an in-district charter school; the local teachers union represented Kincaid's staff, whose pay aligned with WCSD's negotiated scale. However, the school was exempt from other contract provisions. Within two years, Kincaid Charter made significant gains in student test scores and achieved a Level 1 rating from the state.

Teacher Teams as a Strategy for Improvement

Teachers across all six schools widely reported that they collaborated often with colleagues about curriculum, pedagogy, and their students, while administrators said that collaboration was a means for improving teachers' skills and coordinating their efforts on behalf

16

of all students. Teachers expressed respect for the knowledge, values, and hard work of fellow teachers and said that working collaboratively helped them to manage the continuous, intense demands of instruction and to align their efforts with those of their colleagues. A Hurston PK-8 teacher's praise and confidence in her peers echo the comments of many others across the study: "[T]he amount of support we have as a staff, whether it's from administration or from each other, is amazing. We are a pretty cohesive group, by and large."

However, not all schools relied on formal instructional teams as part of their strategy for continuous improvement. Rodriguez Charter School encouraged teachers to work together and assigned instructional coaches to support individuals who needed help. When teachers' preparation periods coincided, they could use them to collaborate. However, Rodriguez administrators did not require teachers to meet regularly in teams and did not arrange common planning time. During the school's weekly professional development meetings, Rodriguez administrators often provided time when groups of teachers could plan curriculum or review students' progress; yet teachers said they could not count on that time each week. Elementary school Principal Rega, explained that time was scarce: "The big problem, honestly, is [finding] meeting time. These teachers are so stretched that to put another hour in to meet someone else . . . It's very hard to add another meeting." Therefore, although Rodriguez teachers said that they collaborated with colleagues, they did not report that teams were the means of doing so.

In the other five schools, team meetings occurred regularly and teachers widely said that their team helped them to teach better and contributed to their school's improvement, criteria that teachers in Charner-Laird et al.'s (forthcoming) earlier study used to assess their instructional teams. Individual teachers repeatedly said that they relied on their team. For example, when we asked a Fitzgerald teacher leader with 6 years of experience whom she would go to for support,

she quickly responded, "My team members." When asked further what kinds of support she might seek, she answered, "Everything." When we probed further about when this might occur, she said, "Every day, many times." We heard similar accounts from others. A Naylor teacher said: "We're all on the same page. Everybody is committed to being a good teacher and [is] invested in not just their own students, but every student in the school." A Hurston teacher described how his team spends its time:

> Some of it is sharing best practices and ideas that we have; some of it's showing student work. We've done things like show videos of tutoring sessions or classes to talk about students' understanding. We brought in research to talk about together and also common planning. It's kind of a mixture of professional development [that feeds] into planning.

A Fitzgerald teacher wrapped up a summary of his team's activities, saying, "It just helps you be reflective on your practice."

A Leader of Instruction at Kincaid Charter characterized the team as the teacher's "first line of defense" saying:

> It's just a cohesive unit. . . . People are unified in their efforts here. You don't want to see anybody fail. I definitely think that, more so than at my [prior] schools, teachers feel like they can go to somebody and ask questions or admit if they're struggling with something and get support from their coworkers.

Fitzgerald's principal, Sharon Forte, attributed her school's rapid improvement after having been placed in turnaround to formal collaboration among teachers: "I would say a lot of our success is because we really work at teams. The primary unit is the grade level team. . . . It's really like you are married to your team. . . ."

Two Areas of Focus: Academic Content and the Student Cohort

18

Teams essentially had two areas of focus: *Content* teams concentrated on developing curriculum, lessons, and pedagogy. They also monitored student performance data (e.g., interim assessments, running records, exit tickets, or unit tests) to gauge the effectiveness of their instruction. *Cohort* teams focused on the students' needs, behavior, and the organizational culture that they experienced. In some primary grades, the same group of teachers met to address both matters of content and the cohort, although in grades 5-8, where teachers typically taught a single subject, separate teams focused on content and the cohort. A Kincaid Charter School teacher described his school's team assignments:

> You basically are always part of two teams. You're part of a cultural [cohort] team, and you're part of a department [content] team. Your department team teachers will never teach together, but you will plan [instruction] together. On your cohort team, you never teach the same subjects, but you all teach the same kids.

Teachers in all five schools had daily blocks of 50-60 minutes for preparation and development, which were scheduled simultaneously as common planning time for teachers in the same grade level or content area. During at least one of these blocks each week, sub-groups of teachers met in teams to address academic content, the student cohort, or both. Teachers then used their remaining blocks of preparation time to work independently or meet informally with colleagues.

Content teams planned instruction and monitored students' learning. All five schools had content teams, composed of teachers who taught the same subject(s) either within a grade or across grades. This included primary grade-level teachers who taught in self-contained classes and teachers of upper-elementary or middle school students who taught a single subject in multiple classes. Content teams sometimes included teachers of special education or English

19

as a Second Language, who taught regularly in an inclusion class.

The schools in our study relied less on prepared curricula than their counterparts in many traditional schools and their teachers participated in collaborative planning, which occurred in the context of content teams. As a turnaround school, Hurston's elementary teachers met with their grade-level team to plan the sequence of topics and competencies they would all teach; this then guided their decisions about curriculum units and daily lesson plans. For example, second-grade teachers, who taught all subjects in self-contained classes, reported having spent their grade-level content meetings during the prior 10 months planning reading units that aligned with the Common Core State Standards. The team leader called this "a very daunting task. We [had] never had a common curriculum for reading."

Throughout these schools, experienced and new teachers routinely reported that their grade-level and content teams reduced the uncertainty about what and how to teach and enabled them to meet the continuous demands of planning, teaching, assessing, and revising a curriculum that stretched throughout the school year. However, some teachers identified drawbacks in team planning. One Naylor Charter teacher said, "Co-planning is hard. It's one of the reasons that people like working in schools like this and then also get burnt out working in schools like this. . . ." Others expressed concern about finding the right balance between support and professional autonomy. One said, "[S]ometimes the way you want to teach something is not the way the other person wants to teach. . . . It's a problem to figure out common ground every single week. It's rough and tough and exhausting." Nonetheless, most teachers at these five schools welcomed planning with their team because they thought it benefited both their students and the school. A Kincaid Charter history teacher with nearly a decade of experience summed up the benefit of his content team's process: "[It has] helped turn the job of curriculum design into a

much more manageable beast."

     Shared lesson planning. At Kincaid, Fitzgerald PK-5 and Naylor Charter, teachers also shared responsibility for lesson plans. Based on their analysis of state and local curriculum standards, teams designed instructional units and then individuals took responsibility for writing a set of lesson plans to be used by all team members. In some cases, lessons were detailed, including scripted introductions, explanations, and questions that the teachers could use to promote deeper thinking.

     Naylor Charter's teachers planned approximately five lessons each week. One teacher with 10 years of experience said, "Right now I'm planning math. . . One of my co-teachers is planning reading. . . and then another teacher's planning all of the science and writing." Another described his team's process: "We shift it. . .. I started planning with reading. This is my second time planning math. I planned writing once. I planned science for a while. So we just shift, usually with the units." A middle school science teacher, who split responsibility for planning lessons with four Naylor colleagues, said that the process was "really helpful to us," not only because it allowed them to share the "planning load," but also because it "gets different eyes on the material." A second-grade teacher at Fitzgerald PK-5 explained his team's process: "There's three of us [at the grade level] this year. I do reading, another teacher does the math planning, and another teacher does the writing planning. Those are our core subjects."

     Unlike Naylor, where teachers decided who would plan for different subjects, at Fitzgerald, Principal Forte made those decisions based on her judgment about different teachers' expertise. By Thursday of each week, Fitzgerald's teachers were expected to upload their draft lessons for the following week. Team members provided feedback during team meetings, while administrators responded in writing.

Across these three schools, team members did not simply exchange and use their colleague's prepared lesson, but instead critiqued and revised them together. A Naylor science teacher explained,

> It's not that other people don't have any input. . . .We'll all give feedback on it. . . . They'll be sending it out ahead of time so that we can then say, "Hey, I really would like to see this in this lesson," or "I'm really confused about this part of the lab. How's that going to work?"

Another Naylor teacher [AN] described the process of give and take as he reviewed lessons with his colleagues:

> It's great because I'll have an idea and they'll make mine just so much better, so much stronger. They'll call out the parts that are weak. They'll call out the parts that are not really alive. . . [They'll say] "Well, your questioning here doesn't really match the standard," or "It doesn't seem like this part of the text . . . really fits. Maybe a different part of the text would work better."

Perceived benefits and challenges of interdependent lesson planning. Many teachers at these three schools spoke very positively about the process, as did others at Hurston and Dickinson where some teams also shared lesson planning. Preparing 20 lessons each week—as teachers of traditional, self-contained elementary classes often must—limits the depth of planning that any individual can do. However, Fitzgerald's teachers were more critical than those in other schools, in part because the principal decided which teachers would plan particular subjects. She also required them to use a detailed template and sometimes monitored whether teachers were, in fact, using that week's prepared lessons. One Fitzgerald teacher claimed that his colleagues did not take the process of lesson-planning seriously and that few actually used

22

the lessons prepared by their colleagues. However, other Fitzgerald teachers described more complicated responses. One recalled how he and his colleagues' initially "complained a bunch," but that "the principal made it very clear that teachers have their own styles. Even though you get a plan from me that is written in a very specific way, you need to meet that objective in the best way suited for you." Another recalled that when the principal insisted that teachers use the planning template, "We griped and we cried, but we did it as we were griping. In the end," she conceded, "it pays off."

A few teachers raised concerns about individual team members who failed to deliver high-quality lessons. One recalled working with a colleague who was "not very strong at curriculum design and didn't seem to like it very much—his lessons were not very good." He observed that "unless the person . . . really wants to do well, it can have a kind of negative effect."

Serious problems like these either were eventually resolved when a teacher who failed to meet his colleagues' expectations left or was asked to leave the school. However, surprisingly few of the many teachers we interviewed said that they lacked confidence in their colleagues. One called her fellow teachers "rock solid," which was consistent with the assessments voiced by others.

Monitoring students' academic progress. All schools in the study dedicated some content team time to analyzing data about students' learning, a process that helped them gauge how effective their instruction was. Teams reviewed a wide range of data from MCAS results and interim assessments to unit tests and students' homework. For example, at Dickinson, Principal Davila convened a weekly meeting with teachers from paired grade levels (k-1, 2-3, and 4-5), where they reviewed results from state tests, interim assessments, and assignments

created by teachers. They then used their analysis to inform the next steps in their instruction. At Naylor, a math teacher described how his 7th-grade content team redesigned their unit on probability after students performed poorly on a new interim assessment that was aligned with the Common Core. "The depth of what they were being asked about probability increased pretty substantially." He said teachers on his team "weren't happy with the way the kids were performing on those types of questions and MCAS too. . . . There was one MCAS question that just destroyed our kids. It was something that we just had overlooked." He said that he and his colleagues realized that they needed to change both the "content and the ways we delivered it." Notably, teams in all five schools analyzed data—including standardized test results, regular class assignments, and teachers' running records of their students' progress—to inform individual and team decisions about curriculum and instruction.

Cohort teams monitored students' needs, behavior, and the organizational culture. Whereas content team meetings explicitly focused on curriculum and instruction, cohort team meetings were dedicated to ensuring that students could and would do their part as learners in the school. Teams did this by systematically discussing the needs of individual students within their grade-level cohort, reviewing the group's behavior, and strengthening aspects of the organizational culture. For example, one of Kincaid's middle-school teachers described a typical Friday cohort meeting, where teachers discussed "what happened during the week, what students were doing well, what they were not doing well, whether any individual students had problems."

Reviewing individual students' needs and progress. All schools designated some team time for tracking and discussing individual students, a process that many said increased teachers' shared responsibility for all students. Teachers reported that focusing on individuals during cohort meetings ensured that no student's personal needs or performance would be overlooked.

At Dickinson PK-5 and Fitzgerald PK-5, this was largely done during grade-level meetings, which included both content and cohort discussions. However, each of these schools also convened a standing student support team that met weekly to systematically review the academic success and well-being of individual students throughout the school. These teachers and administrators believed that students' academic performance could be affected by their home life, their socio-emotional health, and poverty. Other schools focused primarily on students' behavior while at school. Teachers at Hurston PK-8, Kincaid Charter, and Naylor Charter met in separate grade-level "cohort" teams where they reviewed students, both individually and as a group. By focusing on the academic and personal well-being of individual students, teachers could identify those who were experiencing difficulty in several classes and then intervene to get them back on track. For example, Hurston's middle school cohort teams met with relevant student support staff (the dean of discipline and counselor for the grade and representatives of the after-school program) each week. One teacher described the process for reviewing individual students:

> It's as easy as, "Hey, can we put Felix on the agenda for Friday?" It might start as an email early in the week. It could start like that or a casual conversation between teachers. Then we'd decide what has to happen from there. Is it a conversation with a teacher who has a relationship with him? Is it a phone call home? Sometimes we invite parents to come up during these meetings. We might set aside time. If the counselor's there, they might recommend a course of action. . . .

These interventions were generally effective, but sometimes required longer-term focus on particular students over time. "If we do revisit, it's usually like, 'Hey, this isn't working.' . . . The students that we've presented, typically, whatever issue it is gets ironed out."

   Monitoring students' behavior. Each school had a dress code; rules for how to behave in

the corridors (for example, silence at Naylor and Kincaid, quiet filing at Fitzgerald and Hurston); and expectations for how to conduct themselves in classes (respectfully, attentively in all schools). Rules were designed to promote an orderly environment, conducive to learning. Teachers worked to make their expectations explicit and to respond consistently across classes. During cohort team meetings, they took stock of their students' behavior, with some schools focusing more than others on compliance. At their self-described "no excuses" school, Kincaid's teachers regularly reviewed individual students' adherence to the school's standards for dress and behavior, responding quickly and firmly to violations. Teams in other schools focused their review more generally on whether the rules were being upheld by the group.

  Strengthening the cohort's culture. Teams also created new activities, incentives, and rewards to motivate students in their cohort. Teachers tried to nurture an organizational culture that kept students positively invested in learning. For example, Hurston middle school had adopted a set of behavioral norms called "PRIDE" (Perseverance, Respect, Integrity, Daring, and Excellence). Teachers recognized individual students when they acted in a way that was consistent with a PRIDE norm by giving them a small certificate. A teacher explained, "It was just in a moment, 'You did something good; here you go. You have to earn 19 more of these to [qualify for] the ice cream party at the end of the month.'" She explained that this approach had "a more positive tilt than reactive punishment," and then added that "80% of the class gets to go."

  At no-excuses Kincaid Charter, where each grade level was divided into three cohorts, a teacher explained that within her cohort "We all run our classrooms the same way, the same expectations for the kids. We have the same consequences. We have the same incentives. We have the same cheers, the same chants." The teams also created activities, incentives, and

26

rewards to motivate their students. One team leader explained that certain practices were "consistent" throughout the school, while others were "customized" for the cohort. For example, students were expected to "call out answers or raise their hands in similar ways across the school, but the prizes that we're giving for highest homework completion might be customized by cohort."

What Contributed to Teams' Effectiveness?

Despite school-to-school variation in how teams worked, study participants identified a similar set of factors that they said contributed to their teams' success. School leaders made the larger purpose of their teamwork clear. Teachers could count on regular, uninterrupted time to work with their colleagues. Administrators remained informed about and engaged in the teams' work. And in some schools, teacher leaders facilitated team meetings. Each of these factors supported and enhanced the teams' work.

Having a clear, worthwhile purpose. First, teachers' accounts illustrated the ways in which their work on teams was guided by a shared purpose. They were not meeting just to meet. Each of the schools had an explicit mission to eliminate the racial achievement gap and reduce educational disparities between their low-income students and wealthy students in other schools. That mission gave purpose and practical meaning to teachers' work on teams as they developed curriculum and lessons, assessed the success of their instruction, and monitored students' behavior, needs, and progress. A Naylor administrator explained that her charter school achieved its mission by "giv[ing] our students the education they deserve." These schools did not simply have a mission; they were, as Principal Forte told her teachers, "*on* a mission." Based on her research in non-profit organizations and for-profit companies, Edmondson (2012) concludes that managers support effective teams by framing an "aspirational purpose" for their ongoing

interaction (p. 100). In these schools, principals imparted that purpose through both words and actions. A Hurston teacher attributed his team's effective focus to "the staff and the expectations from [the principal]. . .. 'Here are the goals that you created. Go do them.'" In contrast to unproductive team meetings described by teachers in less successful schools (Charner-Laird et al., 2015), these teachers described how their meetings were fueled by such a compelling purpose.

Sufficient, regular time for team meetings. Second, these schools gave team time priority over many other activities and, therefore, teachers could count on that time being protected, which made it worthwhile to prepare and actively participate. Hargreaves (1994) calls the work of teams in some schools "contrived collegiality," because compulsory meetings lead only to "predictable" outcomes and foster resentment among teachers (p. 208). Other studies have found that, when team time is short, intermittent, or unpredictable, meetings often become occasions for check-ins with colleagues about routine matters—playground monitoring or field trips—or opportunities for individuals to socialize or prepare for their next class (Troen & Boles, 2012; Neil & Johnston, 2005; Supovitz, 2002). With few exceptions, the teachers in out study prized team time. One Hurston teacher recalled: "At no point was it ever 'Oh [let's] slack off and just hang out for a couple of hours.' It's never been like that. . . . Why would you just sit around and not do anything?"

Available team time varied across schools. Although each of these schools dedicated blocks of time for teams to meet, expectations for teams varied widely across the sample, depending largely on how much time that was available during the teachers' work day and whether a collective bargaining agreement limited the principal's say in how that time could be used. Of the schools we studied, Dickinson PK-5 had the least amount of dedicated time for team

meetings and Naylor Charter had the most.

Dickinson's teachers were required to be in school for six hours and were guaranteed five periods each week for preparation and planning, one of which was to be used at the principal's discretion in accordance with the WCSD contract. Although this was far less time than other principals of the schools we studied controlled, Davila made the most of it by convening and facilitating weekly team meetings with teachers who spanned two grade levels, which allowed teachers to meet in smaller, horizontal or vertical sub-groups. She explained, "they plan together and collaborate and talk about individual students," interactions that typically then extended beyond a single weekly meeting: "They have four common planning times, and if I walk around during their common planning times, they're usually sitting in each other's classrooms, talking about planning." Teachers confirmed that they spent many hours working with colleagues during their preparation periods, at lunch, and on their own time after school.

At the other end of the spectrum was Naylor Charter School, where teachers were not unionized and had an 8½ hour work day. Teacher teams convened daily for a content meeting, weekly to review data about their students' learning and achievement and weekly as cohort teams to review the progress of students they shared. Then, every Friday during the school's professional development time, grade-level teams continued their work together for an additional 1-2 hours. Samantha Nelson, director of the Naylor Charter Network, explained that the network had "big expectations for collaboration . . . One of our four big organizational values is 'We grow best together.'" The school's substantial allocation of team time reflected that belief and reinforced that priority.

Administrators at other schools did their best to protect and dedicate regular blocks of time for team meetings. Charter school heads could create their own schedule for professional

development and team meetings. Due to the autonomy their principals retained after exiting turnaround status, teachers at Hurston and Fitzgerald met as teams during two or more planning periods weekly, which most teachers welcomed.

Teachers valued dedicated team time. Providing predictable time for collaboration proved to be essential, both to ensure regular interaction and to convince teachers that school leaders believed their joint work together was valuable. A Hurston teacher explained:

> We now have schedules that are like a dream. It's arranged so that our content and grade-level meetings are two consecutive hours a week. That uninterrupted time is so precious that we can actually get a whole lot of work done. . . . This year, the new piece is that the grade-level teams all meet at the same time. That way, if we need to check in about something or two teams might need to come together on something, we can do that.

Therefore, although arranging and securing sufficient time for team meetings was far more challenging in some schools than others, administrators across all five schools succeeded in doing so. In response, teachers willingly invested in the process and participated in serious, sustained deliberations with colleagues.

Ongoing, engaged support by administrators. Teams benefited further from administrators' support and attention, either up close or from a distance. Several principals attended meetings often, although Davila was the only one who regularly chaired her school's team meetings. Hurston's administrators each took responsibility for following teachers' work on four content teams. Principal Hinds' assignment included English language arts teams at three grades and the school-wide arts team:

> Those are my four teams. So I go to almost all of their meetings. . . . All of us, the

30

administrative team, are on the Google Docs for all the teams and the listservs for all the

teams so that we can follow electronically what's happening, even if we're not there.

A middle school teacher leader in math commented on the principal's role:

He doesn't micromanage, but he plays a role in some of the small decision-making we

have in our different teams. He'll pop up and attend different team meetings or he'll read

the notes and give feedback. But it's not "Okay, you guys. You have to do this. This team,

you have to do this. This team, you have to do that."

A second-grade teacher confirmed this account: "He's there more just to keep it on track and

suggest and answer questions when they come along that none of us on the teaching level really

know that answer." However, several teachers said that when ELA test scores in grades 3-5

failed to improve over time, Hinds stepped in, took a more active role, and, as one said, "laid

down the law," requiring the team to focus on skills featured by the Common Core, such as close

reading. Several teachers reportedly objected to that intervention.

Kincaid's administrators, like Hurston's, sometimes took a more active role if a team

encountered difficulties or test scores stalled. A supervisor in math said, "Our seventh grade

team, I go to almost every planning block just because they've struggled more, just in terms of

getting results in student achievement. I'm there just to provide extra support to them." She

contrasted that with her involvement with the sixth- and the eighth-grade teams, where "I pop in

every once in a while, because the teams are just really strong and the [teacher] leaders are

running the show really well, so I tend to not prioritize being at those." At a minimum, other

principals and administrators emphasized the importance of the teams' work and followed the

teams' plans and decisions.

Facilitation by trained teacher leaders. One of the most notable and promising

31

practices in the three schools where the state had intervened and provided additional funding (Hurston PK-8, Fitzgerald PK-5, and Kincaid Charter) was that teacher leaders formally facilitated teams. Hurston committed a full-time administrator to supervise these teacher leaders' work, meeting weekly with each to review the prior team meeting, provide feedback on facilitation, and help to plan the next.

With very few exceptions, Hurston's teachers praised their team leaders, although not surprisingly, some who held the role found it challenging. A content team leader at Kincaid, who met weekly with his supervisor, said that he was still trying to understand his role, which "straddled a line" between manager and colleague: "We work as a team, but I am a point person . . . . [The] "opportunity for constant discourse . . .is super enriching, and fulfilling for me as a teacher—knowing that I'm making an impact, not only in my classroom, but I'm affecting the entire grade." A sixth-grade teacher at Kincaid, who had taught only three years when she was appointed to be a content leader, was at first reluctant to take the position. However, she said, "it ended up being the most fulfilling and exciting thing of this year."

Hurston and Fitzgerald both relied on federal grants to provide a $6000 stipend to all teacher leaders who facilitated teams, funding that ended once the schools successfully exited turnaround. In response to the lost funds, Hurston secured a small grant from a local foundation, reduced the number of teacher leaders, and reallocated the administrator's time so that he supervised only two experienced teacher leaders who, in turn, supervised others. When we collected data, teacher leaders at Fitzgerald still held their positions, but no longer received stipends. Principal Forte had encouraged individuals to continue in their role without pay. Several teachers suggested that this adjustment was working in the short run. However, others expressed doubts that the role would continue to be effective over time as an unpaid assignment.

32

At the newer Kincaid Charter, teacher leaders also were paid $6000 for facilitating teams, although participants said that the stipend was expected to drop to $2500 the following year. This led several to suggest that interest in the position might decline, especially given the demands of the work.

Teams Achieved Their Intended Purposes

Overall, teams augmented and reinforced collaboration among teachers, which they said improved learning for all students. This, in turn, led to greater instructional coherence within grade-levels and subject areas throughout the school. It was in that context, that teams increased individual teachers' opportunities to improve their own instruction. Strong professional cultures within their schools provided encouragement and sustained these teachers in their work as individuals and colleagues.

Increasing coherence throughout the school. Teams increased coherence across classes and grades, building a consistent curriculum, and ensuring that teachers assumed responsibility for one another's success. Teachers credited their teams for their students' and their school's improvement and often said that they chose to stay at their school because of its steady support for teams. They explained how teams promoted professional accountability among teachers, which counteracted teaching's traditional norms of privacy and autonomy. As one experienced Kincaid teacher explained,

> You have to be willing to be a team player, which I think is very easy to say but very [difficult to do]. Because teachers like their autonomy. Most of them like to be able to go into a classroom and decide what exactly they want to do that day. . . . They like to be able to change things. But when you work as a team, you don't have the autonomy.

Asked what she would tell a prospective teacher who was interested in teaching at Kincaid, she

33

said, "Be ready to be on a team and be ready to be accountable to your team." Without that readiness to participate, she explained, "you're going to have to have some hard conversations with your team, perhaps with your [supervisor]. Just get on board."

Repeatedly, teachers and administrators' comments suggested that teachers deliberately aligned their instructional expectations for students. They variously spoke of "increasing rigor," setting "high expectations," and establishing "consistency across classrooms." One Hurston teacher explained that when the school entered turnaround, "all of the students were below grade level—literally all of them." The teachers and administrators, motivated by a mission to provide their students with the education that all students deserve, accepted the challenge of "creat[ing] a curriculum that was going to catch them up." One Fitzgerald teacher explained that the coherence achieved within grade levels not only would be apparent to students who compared their classes, but also to visitors:

> If the superintendent of schools were to walk into the 3rd grade [area] and just poke his or her head into every classroom—or anyone from the state just popped in, they should be able to experience the same level of instruction in every class. It doesn't necessarily have to be word for word the same lesson, but the rigor of it and the experience of it should be the same.

In departmentalized sections of the schools, typically grades 5 through 8, teachers of subjects such as science or mathematics were coordinating curriculum and teaching from grade to grade. At the elementary levels, however, schools had only begun to align their work vertically. Combining grade levels in team meetings at Dickinson led teachers to consider the importance of knowing more about the classes "above" or "below" them. However, an elementary team leader at Hurston said, "I think vertical integration is still [ahead as] a huge area

34

of growth for us."

Improving individuals' instruction. Individual teachers repeatedly credited their team for increasing their effectiveness with their own students. Importantly, however, when they described the individual benefits they derived from their team, it was typically within the context of the school's larger improvement agenda. Many teachers, like this Naylor teacher, talked about being "on the same page" with colleagues, an expression that they used figuratively, rather than literally. She went on to explain "Everybody is committed to being a good teacher and invested in not just their own students, but every student in the school," which she said "creates a really open, honest environment." She could "walk into any of the other kindergarten teachers' classrooms and say, 'I just taught a lesson, and it was bad. This really didn't go well at all. What did you guys do that I could do better?'"

Although no school reported having deliberately created teams to support the induction of new teachers, we repeatedly heard that teams served that purpose. Novices quickly became fully engaged with their peers in making consequential decisions about what and how to teach. They could observe others' classes and be observed teaching as part of their team's routines, rather than waiting for intermittent help from a single mentor, whose interests and pedagogical style might not align with their own. A teacher at Kincaid said, "I think [that's really important] for the new teachers, because even if you don't know everything, you're always informed with everything. There's no, 'I'm doing this and I'm going to hide it because it's such a good idea.' Everybody knows about it." Meanwhile, more experienced teachers could learn new skills from early-career teachers. This type of "integrated professional culture," which engages teachers with differing levels of experience in shared responsibility for students and peers, has been shown to be effective in supporting and retaining teachers (Kardos & Johnson, 2007).

35

One unintended drawback of these schools' reliance on teams was that teachers who were specialists sometimes had no team to call their own. The sole science teacher at one school observed with obvious disappointment "I'm kind of on my own here." At all schools, teachers of art, dance, music, and physical education taught students during the time blocks when teams of core teachers met. With so much of the school's energy being devoted to grade-level or departmental teams, teachers without a team sometimes said that they felt excluded. Special educators or ESL teachers, both those who pushed into classes and those who pulled students out for tutoring, often were expected to organize their own collegial meetings, which did not always happen. A resource room teacher at Fitzgerald said, "I don't really communicate with anybody on a regular basis." Many of these teachers did not feel that they belonged to the school in the same ways that regular classroom teachers did.

The work of improving the school and developing individuals' instruction was never finished. New students enrolled whose needs had to be addressed. The state replaced its standards with those of the Common Core, requiring rapid changes in the curriculum and pedagogy. Experienced teachers moved on to other positions and novices arrived to take their places. Throughout such change, these schools looked to teams as the main means to guide and support their teachers.

Discussion and Implications for Practice, Policy, and Research

This study focused on six district and charter schools, all of which successfully served students living in high-poverty, high-minority communities. Teachers and administrators in all schools reported high rates of collaboration, although only five relied on teams of teachers as a key component of their improvement strategy. Most teachers and administrators interviewed in those five schools endorsed teams as a valuable mechanism for developing and maintaining an

effective instructional program, monitoring students' experiences and success. Teachers said that their experience on a team reduced the isolation of teaching, supported them in developing curriculum and lessons, ensured that students received close attention, and contributed to a more successful school.

Teachers participated in both content teams (with colleagues who taught the same subject) and cohort teams (with colleagues who taught the same students). At the elementary level, the same team sometimes served both functions. Teachers' main responsibility as members of content teams was to develop curriculum and to track the effectiveness of their instruction by reviewing an array of data about students' learning. In three schools, individual teachers also prepared lesson plans, which they critiqued and revised with team members, who then taught them in their classes. As members of cohort teams, teachers identified students who were having difficulty and devised responses to support them. They reviewed student behavior and created activities and incentives for cohorts of students to instill and reinforce the school's core academic and social values.

Overall, teachers reported that teams in these five schools supported their instructional needs while advancing the school's progress in achieving its goals. Various factors were found to contribute to the teams' effectiveness. These included having a worthy purpose; being assured of sufficient, regular time for meetings; experiencing ongoing, engagement and support by administrators; and being facilitated by trained teacher leaders. Several of these factors were substantially influenced by policy. State-authorized charter schools, district schools under the state's oversight during turnaround or restart, and WCSD schools that had gained special status could exercise more discretion in staffing, funding, and scheduling than the traditional district school.

Our evidence suggests strongly that, in the right context and with the right conditions, teachers welcome collaboration and thrive as they work on teams. With very few exceptions, the teachers we interviewed preferred collaboration over isolation, particularly given the intense demands of teaching in their schools. However, they did try to find the right balance between holding true to their professional judgments about what and how to teach and accommodating to the judgments of their teammates, who sometimes held different views. Teachers on most teams had to reach agreement about curriculum, instruction, and strategies for managing students' behavior, both in their class and across the school. Teachers in several schools also had to find common ground about how to teach individual lessons. Making these decisions could be difficult because teachers had different training, priorities, and experiences. However, reaching accord was important for their students as they moved from class to class and grade to grade within the school.

Implications for Practice

The principals of these schools recognized that implementing teacher teams was a comprehensive, not a piecemeal process, and other principals who seek to create successful teams can learn from their experience. Fundamental to these teams' success was the confidence teachers had in their peers' knowledge, skills, and good intentions. Most attributed the professional quality and commitment of their colleagues to their school's thorough hiring process and ongoing supervision of instruction, both of which principals largely directed. The principals also carefully managed the school schedule to facilitate teamwork and informal collaboration. Common planning time and regular, dedicated blocks of team time require administrators' deliberate efforts to ensure that teachers who should work together can and do work together. Without such careful planning, assurance, and support, competing obligations will steadily

38

undermine the potential of teams. Also, it was principals who communicated a clear, meaningful purpose for the teams' work, grounding it explicitly in the school's mission. If teachers agreed with that purpose, they became motivated to invest in their team's work.

Although principals differed in the extent to which they were actively involved with teams, teachers appreciated them for closely following their teams' progress. However, when principals were perceived to be intrusive or to treat teachers primarily as a means to an end, teachers experienced a loss of agency and withdrew their commitment in response.

Recent research documents the importance, not only of collaboration among teachers, but also of relational trust between teachers and administrators, which makes collaboration on teams meaningful and consequential (Bryk et al, 2010). In the schools we studied, teachers exercised considerable agency, both as individuals and as teams, which probably would not have happened without their principal's encouragement. In their 2014 study, Johnson, Reinhorn, Charner-Laird, Kraft, Ng, & Papay found that, when a principal took an inclusive rather than an instrumental approach to teachers' participation in decision-making, teachers were more willing to invest in school-wide reforms. Arguably all principals seeking to rely on teams for improvement should become skilled at developing relational trust and practicing inclusive leadership. They must be ready to mediate, broker and troubleshoot; to offer advice and to accept it; and to learn alongside their teachers. Teams will not succeed as a top-down initiative with only superficial buy-in from teachers.

Principals also should note that teams were not a stand-alone initiative within these schools. Every school had a purposeful set of interdependent approaches to hiring, supporting, and developing teachers. Ambitious recruitment and hiring procedures were designed to ensure that teachers were well-matched with their school. From early stages of the hiring process, all

39

teachers understood that they would be expected to collaborate with colleagues. Teachers repeatedly expressed confidence in the quality of that hiring process, which assured them that they could count on their colleagues. Also, administrators frequently observed teachers' instruction, provided them with written feedback, which they discussed in face-to-face meetings. Therefore, teachers had several sources of advice and feedback about their instruction, which supplemented and were consistent with their team experiences.

Teachers, too, can learn from this study. Teachers enjoyed the rewards of working in a strong, positive professional culture. They recognized that participating actively with colleagues on their team helped them to teach better and to achieve a greater "sense of success" with their students, which research shows contributes to retention of teachers (Johnson & Birkeland, 2003). New teachers could count on regular, meaningful engagement with their more experienced colleagues, which far surpassed the hit-or-miss quality of many mentoring programs.

Three schools' teams were said to function especially well because teacher leaders facilitated their work. These schools not only capitalized on their teacher leaders' expertise, but also gave promise to other teachers that their own career opportunities might expand as they developed professionally. If schools are to move beyond the limitations of the egg-crate school, then teachers will need to acknowledge and respond to the reality that some of their peers are more knowledgeable and skilled than others. This means being ready to graciously learn from some colleagues and to generously advise others.

Implications for Policy

This study also has important lessons for policymakers. Policy indirectly, but powerfully, affected the likelihood that teams could be an effective component of a school's improvement strategy. As they managed their schools, four principals could rely on additional funding and

40

flexibility granted through state regulations, charter school laws, and local WCSD provisions for schools with special status. These laws and regulations gave them substantial discretion in staffing, scheduling, and budget allocations, each of which had important consequences for the success of teams. In some cases, principals held all formal authority for these functions; in others, such as hiring or the use of time or resources, teachers also had a say. Some reformers assert that policymakers should grant all principals sweeping autonomy to manage their school. However, this will not, in itself, lead to effective teams. To state the obvious—that all depends on what that principal does. For certainly many charter schools fail to accomplish what these schools did, even though their principals may have comparable discretion. It is important to recognize that Principal Davila at Dickinson managed to make teams work in her school, despite having considerably less formal autonomy than the other principals in our study. Nonetheless, our data suggest that she could have accomplished more if she had had additional funding, greater flexibility in staffing, and more say in how teachers' time was used.

This study suggests strongly that principals should have a substantial say in who teaches in their school. In fact, at the time of our study, WCSD was moving in that direction. No school should be required to accept a teacher who is reluctant to teach there or expects to be unfettered by the school's expectation for collaboration among teachers. Bryk et al. (2010) conclude that "teachers who are unwilling to take on the hard work of change and align with colleagues in a common reform agenda must leave" (p. 208). We are not arguing that teachers should be at-will employees, as they were in the three charter schools of this study, but we are convinced that school-based hiring is essential. New teachers should be well informed about a school's norms and expectations before being offered and then accepting a position. Subsequently, all teachers should be held to a high standard in their day-to-day work by both their peers and their principal.

Schools also must have adequate funds and flexibility if they are to arrange common planning time and sufficient meeting time for teams. These school leaders understood that the demanding work of teams could not be completed at lunch or after hours—even though many participants described how collaboration that began in meetings often extended well beyond the school day. Both students and teachers in traditional public schools deserve more time for learning and development. Often such time is made available when a school is targeted by the state for improvement and granted additional resources. However, usually those resources are withdrawn once the school makes progress, which is surely short-sighted. While they were in turnaround, Hurston and Fitzgerald used additional money to institute important reforms, including extra time for professional development and stipends for teacher leaders who facilitated teams. However, when they lost those funds and encountered additional budget cuts, some predicted that the progress these schools had achieved would be lost and that those teachers and administrators who had worked so hard would be left frustrated and cynical. This suggests that, when schools improve by wisely using additional funding to deepen and expand their efforts, they cannot be expected to sustain that improvement once the grant runs out. Policymakers must consider dedicating additional funds over the long-term in order to ensure that effective practices endure and high-poverty schools can maintain the level of effectiveness they have achieved for their students.

Implications for Research

Our findings provide additional understanding of the topics that teams productively address. We conducted our comparative case study at the same time that Ronfeldt and colleagues were analyzing survey data from Miami-Dade. Both studies found that teacher teams benefit from focusing on curriculum and instruction. Our study provides detailed information about what

42

teams actually do when they focus effectively on curriculum and instruction. Whereas Ronfeldt et al. found that teachers had relatively few opportunities to deliberate about their students, teachers in our study all had time to review both the cohort of students they taught and individual students' personal and academic progress. Teachers widely reported that such time was well-spent. Further, Ronfeldt et al. identified an important puzzle in their data: when teachers collaborated extensively about student assessments, test scores rose, but teachers did not report that this activity was nearly as helpful as collaborating about instruction. Our case studies suggest that teachers do find such experiences worthwhile when they include a broad range of data (including students' assignments and teachers' own assessments) and when they are closely linked to decisions about what and how to teach. Therefore, we concluded from our case studies that assessing data probably is best done in the context of reviewing and revising approaches to curriculum and instruction. By comparing findings from these two studies about the same issue—what topics teams can most productively address—we can see the benefits of moving iteratively between studying large and small samples and relying on both qualitative and quantitative data to better understand how teams can be used effectively.

Further research is warranted about many topics that emerged from our study—the conditions that support collaboration among teachers, the role that teams play in instructional improvement and teachers' career decisions, what principals can do to advance their school's mission by endorsing and supporting teams. More specifically, do differences in the structure and facilitation of teams affect what they accomplish? How does participation on various types of teams (content, cohort, horizontal, vertical) influence teachers' instruction and students' learning? Do the benefits of joint lesson planning outweigh the challenges inherent in the process? If so, do those benefits play out at all grade levels and in all subjects? In schools where

teachers report having effective teams, what attitudes, skills and behaviors do principals exhibit? In what ways does participation on teams affect teachers' instructional practice? How does the experience of facilitating teams influence teacher leaders' subsequent career moves?

Each of these questions warrants inquiry in a variety of state and local contexts, using different research approaches. The research presented here demonstrates that teams can be effective and that, under the right conditions, teachers embrace and benefit from interdependent work. However, if research is to sufficiently inform policymakers and practitioners about how best to improve urban schools, we need to know much more about how teams succeed or why they fail under different conditions and in different contexts. If researchers build on prior work, their cumulative findings can inform those in practice and policy about how best to establish, maintain, and strengthen teacher teams on behalf of all students.

44

References

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning.
Educational Psychologist, 28 (2), 117-148.

Bryk, A., Sebring, P.B., Allensworth, E., Luppescu, S., & Easton, J.Q. (2010). *Organizing
schools for improvement*. Chicago: University of Chicago Press.

Charner-Laird, M., Ng, M. Johnson, S.M., Kraft, M.K., Papay, J.P., Reinhorn, S.K.
(forthcoming). Gauging goodness of fit: Teachers' expectations for their instructional
teams in high-poverty schools.

Drury, D. & Baer, J. (2011). *The American public school teacher: Past, present, and future.*
Cambridge, MA: Harvard Education Press.

Edmondson, A.C. (2012). *Teaming: How organizations learn, innovate, and compete in the
knowledge economy.* San Francisco: Jossey-Bass.

Gallimore, R., Ermeling, B., Saunders, W., & Goldenberg, C. (2009). Moving the learning of
teaching closer to practice: Teacher education implications of school–based inquiry teams.
The Elementary School Journal, 109(5), 537–553.

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), pp. 877-896.

Goddard, R. D., Goddard, Y. L., Kim, E. S., & Miller, R. J. (2015). A theoretical and empirical
analysis of the roles of instructional leadership, teacher collaboration, and collective
efficacy beliefs in support of student learning, *American Journal of Education, 121*(4),
501-530.

Goddard, Y.L., Neumerski, C.N., Goddard, R.D., Salloum, S.J., & Berebitsky, D. (2010). A

multilevel exploratory study of the relationship between teachers' perceptions of
principals' instructional support and group norms for instruction in elementary schools,
The Elementary School Journal, 111(2), 336-357.

Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the
postmodern age*. London: Continuum.

Huberman, M. (1993). The model of the independent artisan in teachers' professional
relations. In J.W. Little & M. W. McLaughlin (Eds.), *Teachers' work: Individuals,
colleagues, and contexts*, (pp 11-50). New York: Teachers College Press.

Jackson, C. K. & Bruegmann E. (2009). Teaching students and teaching each other: The
importance of peer learning for teachers. *American Economic Journal: Applied
Economics, 1*(4), 85–108.

Johnson, S.M. & Birkeland, S.E. (2003). Pursuing a "sense of success": New teachers explain
their career decisions. *American Educational Research Journal, 40*(3), 581-617.

Johnson, S.M., Reinhorn, S. K., Charner-Laird, M., Kraft, M. A., Ng, M., Papay, J.P. (2014).
Ready to lead, but how? Teachers' experiences in high-poverty, urban schools. *Teachers
College Record, 116*(10), 1-50.

Kardos, S.M. & Johnson, S.M. (2007). On their own and presumed expert: New teachers'
experiences with their colleagues, *Teachers College Record, 109*(12), 2083-2106.

Little, J.W. (1990). The persistence of privacy: Autonomy and initiative in teachers'
professional relations. *Teachers College Record, 91*(4), 509-536.

Lortie, D. C. (1975). *Schoolteacher: A sociological study* (2nd ed.). Chicago: The University of
Chicago Press.

46

Louis, K.S., Marks, H.M., & Kruse, S. (1996). Teachers' professional communities in restructuring schools. *American Educational Research Journal, 33*, 757-798.

Maxwell, J. A. (2012). *Qualitative research design: An interactive approach.* New York: Sage.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook (2nd ed.)* Newbury, NJ: Sage.

Neil, P. & Johnston, J. (2005). An approach to analysing professional discourse in a school self–evaluation project. *Research in Education, 73,* p. 73–86.

Newmann, F.M., King, M.B., & Youngs, P. (2000). Professional development that addresses school capacity: Lessons from Urban elementary schools. *American Journal of Education, 108*(4), 259-299.

Newmann, F. M. & Wehlage, G. G. (1995). *Successful school restructuring*. Center on Organization and Restructuring of Schools, University of Wisconsin-Madison.

O'Day, J.A. (2002). Complexity, accountability, and school improvement. *Harvard Educational Review, 72*(3), 293-329.

Ronfeldt, M., Farmer, S.O., McQueen, K., & Grissom, J.A. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal, 52*(3), 475-514.

Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement, *Econometrica, 73*(2), 417–458.

Rockoff, J.E. (2004). The impact of individual teachers on studnt achievement: Evidence from panel data. *American Economic Review, Papers and Proceedings, 94*(2), 247-252.

Rosenholtz, S. J. (1989). *Teacher's workplace: The social organization of schools.* Reading, MA: Addison-Wesley Longman.

Supovitz, J. A. (2002). Developing communities of instructional practice. *Teachers College Record, 104*(8), 1591–1626.

Troen, V. & Boles, K. C. (2012). *The power of teacher teams: With cases, analyses, and strategies for success.* Thousand Oaks, CA: Corwin.

48