

MAKING SPACE: The Value of Teacher Collaboration



School on the Move Best Practice Research

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The Rennie Center's mission is to improve public education through well-informed decision-making based on deep knowledge and evidence of effective policymaking and practice. As Massachusetts' preeminent voice in public education reform, we create open spaces for educators and policymakers to consider evidence, discuss cutting-edge issues, and develop new approaches to advance student learning and achievement. Through our staunch commitment to independent, non-partisan research and constructive conversations, we work to promote an education system that provides every child with the opportunity to be successful in school and in life.

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EdVestors, a dynamic school change organization, focuses on accelerating substantive improvement in urban schools and seeks to level the playing field of opportunity and achievement for all students. It advances its mission by identifying and shaping the most effective improvement initiatives, partnering with donors to invest in these efforts, and supporting education project leaders with hands-on expertise. Since 2002, the entrepreneurial nonprofit has raised and directed over \$16 million in private donations for urban school improvement efforts through EdVestors' Urban Education Investment Showcase, the BPS Arts Expansion Initiative, the School on the Move Prize, and our newest Improving Schools Initiative, partnering with a cohort of under-performing schools to accelerate improvement.

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Letter to Colleagues

EdVestors, in partnership with the Rennie Center for Education & Policy, is pleased to release this report, *Creating Space: The Value of Teacher Collaboration*. For the past eight years, EdVestors has annually awarded the School on the Move Prize to the most improving Boston Public School. This \$100,000 prize is intended to shine a spotlight on schools that have undergone significant improvement over multiple years, delivering better outcomes for their students. The Prize is paired with best practice research to provide an opportunity for other schools to learn from their experiences. The winning schools have represented all grade levels – elementary, K to 8, middle and high schools – and all types of schools – regular district schools and pilot schools. Despite these variances, our 2010 report, *Charting the Course: Four Years of the Thomas W. Payzant School on the Move Prize*, identifies four key practices that all rapidly improving schools demonstrate. One of these is shared ownership and teacher collaboration.

Based on this evidence, which is confirmed by a wide body of research and our own experience working with many schools, EdVestors believes that school change is only possible when the adults in the schools – teachers and leaders – take responsibility for changing their practice in order to ensure that all students learn at high levels. This change does not happen without the space for teacher collaboration – both the time for teachers to meet to discuss instructional practices and a culture that fosters shared decision-making and accountability where differences of opinion strengthen outcomes. This current report digs deeper into how teacher collaboration happens and what it looks like on the ground in five successful Boston Public Schools.

We also know that teachers are hungry for this change in their work culture. A single teacher working in isolation is no longer the model of instructional excellence, but instead teams of teachers working together to problem-solve, challenge and support each other needs to be the new norm, as it is in many other professional settings. In the most recent state-wide survey of teachers conducted in 2012, educators report challenges in finding sufficient time to plan and collaborate with colleagues. Only 55% of responding teachers report that “non-instructional time provided for teachers in my school is sufficient.” Fewer than 6 in 10 educators report that there are effective strategies to make collaborative decisions to solve problems in their schools.¹

We hope this report will contribute to the body of knowledge on improving schools by providing a road map for schools and districts to create the conditions for teacher collaboration, which ultimately leads to student success and achievement in all schools.

Laura Perille
President & CEO

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¹ New Teacher Center. (2013). *Understanding the Results of the 2012 TELL Massachusetts Survey: General Trends* (Research Brief). Santa Cruz, CA. Retrieved from http://www.tellmass.org/uploads/File/MA12_brief_gentrends.pdf.

MAKING SPACE: The Value of Teacher Collaboration

Introduction

In recent years, unparalleled levels of national attention have been paid to the issue of teacher effectiveness. Sophisticated measurement techniques have been developed to isolate teachers' impact on students' academic growth and ability to master challenging content and to inform large-scale educator evaluation systems. However, these efforts have largely focused on the impact of individual teachers. While the recruitment, preparation, and performance of individual teachers are, of course, critical to building successful education systems, current conversations have neglected how staff at high-functioning schools interact and work together to produce successful outcomes. Research by Amy Edmonson at the Harvard Business School finds that organizations often thrive, or fail, based on their ability to work as teams to learn, improve, and innovate.¹ Other contributions to teacher research have derived similar conclusions for schools. Drawing on the notion of social capital, research points to the high value teachers of all abilities draw from working together and the extent to which teachers report doing so as a remedy to solve instructional problems.² In fact, schools with higher levels of teacher collaboration are associated with stronger student performance.³ For example, a study in New York City showed that teachers were more likely to produce student achievement gains if they taught in schools where they had strong ties to colleagues with whom they worked often on instructional issues, regardless of their education, experience, or previous student achievement levels.⁴ Further, teachers have reported being more likely to work on instructional issues with a peer teacher than a principal or district-designated professional resource.

This evidence builds consensus on teacher collaboration as a key element in driving school improvement, creating an environment for teachers to improve their practice, while facilitating action designed to address diverse student needs. Perhaps one reason why teacher collaboration has received limited attention in current policy discussions is that it is difficult to achieve, especially through state or district directives. In large urban schools, often characterized by higher than average rates of teacher turnover, the task is even more daunting. And yet, educators in some urban schools have found a way to transform school cultures into collaborative work environments, where leaders and teachers set expectations for shared responsibility of whole-school improvement. It is a process that has led some schools to overcome many of the challenges endemic to the urban environment and become models of practice.

“Teacher collaboration is the highest leverage strategy for school improvement that we have.”

—Principal from one of the study schools

In this research report, the Rennie Center for Education Research & Policy examines the role of teacher collaboration in driving school improvement. The research study focuses on leader and teacher practices in EdVestors' School on the Move (SOM) prize-winner and finalist schools – urban schools in Boston recognized for exemplary progress in advancing the academic achievement of all students. The Rennie Center has done extensive documentation of SOM schools since 2006, including annual case studies of prize-winners and additional analyses examining common practices across these rapidly-improving schools. The research presented here adds to this body of knowledge as part of an ongoing effort to look inside these schools to uncover successful practices that may inform district- and school-level decision-making on school reform. In the sections below, we detail strategies used in SOM schools to build structures and routines to support and sustain collaborative cultures. Research findings present specific steps all schools may take to build leader and teacher collaboration to advance meaningful reform.

About the School on the Move Prize

The School on the Move (SOM) Prize recognizes individual schools within Boston Public Schools that have made significant progress in improving student achievement. Schools are invited to apply for the SOM Prize annually based on an analysis of their students' performance on the Massachusetts Comprehensive Assessment System (MCAS) over a four-year period. To be eligible, schools must show rates of improvement that are significantly greater than the district average and their student demographics must be representative of the district as a whole. In their application, invited schools describe the strategies they use to improve academic performance over the review period, including shared leadership and ownership, meaningful teacher collaboration, effective use of data, strengthening academic rigor and student support, and effective family and community partnerships. An independent selection panel reviews applications and conducts site visits to select the winning school each year. Since its inauguration in 2006, eight schools have won the annual \$100,000 Prize. As part of the Prize each year, EdVestors commissions best practice research – in collaboration with the Rennie Center for Education Research & Policy – documenting the strategies of the winning schools in order to better understand how schools improve and to share the findings with educators, school leaders and policymakers.

Study Approach

The Rennie Center conducted research to document evidence-based teacher collaboration practices in SOM prize-winners and finalists, and the extent to which these practices act as a conduit in advancing other school improvement strategies. The study methodology is informed by the following research questions:

1. What are the school-based structures that promote teacher collaboration, and what are barriers that stymie collaboration? How have SOM prize-winners and finalists created the conditions for meaningful teacher collaboration and overcome any barriers?
2. To what extent are the teacher collaboration practices in SOM winner and finalist schools replicable? What trainings and supports for teachers and leaders are needed?
3. Is teacher collaboration a primary lever for school-wide change? How does teacher collaboration cultivate and support other high leverage practices, such as: the effective use of data to improve instruction; increased academic rigor and student supports; and effective family and community partnerships?

To address these research questions, the study team pursued a comprehensive data collection and analysis plan including:

- **Promising practice scan.** The study team reviewed the literature on teacher collaboration, focusing on practices critical to developing sustainable, teacher-led school communities. We also focused on key linkages between teacher collaboration and other school improvement strategies.
- **Teacher logs.** Designed to be completed by teachers every day for a period of two weeks, the teacher logs captured descriptive information about the opportunities teachers have to work with other teachers and with school leaders.
- **Principal survey.** The study team developed and administered a principal survey, completed by school leaders, about how they work with teachers and create opportunities for collaboration.
- **Site visits to schools.** Using data on teacher collaborative practices from the logs and surveys, the study team conducted a site visit to all study schools. These visits included an interview with the school leader, a teacher focus group and an observation of a teacher team meeting.
- **Analysis of quantitative and qualitative data.** The study team integrated quantitative and qualitative data to identify key themes about how teachers and leaders work together in study schools, challenges to collaboration, and the ways in which schools have overcome barriers.

The study team conducted this research during the fall and winter of the 2013-14 school year with a sub-set of the SOM prize-winners and finalists located throughout Boston, including:

- **Clarence R. Edwards Middle School.** A School on the Move winner in 2011, the Edwards Middle School is located in Charlestown and enrolls approximately 490 students in grades 6-8.
- **New Mission High School.** Formerly in Mission Hill, this Hyde Park-located high school is a pilot school with an enrollment of about 260 students. New Mission is the 2012 School on the Move winner.
- **George H. Conley Elementary School.** A small elementary school with one class per grade located in Roslindale and enrolling 224 students from pre-kindergarten through grade 5. Conley Elementary is the 2013 School on the Move winner.
- **Orchard Gardens Pilot K-8 School.** Located in Roxbury serving kindergarten through grade 8, Orchard Gardens enrolls 830 students. Orchard Gardens was a 2013 School on the Move finalist and recently emerged from state-designated Turnaround School status.
- **Urban Science Academy.** Located in the West Roxbury Education Complex where it shares its campus with another urban high school, the Urban Science Academy enrolls about 600 students in grades 9-12. Urban Science Academy was a 2011 and 2013 School on the Move finalist.

Building and Sustaining Collaboration in School Communities

Effective teacher collaboration is defined as engaging in regular routines where teachers communicate about classroom experiences in an effort to strengthen pedagogical expertise⁵ and push colleagues to try new things.⁶ These types of interactions among staff have been difficult to achieve in schools. Sociologist Dan Lortie, conducting research in the 1970s, famously claimed that American schools are widely defined by a culture of individualism.⁷ Still pervasive today, teachers tend to work independently and are often unaware of what is going on in nearby classrooms. Thus, fostering collaboration is a challenge for most schools. When it does occur, collaboration depends on establishing trust among teachers and between teachers and school leaders.⁸ In short, a two-pronged approach is needed. First, schools must implement structures, routines, and protocols to establish and facilitate teacher interaction focused on instructional issues. Second, specific attention must be devoted to nurturing school-wide behavioral norms that undergird collaborative practices, such as collective responsibility for student learning. In such a school environment, a more holistic view of student learning can emerge where all adults are committed to working together to achieve commonly-held goals.

Structuring professional protocols and routines in teacher communities. The building of teacher collaboration begins with implementing a set of routines that fosters teachers working together on common instructional issues. Schools committed to collaboration exist on a continuum ranging from developing to implementing to sustaining environments where teacher-led communities emerge (see Figure 1). In developing school communities, teachers work with school leaders to develop structures, like teacher teams, and common professional protocols for regularly occurring team meetings, including agendas and procedures for addressing and responding to teachers' concerns about their own instructional practice. It is school leaders, however, who often ensure that regular team meetings are held.⁹ These structures and protocols contribute to the development of a shared vision for school improvement, in a way that engages all members of the school community. This vision becomes a foundation for the community and exists as a statement of purpose. Without these in place, teacher communities function more like a collection of individuals than a cohesive team that moves together towards common targets for school improvement.¹⁰

Meanwhile, in more advanced, implementing school communities, teachers begin to determine direction – teachers play substantial roles in developing and leading professional development opportunities for colleague teachers.¹¹ Teachers and leaders in implementing school communities often take up issues related to addressing professional conflict. Protocols for acknowledging conflict have been identified as a key lever for the development of more advanced collaborative practice; when teachers and school leaders work together to develop these protocols, they become systems for conflict management reflective of collective decision-making.¹² Addressing differences between colleagues can encourage teachers' buy-in to a community's shared vision for school improvement, as they create opportunities for teachers to consider new perspectives.¹³ In sustaining school communities, or those with the most developed notions of collaboration, the routines of teachers working together – and with leaders – towards a common goal are well-established. With protocols in place, teacher leadership in school communities begins to emerge. Teachers begin to demonstrate specialized skills in particular facets of collaborative work (e.g., analyzing data, facilitating and leading teams, developing plans for classroom interventions), and teams harness the diversity of these skills as a way to accomplish team goals. This process translates teamwork into a teacher-owned enterprise, relying on school leaders for minimal supervision and direction.¹⁴

“Effective teacher collaboration is defined as engaging in regular routines where teachers communicate about classroom experiences in an effort to strengthen pedagogical expertise and push colleagues to try new things.***

— *Brownell, M. T., Yeagar, E. Rennels, M. S. & Riley, T. (1997). / **Davis, K. S. (2003).

Figure 1: Key Elements of Collaborative School Communities*

	Developing Communities	Implementing Communities	Sustaining Communities
<p>Characteristics</p> <p>Members of the school community...</p>	<ul style="list-style-type: none"> ... work to develop collaboration norms and goals for school improvement¹⁵ ...are reluctant to address differences of opinion about effective teaching¹⁶ ...see participation as individual and disconnected from their practice¹⁷ 	<ul style="list-style-type: none"> ...have established common goals & a shared language around reform¹⁸ ...demonstrate a communal responsibility for student learning¹⁹ ...use collaborative dialogue closely linked to practice²⁰ 	<ul style="list-style-type: none"> ...allow teachers to primarily drive collaboration²¹ ...use data to drive continuous improvement²² ...move beyond short-term achievement gains to address underlying obstacles to student achievement²³
<p>Teacher behaviors</p> <p>Teachers in the community...</p>	<ul style="list-style-type: none"> ... create data teams, oriented explicitly towards evaluating test-based outcomes²⁴ ... monitor student growth by developing a system with school leaders that is based on multiple measures of student performance and linked directly to a shared vision²⁵ ... generate & use a list of obstacles to student learning to guide collaborative discussion²⁶ 	<ul style="list-style-type: none"> ... develop standards & protocols for managing conflict that are linked to shared goals²⁷ ... encourage peers to make innovative changes to practice & engage in reflection about challenges & breakthroughs²⁸ ... work with school leaders to shape professional development²⁹ ... seek opportunities for classroom observation or co-teaching with peers³⁰ 	<ul style="list-style-type: none"> ... work with peers who have similar learning goals, using formal structures to collaboratively plan & analyze data³¹ ... create opportunities for informal interaction with peers³² ... seek opportunities for continual improvement by accessing additional expertise (e.g., in the form of external service providers/partners)³³
<p>Leader behaviors</p> <p>School leaders in the community...</p>	<ul style="list-style-type: none"> ... develop common standards & protocols for participation in meetings³⁴ ... model normative practices & protocols for collaboration³⁵ ... facilitate collaboration in a way that makes opposing views “visible” & subject to supportive discussion³⁶ ... establish a coherent school-wide reform message³⁷ ... restructure school time to allow for daily opportunities for teachers to meet in school-wide, departmental, or grade-level teams³⁸ ... restructure school time to allow for one period of collaborative planning each week³⁹ 	<ul style="list-style-type: none"> ... create a data & accountability system for monitoring school improvement (including student data, information about teachers, and information about students’ school experiences)⁴⁰ ... create a team of teachers & leaders exclusively focused on instructional supports that aligns to teacher identified classroom challenges⁴¹ ... increase teacher interaction time with teachers during meetings⁴² ... address predictable sources of conflict or risk⁴³ ... resist the temptation to solve problems unilaterally; instead work with teachers individually to respond to conflict⁴⁴ 	<ul style="list-style-type: none"> ... work with teachers to develop a plan that aligns teacher professional development with learning goals⁴⁵ ... create a model in which mentor teachers serve as coaches to beginner teachers to improve instruction⁴⁶ ... encourage team teaching and integrated lesson design⁴⁷ ... provide resources to support teacher-directed collaboration, but resist the temptation to offer direct guidance⁴⁸

* The Key Elements of School Communities was developed by the Rennie Center study team based on a synthesis of teacher collaboration research literature. Teacher and leader behaviors were sorted into categories based on commonly-held characteristics of collaborative school communities existing in the research literature.

Building collaborative culture in school communities. While procedural aspects of teacher collaboration are important, school leaders must also pay attention to building a vibrant collaborative culture. A comprehensive research study of teacher collaboration conducted in Boston Public Schools found that schools with the most effective collaborative practices exhibited a school culture oriented towards “norms of collective responsibility and continual learning.”⁴⁹ In sustaining communities like these, high levels of organizational trust define teacher and school leader behaviors (see Figure 1). School leaders must demonstrate trust in teachers to work together without close and regular supervision, while teachers must develop trust with school leaders and colleagues to have effective discussions about instructional challenges, offer constructive critique, and use each other as resources. School leaders in developing communities begin this process of building trust through the use of a coherent school-wide reform message⁵⁰ and increasing teacher interaction time during team meetings.⁵¹ In implementing communities, characterized by higher levels of organizational

trust, more attention is paid to teachers expressing instructional concerns freely during these meetings.⁵² Research notes that in sustaining communities with the highest levels of trust, teachers are more likely to make changes to classroom practice when they engage in data-driven conversations and explore challenging questions about student learning and effective teaching with peers.⁵³ Indeed, as teacher-led communities emerge in schools practicing more advanced notions of collaboration, high-levels of organizational trust can help nurture the transition to teacher responsibility for community goals and teams.

Understanding the contributions that leaders and teachers make to transform a well-run school with competent, effective staff into a school-wide community characterized by a structure and a culture that support collaboration is a critical step in driving systemic school improvement. However, starting from scratch is difficult. Instructive examples are needed to foster schools’ ability to cultivate collaboration when few, if any, of the norms described above by research are regularly demonstrated by the adults in the building.

Findings

Consistent with the literature base, school leaders in the five study schools established structures, routines, and protocols to promote teacher interaction school-wide. Working together, leaders and teachers fostered a culture of meaningful collaboration and continuous school improvement and engaged in activities that led to improved opportunities for student learning. The findings presented are based on analysis of all study data – including log/survey data and interviews with school leaders and teachers. Documented below are examples critical to understanding both what teachers and leaders do as part of their collaborative practices, and how these practices are established as norms within these school communities.



Schools create the structures necessary for collaboration

In the five study schools, creating teacher teams laid the groundwork for the development of school-wide collaboration oriented towards continuous school improvement. Team meetings helped increase the frequency of teacher behaviors positively associated with more collaborative practice (see Table 1). As one leader noted: “If you don’t have the structures, you can’t get teachers – especially those differing in personality or vision – in the same room to work together.” Below, specific strategies used by study schools to organize and maximize the effectiveness of team structures are examined, as well as the challenges with which schools continue to grapple.

Table 1: Most Frequently Reported Teacher Behaviors in Team Meetings

During team meetings, teachers in study schools...		
<ul style="list-style-type: none"> Engage in at least one reflective conversation about an in-class obstacle or teaching challenge. 	<ul style="list-style-type: none"> Review schools goals. 	<ul style="list-style-type: none"> Discuss instructional topics, such as the content of a lesson or effective teacher practice.

“Matrixed” teams foster school-wide interactions. All study schools describe implementing integrated, matrixed teams to promote school-wide collaboration. This teaming structure, often established by school leaders, presents an opportunity for school-wide interactions among teachers and staff. Each team is guided by specific, distinct goals that are linked to the goals of other teacher teams and the school’s

strategic plan and governed by protocols for how teachers will work together. All five schools’ teams are structured so that nearly all teachers are on more than one academic team, such as grade-level and subject-area teams (see text box for examples). Grade-level teams are typically characterized by short, frequently occurring meetings (e.g., about 35 to 50 minutes weekly, in some schools twice per week) and allow teachers who share the same students a chance to discuss ongoing challenges. Subject-area meetings are usually scheduled for a longer block of time, and study schools demonstrated greater variation in how often these teams meet (e.g., ranging from once/twice per week to once a month). These meetings address content issues – such as identifying common gaps in student mastery of a particular skill or concept. All schools also report having a bi-monthly instructional leadership team (ILT) meeting, focusing on meeting school-wide improvement goals. A few schools also have a teacher-leader team comprised of teachers who have a formal leadership role; the team meets to discuss critical issues confronting teams and to report out on professional development needs. Some schools report having “specialty teams,” special education meetings, or school improvement sub-committees, for example, that meet regularly to discuss learning goals and challenges not typically represented in grade-level or subject-area team meetings.

A Matrixed Approach to Teacher Teams

At the *Edwards Middle School*, an 8th grade math teacher meets with:

- The grade-level team teachers with whom she shares most students twice a week;
- All math teachers twice per week;
- Other teacher leaders (e.g., if she has this role) weekly;
- Other members of different cross-school teams once every other week to discuss specific school initiatives, such as the implementation of extended learning programming;
- Other members of the instructional leadership team (e.g., if a teacher leader); and
- The entire faculty once per month.

At *Urban Science Academy*, a 9th grade science teacher meets with:

- The 9th grade team once per week;
- Teachers with whom he co-teaches or is implementing an interdisciplinary project about once per week, often more;
- All science teachers once per month;
- Other teacher-leaders (e.g., if he has this role) once every other week; and
- Other teachers and leader as part of the instructional leadership team once per month.

Teaming improves important two-way communication. Meeting in a matrixed team structure helps to improve two-way communication between teachers and school leadership. Both teachers and leaders identify teams as a key support to the effective functioning of the school. Described by the literature as a valuable way to build organizational trust, team meetings are characterized by the use of common protocols and routines to define joint work (see text box for additional information). Teacher leaders, whether a formal designation or an informal role, then have responsibilities for initiating, facilitating, and reporting out on team activities (e.g., goals, progress, needs). In schools with formal teacher leader designations, this is done in lead teacher meetings and/or the ILT. One school leader describes this interplay of team meetings as maximizing the opportunities for cross-communication, so that each small group or team can contribute to the

larger school improvement plan: “[We want to] leverage what happens in individual teams for the whole school.” In this way, teachers, teacher leaders, and school leaders all discuss – and weigh in on – school improvement plans and strategies before they are implemented school-wide. This process helps schools to maintain focus on articulated school improvement goals, while garnering buy-in school-wide.

School leaders transfer team management and leadership to teachers.

School leaders are involved in a gradual release of responsibility to teacher teams. One school leader, in referring to opportunities for collaboration, tells new teachers, “These are not top-down structures; you have to drive these.”

School leaders often take purposeful steps to give teachers greater control over team management, such as establishing schedules for team meetings, identifying next steps and assigning roles, and developing protocols for group conversations. As teachers assume leadership responsibilities, school leaders provide support, rather than direction. Teachers describe the school leader’s changing role: “[She] sets the tone of where we are; this is

what we want to do... This is different than in the past; when she first joined, she used to facilitate all meetings, [in an effort] to make sure all had the same vision for the school...[now, she] sees the value in letting people do the work.”

The emergence of teacher leadership is not without tension. School leaders struggle in determining when to provide detailed guidance and when to let teachers work productively without direct oversight. School leaders still want some direct “say” about what happens in teacher team time. Teachers often want more autonomy and consider the routines and protocols of teacher-led team management the most critical elements for teams to be highly effective. This push-pull defines a learning experience for teachers and school leaders alike. In one school, a school leader describes the tension he felt in allowing “teams who wanted to try something and fail – and get something from that experience.” However, while it can be difficult to transfer leadership of teams to teachers, leaders note it is a necessary step towards a more collaborative school culture. Here, there is an important but nuanced difference between practice in study schools and the existing literature. Research indicates that teacher-led school communities are characterized by teachers and leaders creating a shared vision for school improvement, and then teachers establishing plans for teams’ execution with very limited direction from school leaders. In study schools, while teachers are assuming greater responsibility for teams, it is within a vision for the school set by school leadership.

Protocols and routines define team meetings.

The vast majority of teachers in each study school report that nearly all team meetings are defined by the following protocols and routines:

- An agenda detailing discussion topics that is developed prior to the start of the meeting.
- An agreed-upon protocol to guide the flow of discussion.
- A teacher or leader designated as a meeting facilitator.



Schools instill a culture of meaningful collaboration and continuous improvement

All leaders agree that establishing structures, and the routines and protocols that support them, can only get schools part of the way to school-wide collaboration. Indeed, research notes that structures are necessary but not sufficient to build collaboration – leaders need to articulate a vision for school culture that values increased teacher voice and leadership. One leader notes her school encountered an obstacle to effective collaboration when “the whole school [staff] realized they didn’t work through the mission and vision consistently enough and they needed to address it as a whole school first before moving forward.” School leaders in this school also reported frustration with a persistent “culture of nice” that prevented more meaningful dialogue and critique. The school’s ILT is now focusing on re-establishing school-wide participation in teams, trying to create these as safe spaces for teachers to voice conflicting opinions about community goals. Study schools use particular approaches to build a culture of collaboration, which are not without distinct challenges; these are described in detail below.

School leaders set goals and expectations for collaboration. School leaders communicate shared team goals linked to the vision for school improvement. One teacher commented on the ways individual team meetings contribute to whole school success, noting, “Grade-level teaming is important for the students.

Professional norms in team meetings are established.

Teachers in each study school report that nearly all team meetings are defined by the following:

- A shared common language;
- A level of comfort contributing ideas to the meeting;
- Equal opportunity to participate;
- Safe space to express disagreement; and
- Instances of disagreement are handled appropriately.

Department meetings are good (professionally) for teachers. Whole school faculty meetings are good for school identity. You need to bring together the whole to make sure people get it, and are moving together as a school.” Leaders have been successful in articulating expectations for how teachers will work together – including placing a premium on learning with colleagues. Teachers report they “use each other as a resource” on common pedagogical challenges, relying on the expertise of peers and specialists to develop a holistic un-

derstanding of student learning. Aligned with the research, this demonstration of a communal responsibility for student learning is a foundation for collaboration in a school community. And, the commitment to learning with peer teachers is characterized by a degree of “professionalism and respect for your colleagues.” However, learning from peers is not without challenges; some teachers may be hesitant to critique high-performing peers, and others may come from schools or pre-service experiences that did not prepare them sufficiently for this deeper level of collaborative dialogue. In these cases, school leaders, many of whom see teachers’ reluctance as the biggest challenge to a school-wide collaborative culture, model expected behaviors and instill norms for communication that value constructive criticism as an important vehicle for school-wide improvement.

Teachers' collaboration with peers extends beyond formal teaming structures. High percentages of teachers in study schools describe frequently seeking out peers to solicit feedback on a current challenge in their classroom (see Table 2). In comparison to the discussions on instructional topics that characterize team meetings, these informal, peer-to-peer interactions are more specific to teachers' own concerns about classroom practice. Research notes that these deep, personal conversations with peers about in-class practices drive the hard work of adjusting pedagogy to meet student needs.⁵⁴ Research also notes that school communities reaching high levels of collaboration have done so by either fostering these informal peer-to-peer relationships (e.g., matching teachers in peer pair teams, arranging for these teachers to share a common prep periods), or formalizing reflective conversations within the team structure (e.g., through the use of instructional rounds).⁵⁵ While strong levels of informal peer-to-peer collaboration exist in all study schools, some schools are attempting to create more formal opportunities for reflection, albeit with mixed results. A few schools have tried implementing instructional rounds, where teachers observe each other and debrief the strengths and weaknesses of the observed lessons. In the one school currently implementing this practice, scheduling challenges only allow for two to three instructional rounds per year and a limited number of teachers participating. Research suggests this practice can be implemented school-wide with powerful results.⁵⁶

“Indeed, ... structures are necessary but not sufficient to build collaboration: leaders need to articulate a vision for school culture that values increased teacher voice and leadership.”

Table 2: Most Frequently Reported Teacher Behaviors in Peer-to Peer Interactions

During informal, peer-to-peer interactions, teachers in study schools...		
• Weigh the pros and cons of specific teaching practices.	• Work on a lesson plan.	• Discuss a problem experienced in their classroom.

Hiring decisions are critical to making collaboration more pervasive in teacher culture. School leaders discuss the importance of recruiting and hiring teachers who want to work in an environment where collaboration is the norm. Leaders put a priority on a teacher who is a “fit” for the vision of a school culture defined by shared goals for student learning, feedback on practice, use of data, and working within teams. Leaders also admit that it is hiring – more than any support and guidance offered to new teachers – that is an important vehicle for instilling a rich collaborative culture with teachers. When leaders have the opportunity to “open hire” (i.e., select a teacher for an open position), they often employ other teachers in this process. Teachers participate in interviews and ask candidates about their past experience collaborating with other teachers, trying to gauge their willingness to work with colleagues. One school leader “looks for receptivity to feedback” among teacher candidates. Teachers who are strong collaborators need to be able to accept feedback and act on it. A teacher describes looking for potential colleagues who are interested in “constant learning,” irrespective of their years of experience.

School leaders invest time in establishing – and maintaining – a collaborative school environment.

Leaders have a variety of responsibilities in developing and nurturing teacher collaboration. Leaders must spend substantial time on setting up teacher teams and establishing a school schedule to support meetings. However, once team structures are established, a leader’s work continues. For example, school leaders report they regularly check in with teacher leaders, or those teachers who facilitate meetings, as an important way to “take teacher temperature.” Leaders take on the task of working with teachers, often individually, who may initially be resistant to collaborative culture. This practice – one-on-one interactions with a varied set of teachers school-wide – represents a direct connection with the literature on orienting new teachers to a collaborative environment. Leadership also devotes significant time to cultivating personal relationships with teaching staff, so that they feel comfortable voicing concerns or discussing classroom challenges.

“This process (of teacher collaboration) translates teamwork into a teacher-owned enterprise...”

Given this diverse set of tasks, it is no surprise that leaders report spending a large amount of time in support of teacher collaboration. In all study schools, at least one school leader reported spending at least half of their time in direct support of teacher collaboration. In some cases, this was the school principal, who then designated other school leadership responsibilities (e.g., administration, facilities) to another school leader. In other schools, an Assistant Principal or Director of Instruction took on the responsibilities associated with teacher culture, including the work of supporting teams.

 **Teacher collaboration is a key factor in improving student learning**

Teachers and leaders report linking collaborative activities to a variety of positive school and student outcomes. For example, school leaders at Urban Science Academy attribute to the work of teacher teams that “more students are in Advanced Placement courses and performing well; students are getting into prestigious colleges and getting scholarships; and MCAS performance is improving.” Universally across study schools, educators note that teams have enabled schools to use data to inform instruction, to increase the school’s academic rigor, and to more effectively support student learning needs – all key factors in improving student learning. Below, we discuss each finding in depth, while offering examples drawn from team meetings at the study schools.

Collaboration supports improvements in teacher practice. Teachers report that the reflective conversations they have with other teachers – both in team meetings and informally with peer teachers - are critical to improving their classroom practice. Teachers will discuss particular students with colleagues, explore new pedagogical techniques, and review curricular materials, when working with other teachers. As one teacher notes, “We spend an hour fine-tuning teaching and different protocols we use in the classroom. We have a direct discussion of how to make something better.” Fundamentally, collaboration presents opportunities to

try new skills or techniques in service of student learning. For example, in Urban Science Academy, teachers lead semester-long mini-professional development courses that occur over three sessions. These small group sessions are planned and facilitated exclusively by teachers, and each session focuses on a single strategy, such as a certain technology application or pedagogical technique. Teachers describe these as a powerful platform from which to initiate changes in their practice. The structure allows for continuity, allowing teachers to reflect on techniques and try new strategies with the opportunity for feedback, as teachers who instruct professional development sessions are colleagues “right down the hall” who are “there as a resource as you implement and incorporate” practices.

Collaborative teaming supports data-driven instruction.

In study schools, collaborative work is a data-rich activity. Teacher teams typically use multiple forms of data, including state summative assessment results, formative assessment results, and teacher-developed assignments and performance tasks. Team meetings are characterized by a discussion of data on the students, or the subject-area, teachers share. At the Conley, a team of 3rd, 4th and 5th grade teachers use MCAS English Language Arts results from the previous year to identify common skills across grade levels where students are not reaching mastery, discuss standards at different grade levels that address these skills, and then create a plan to allocate more instructional time to these standards. Across study schools, the review of data is done in a way that actively engages teacher teams in planning interventions and strategies to better address student learning needs. Teachers utilize different types of tools and protocols to incorporate the use of data. For example, some grade-level teams use a formal protocol when reviewing students’ progress and consider only grade-level, in-class academic concerns. These teams tend to focus discussion on pedagogical techniques to address specific skills or content with which a student may be struggling. A sub-set of these teams work at an even more detailed level: creating daily plans and goals, and a timeline for next assessing students’ performance. Additionally, a few schools also use data to inform inquiry cycles, where “teachers will discuss an issue, observe it and talk about it,” as part of their methodological process to improve their instruction with a focus on struggling students.

A Focus on Struggling Students at Orchard Gardens K-8 School

“What do our struggling students need to learn to move to the next level?” With this opening question, teachers on the grade 3-8 ELA team identified skills they needed to reinforce with struggling readers. Their focus was the five lowest readers in each class – many of whom are at least two grade levels behind in reading. Previous to this team meeting, teachers had used data to identify the struggling students; now, working in small groups, teachers differentiated between needed skills at each reading level, and then developed an intervention plan to address student skill gaps. Many of the teachers paused to reflect on the curricular materials they would use to execute the newly-crafted teaching plan. One teacher brainstormed out loud, “I can’t really use these texts [with this group of students] to work on close reading skills, they’re just not even there yet with comprehension.” Teachers either worked in peer pairs if student needs were similar, or worked individually and paused to get feedback on their plans from others. When the whole group reconvened, discussion turned to how to align pedagogical techniques surfaced by teachers with the important work of preparing all students for MCAS assessments. This process is iterative throughout the school year; teachers reflect on – and potentially reset – student goals and intervention plans monthly based on progress and performance.

“Schools with higher levels of teacher collaboration are associated with stronger student performance.”

—Goddard, Y., Goddard, R., & Tschannen-Moran, M. (2007)

Teaming helps create strategies for increasing academic rigor. Teacher teams, across all schools, report that collaboration serves the larger purpose of raising academic rigor. In one school, grade-level teams implemented interdisciplinary projects to foster the improvement of critical reading and analysis skills among students across all subjects, while subject-area teams focused on key curricular issues (e.g., the implementation of Common Core State Standards). Teachers

use team meeting time to discuss new curricular materials and issues of vertical alignment (e.g., what concepts students need to master in a lower grade to ensure success with an upper grade/level curriculum). One school leader noted that the additional time for vertical planning has led to “amazing results” across grade levels and content areas.

A Focus on Rigor at New Mission High School

The study team observed a math team meeting at New Mission comprised of 9th, 10th and 11th grade math teachers. The agenda for the weekly team meeting sought to review three publicly-released Partnership for Assessment of Readiness for College and Career (PARCC) math assessment items. Teachers worked individually to solve each math question and then de-brief the approach they used to arrive at an answer. Their reflection focused on the mathematical concepts they utilized in their solutions, and whether those were part of the math curriculum students would complete in time for the PARCC assessments. Given the new format of PARCC assessment (e.g., including multiple correct answers, or blending mathematical concepts in one question), teachers focused on a central question: “Would our kids be able to get the mathematical approach they are supposed to use, [and then] get to the right answer?” And: “Have we ever introduced problems that look like this when we’ve been teaching these concepts?” Discussion also included a comparison of MCAS items and PARCC items, and preparation techniques the teachers may need to change. The meeting concluded with a decision to do a more elaborate review of curriculum during their next team meeting. This team’s next conversation would focus on vertical alignment to articulate which mathematical concepts needed to be taught in each grade to ensure adequate mastery of concepts for the PARCC assessment.

Team meetings systemize work to support students’ academic and non-academic needs.

Teachers report that they work with peer teachers, often informally, on how best to support students. Teacher team meetings present opportunities to formalize conversations into specific plans for academic and socio-emotional interventions. In grade-level meetings, for example, student case management is the norm. At a number of schools, teachers work through set routines where each student is discussed “every 6-8 weeks,” strategies typically only used with students with individualized education plans.

These meetings often encompass a set of teachers with whom students regularly interact, as well as specialist staff, to ensure a nuanced assessment of student behaviors and performance. Teachers discuss student work habits and progress with assignments. In some team meetings, teachers also use non-academic data to create instructional plans. When school specialists (e.g., school psychologist) join the conversation, additional data on health issues and pertinent information on family circumstances may be considered. Common across many of these team meetings is not only an assessment and documentation of students’ needs and progress, but a collegial conversation about different instructional approaches. Teachers openly share the pedagogical adjustments they make to their practice to differentiate instruction and receive feedback from peers. The final result is a comprehensive plan for supporting student academic and non-academic growth and specific advice from peer teachers about how to implement the plan.

Considerations for School and District Leaders

Research findings from the five study schools reveal several replicable practices that are key to creating school-wide collaboration. These findings lend themselves to a number of considerations instructive to both district and school leaders interested in building teacher collaboration to drive school improvement.

Establish structures – and expectations – for collaboration that foster school-wide participation.

Universal among the literature base and practice in these study schools is the importance of a school leader creating school structures, including a school schedule that allows for teachers who share students, or share a content expertise, the opportunity to work together. These schools did so by establishing both subject-area and grade-level teams in which all instructional staff participate. Further, school leaders place a priority on teachers working together so that episodic interruptions of a school schedule have a minimal impact on teacher work time. Early on in the introduction of collaborative processes, school leaders create the expectation that teachers use team meetings as work time, not just “meeting” time. As such, school leaders routinely hold teachers accountable for achieving team goals. This expectation, in turn, fosters a dynamic where teachers expect to engage with peers in a discussion focused on instructional issues and hold each other responsible for producing work products.

A Focus on Student Support at Conley Elementary

To best serve students with disabilities, the Intellectually Impaired (I.I.) team is comprised of Special Education teachers from several grade levels and is facilitated by a teacher-leader. In the team’s weekly meeting, teachers reflect on student successes, challenges, and growth using multiple data sources, with the goal of providing appropriate services and supports. To ensure all students identified with a special education need receive equal attention throughout the year, the I.I. team maintains a rotating schedule set at the beginning of the year and regularly updated, and uses similar protocols to review student data during each meeting. Team members come to meetings prepared with information about students’ progress – both academic (e.g., progress against learning goals) and non-academic (e.g., behavior). All teachers participate in a group discussion of each student offering suggestions for classroom management, pedagogical and learning strategies, and welcome learning from peers. Some teachers suggest using specific curriculum materials and behavior management strategies and offer to meet outside of team time to guide a new teacher in her practice.

Model constructive feedback to strengthen a culture of collaboration.

Across study schools, leaders express desire for teacher collaboration to drive school-wide improvements in instructional practice. Drawing from the literature, this is most often accomplished when teachers engage in reflective conversations: debriefing classroom challenges, receiving feedback on practices, and identifying new pedagogical techniques to try. At its core, this process depends on peer critique – a ritual not yet universally strong across study schools. As one leader describes it: “Teachers still are not comfortable with being critical of one another at the level needed...the ‘culture of nice’ is in the way of the real work that needs to happen.” Research suggests that leaders can use two techniques – both hallmarks of school communities that have reached sustaining levels of collaborative practice – to overcome this potential obstacle to deeper levels of collaboration. First, leaders can model constructive feedback during team meetings, initiating critique as a routine part of group work. Next, school leaders can purposefully introduce challenging questions related to instructional practice in team settings.

The collegial debate that is spurred can be a chance for teachers to consider new perspectives. To make the most of these moments of productive conflict, leaders need to be attentive to team dynamics so that teacher voice can be expressed freely in team meetings. Initiated by leaders, these fundamental actions can bolster organizational trust, a key pre-cursor to the emergence of teacher-led teams.

Prioritize cultural fit when hiring teachers. Leaders and teachers alike describe the importance of hiring teachers who are seeking a collaborative school culture. As one teacher stated, “Chemistry is important. Hire with purpose. Hire the person with the best fit.” Looking towards the hiring cycle for the start of the 2014-15 school year, school leaders in the Boston Public Schools have been given the autonomy to hire the best teacher for each open teaching position rather than the teacher with the most seniority, referred to as “open-posting.” This new flexibility may allow school leaders to accelerate strategies for leveraging teacher collaboration to support school improvement efforts.

Create opportunities for peer teachers to work together as a mechanism for developing teacher-led collaboration. Teachers place a premium on the interactions they have with colleagues to support their practice. Our synthesis of the practices in study schools suggests that teachers use peer interactions for different purposes than team meetings, in that they have more in-depth conversations to solicit feedback and advice on their particular classroom challenges. However, in study schools, these interactions often happen informally between classes, during lunches, or after-school. School leaders can support teachers to work together more intentionally by establishing study groups or pairing peer teachers – strategies supported by the literature – or by creating a school schedule where teachers who share students or a subject-area have time to work together. School leaders can then identify teachers, who regularly reflect on instructional practice with peers, for leadership roles in facilitating team conversations.

Conclusion

This research study documented teacher collaboration practices in School on the Move prize-winners and finalists. Findings highlight the value of establishing school-wide structures and collaborative cultural norms to school leaders and teachers committed to working together. In these schools, collaboration is seen as “the way we work.” Teachers articulated feeling far more “isolated” in other schools in which they taught, and describe their current pedagogical practice as being defined by the daily routines of “learning things from other teachers.” Teachers universally point to the impact of teacher collaboration on student learning by improving classroom practice, promoting data use, increasing academic rigor, and supporting students’ non-academic needs. One school leader sums it up quite well: “It’s the highest leverage strategy for school improvement that we have.”

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