Investing in School Learning:
The New York City Department of Education's Learning Partners Program

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ABSTRACT

INVESTING IN SCHOOL LEARNING:

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LEARNING PARTNERS PROGRAM

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It is challenging for central authorities to change the nature of teaching and learning despite great efforts to do so through both command and commitment-style approaches, as well as through recent reforms aimed at teacher quality. Capacity-building initiatives, particularly those that engage educators in structured collaboration within and across schools, hold promise for school improvement. These approaches engage educators to develop contextualized solutions to the specific obstacles facing their students. However, without certain conditions in place, particularly a strong professional community that prioritizes continuous improvement, collaborative activities are unlikely to yield positive outcomes, and instead produce variable results based on schools' capacity pre-intervention.

This dissertation explores New York City's attempt to build schools' capacity for improvement through the Learning Partners Program (LPP), a program developed under the Chancellor Fariña administration in 2014. LPP combines interschool collaboration, inquiry, teacher leadership, and teaming, thus providing an opportunity to explore how a district can foster the prerequisite conditions necessary for school improvement. Drawing on qualitative data from 3 years of implementation, I provide a detailed portrait of the elements of the program in practice, and describe the processes and conditions that allowed some schools in the program to

implement coordinated changes that moved them towards their improvement goals. These descriptions can provide lessons to other districts interested in taking on similar "learning organization" reforms, or reforms that generally aim to shift the teaching profession towards one that fosters self-examination and continuous improvement.

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Chapter 1 Introduction

For decades, education researchers have investigated the problems of school reform, and in particular, the challenge of changing the nature of students' classroom experiences through policies derived from districts, states, and the federal government. The conclusions of most research on the subject are well known—it is difficult for changes in schools to take hold, those that do catch on rarely persist beyond the early adopters, and those that endure tend to be the type that "tinker" around the edges, leaving the "core" of instruction, or the interactions between teachers, students, and content, unchanged (Cohen, 1990; Cuban, 1993; Elmore, 1995; Tyack & Cuban, 1995). Recently, however, districts are emerging as a promising locus of change (David & Talbert, 2012; Honig & Coburn, 2007; Honig, 2013; Supovitz, 2006; Togneri & Anderson, 2003).

This dissertation explores how the New York City Department of Education (DOE) is attempting to impact instruction through the Learning Partners Program (LPP), an interschool collaboration initiative established by Chancellor Fariña in 2014. LPP brings together teams of teachers and school leaders to engage in cross-school capacity building. The program is unique because it is built around school-level decision-making even as the district provides substantial guidance and resources that support the change process. In this way, it is a more deliberate initiative than other approaches to school inquiry and collaboration, and provides a fertile ground for understanding how district inputs can drive or inhibit school-led improvement. By describing the mechanisms that lead to schools' ultimate changes in practice through LPP, I hope to provide lessons to other localities similarly interested in strengthening schools' abilities to improve.

Challenge of Impacting the Instructional Core

The Problem of Implementation

The "first generation" of policy analysts of the mid-20th century found that policies did not produce intended results because implementation, not necessarily policy design, could be problematic (McLaughlin, 1987). On-the-ground implementers do not simply follow externally set goals and work towards singular policy objectives; they have competing demands, differing priorities, varied circumstances, uneven skills, and a whole host of other considerations that drive their behavior (Bolman & Deal, 1991; Evans, 1996; Lipsky, 1980; Scott & Davies, 2007). Further, they may be rightfully wary of implementing reforms that are likely to be short-lived, as new policies stem from policymakers who may only remain in office for a few years and who lack a sustained investment in the local outcomes (Hess, 2011; Payne, 2008). It is not surprising, then, that the more lasting changes to schooling, such as extending the school year and reducing class size, do not call for a fundamental change regarding how teachers behave, and thus only impact the nature of instruction to the extent that they have spillover effects on teachers' abilities and decision-making (Elmore, 1995).

Problem of capacity. The "second generation" of policy analysts of the 1970s and 1980s dug deeper into why implementers' decisions and actions do not align with the dictates of policy. McLaughlin (1987) summarized the reasons for lack of implementation fidelity as being a matter of capacity and a matter of will. In terms of capacity, educators may not have the knowledge and skills on which reforms intend to build. In particular, reformers may assume that educators have a certain amount of content knowledge in their discipline, but we know that some teachers lack college-level training in the subjects they teach (Wilson, Floden & Ferrini-Mundy, 2001). And even with sufficient subject area knowledge, teachers may lack "pedagogical content

knowledge," or an understanding of how students will respond to content when it is presented in various ways (Ball, 1999). Teachers may also struggle with classroom management, which can make efforts to change curriculum and instruction fruitless. Aside from teachers' individual skills, Little (1993) writes about how reforms carry demands in the way they ask for dramatic changes in multiple areas at once. She cites mandates for integrating curriculum, increased standards for student performance, individualizing instruction, and the use of "authentic assessment," as examples of reforms that require dramatic changes to educators' beliefs, as well as their daily practices, and that are often implemented concurrently. Further, such changes require planning and deliberation time, which is scarce in most U.S. teachers' schedules.

Problem of will. Understandings of teachers' *will* to change fall loosely into two camps. The more negative perspective is that teachers are simply opposed to change and prioritize protecting the status quo over student learning (Hess, 2006; 2015). On the more positive end, there is a view that teachers reject reforms because they do not want to take the chance of students learning less from the changes (Guskey, 2002). Relatedly, teachers may think—rightly or wrongly—they know the best ways to teach children, and the best ways to teach their students in particular, and thus resist outside influence that comes from what they perceive to be less expert sources. Of course, the complexities of schooling and human psychology do not align with such a dichotomous view of responses to reforms. What may seem like general resistance to change could stem from a combination of sincere beliefs about what students need, as well as more generalized opposition to change developed over years of seeing unsuccessful implementation and the churn of reform. In addition, capacity and will are not mutually exclusive categories. Lacking time, ability, or skill to implement a reform will no doubt decrease enthusiasm for change; and lacking in enthusiasm will likely lower capacity.

Contributing to these obstacles, traditional schooling in the U.S. allows individual schools and teachers to maintain significant authority over what and how they teach, making outside influence seem intrusive. Although learning standards have been set at the state level since the 1980s, curricula are selected or created at the district or school level, and pedagogical approaches are often determined at the school or even the classroom level. This structure stems, in part, from the republican ideal of local decision-making that is evident across all U.S. public institutions (Cohen & Bhatt, 2012). But the localized nature of education, in particular, also relates to how children fundamentally learn. Teaching involves the "coproduction" of knowledge between teachers and students, as students come to school with prior knowledge, habits, and attitudes, all of which impact the nature of learning. Thus teachers' decisions are necessarily contextualized based on the students they teach, requiring some level of discretion and autonomy (Cohen & Ball, 1999; Shulman, 1983).

Problem of coordinated change. While improving teachers' practice comes with the challenges described above, generating coordinated change among educators across a team of teachers, across a school, or across a district, which is needed for reforms to have widespread impact, is even more difficult. The traditional organization of schools and school systems hinders systematic efforts among faculties, in part due to teachers' isolation and in part due to the limited role they play in school-wide decision making. Teachers are individually responsible for a class of students or particular subject matter and spend most of their workday interacting with children. This scenario makes it challenging for teachers to scrutinize each other's methods and for school leaders, let alone district or state officials, to manage what teachers do in their classrooms (Ball, Ben-Peretz, & Cohen, 2014; Lortie, 1975). It is therefore difficult not only to synchronize teachers' practice, but it is challenging for teachers to exert influence over the

organizational aspects of school, including school policies that could support the implementation of reforms across a school (Lipsky, 1980; Lortie, 1975; March & Olsen, 1976; Meyer & Rowan, 1977). Indeed, teachers report limited influence over school policy and decision-making (Ingersoll, 2003). So although teachers traditionally have a high level of influence within their individual classrooms, they often have little influence outside of their classrooms, making it challenging for external policies that impact teaching and learning to take hold in systematic ways.

Despite the many obstacles in the way of meaningfully impacting daily instruction, central authorities continue to implement reforms aimed at the instructional core in an effort to improve student outcomes. Recently, a form of capacity-building policy has gained popularity that aims to change the professional culture in schools and turn them into "learning organizations" (Langley et al., 2009; Lewis 2015; Senge, 1990; 2006). The idea of learning organizations as applied to schools reverses the traditional state of affairs such that teachers have *less* autonomy over instruction in their individual classrooms and *more* influence across their school communities. This reversal is accomplished through attention to the professional relations and configuration of a school's faculty, as well as the processes in which the faculty collaboratively engages. Teachers have less autonomy as they are encouraged to open up their classrooms to observation, expose their practice to interrogation by their colleagues, and then, based on discussions of practice, make changes that align with the decisions of the professional community, as opposed to decisions that align with their individual preferences. Teachers have more influence over school-wide functioning as they engage in coordinated efforts to change practice across their schools, not just in their individual classrooms.

Research Questions

This dissertation explores New York City's attempt to achieve such a shift in schools on a large scale through LPP, which had 190 participating schools from grades Pre-K-12 in 2016-2017, representing about 10% of the city's over 1,800 schools. Drawing on qualitative data from 3 years of program implementation, I describe how the program functioned and the processes and conditions that allowed for some schools in the program to implement changes that moved them towards their improvement goals. These descriptions can provide lessons to other districts interested in taking on similar learning organization reforms, or reforms that generally aim to shift the teaching profession towards one that fosters self-examination and continuous improvement. More specifically, the dissertation addresses the following research questions:

1. What is LPP's program design and in what ways is it implemented?

   a. To what extent is LPP, as part of the Fariña administration's overall approach, a transition away from and/or an extension of the policies from the Klein-era?

   b. What are the implementation challenges?

   c. How has the program evolved over its 3 years?

2. How, if at all, does LPP foster change in schools?

3. How do changes and processes vary across contexts?

Learning Partners Program Overview

The Learning Partners Program (LPP) began as a small pilot of 21 schools in the spring of 2014 and expanded to include 190 schools in 2016-2017. It was designed and is administered by a DOE central office program team in the Office of Interschool Collaborative Learning (OICL) within the Division of Teaching and Learning. OICL was formed shortly after Carmen

Fariña became Chancellor as part of a broader effort to increase capacity-building efforts and educator collaboration across the district.

LPP facilitates interschool collaboration among small networks of elementary, middle and high schools by bringing together a "host" school exhibiting expertise in a particular area known as a learning focus area (LFA) with "partner" schools interested in strengthening their practices in a similar area. School teams made up of about 5-7 teacher leaders and principals from each school engage in monthly interschool site visits, rotating to visit all schools in the network multiple times. These visits involve exchanging ideas and engaging in various learning activities related to the LFA. School teams also engage in an inquiry process known as the Cycles of Learning (CoL). They gather ideas for the CoL at interschool site visits and go through the steps of planning, implementing, assessing and reflecting on their processes at biweekly meetings. All schools are supported in their work by program Facilitators, experienced educators who each work with 3-4 networks, providing logistical assistance and guiding them through the CoL process.

Through these structures, LPP aims to achieve four program outcomes: (1) "strengthen school capacity to engage in continuous improvement," (2) "improve school and educator practice and student outcomes," (3) "establish a system-wide culture of collaboration," and (4) "develop strong school and teacher leaders" (LPP Framework, 2016-2017). The program measures its progress towards these outcomes, and seeks to understand how these outcomes can by achieved, by working with the DOE's Research and Policy Support Group (RPSG) to administer surveys to all program participants, analyze school and student outcome data for participating schools, and analyze qualitative data in the form of observations and interviews from a sample of schools.

Empirical and Analytic Approach

This dissertation is based on a secondary analysis of the qualitative data collected as part of the DOE's internal program evaluation. RPSG collaborated with Columbia University's Center for Public Research and Leadership (CPRL)[1] to collect these data, and as a researcher at CPRL, I led the qualitative component of the evaluation with support from seven teams of graduate and professional students between August 2014 and June 2017.[2] Over that time, we observed 236 LPP events, including numerous interschool site visits and school team meetings in 45 different schools, and conducted 62 interviews with principals and teachers from 24 schools, as well as with Facilitators from eight networks. For the program evaluation, the qualitative research was primarily intended to describe the processes in which schools engage in order to move toward program outcomes. For this reason, our research focused on networks that contained schools engaging in sustained, focused work on changes that they viewed as improvements.

For the dissertation, I re-analyzed a sample of the data collected for the program evaluation in order to describe how a central authority can support schools to become learning organizations. My analysis involved coding in qualitative analysis software (Dedoose), which allowed me to identify the key conditions and processes involved. My process was primarily inductive, determining findings as they emerged from the data; although five intersecting bodies of literature informed my analysis—the literature on professional learning communities, professional development (PD), school capacity, organizational learning, and interschool collaboration.

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[1]CPRL is based out of Columbia Law School. It partners with schools of education, law, policy, social work, and business throughout the country to engage graduate and professional students in research and consulting projects with education.

[2] I received permission from both the NYCDOE and CPRL to use the data collected for the program evaluation for my dissertation.

Chapter Overview

Six chapters follow this introduction. Chapter 2 provides a literature review on the major

reform attempts aimed at the instructional core. It focuses on capacity building, and especially

organizational learning and interschool collaboration. It also describes how the key theories from

across the capacity-building literature are relevant to LPP and my analysis of the program.

Chapter 3 describes the methods used for this dissertation, including a detailed account of all

sampling, data collection, and analysis procedures. Chapter 4 addresses my first research

question, "What is LPP's program design and in what ways is it being implemented?" It explains

the political context in which LPP was developed, the precursors to LPP, the program

components, and describes program implementation. Through a cross-sectional analysis of the

cases in my sample, Chapters 5 and 6 answer the remaining two research questions, "How, if at

all, does LPP foster change in schools?" and, "How do these changes and processes vary across

contexts?" Chapter 5 focuses on how LPP develops the structural and social conditions needed

for capacity development. Chapter 6 describes the knowledge-creation processes in LPP. Chapter

7 summarizes the findings of the study and offers suggestions for future research.

Chapter 2 Literature Review

The purpose of this study was to explore how a district can impact instructional practice by increasing schools' capacities to improve. In order to situate LPP among previous school improvement efforts, the following review describes four broad categories of reforms. The first two derive from Brian Rowan's conceptions of "control" and "commitment" approaches to school change (1990). The remaining two categories, which overlap somewhat with Rowan's and with each other, are teacher quality policies and capacity-building policies. Capacity building includes professional development, efforts to increase overall school capacity through organizational learning initiatives, and interschool collaboration programs. This chapter describes the extent to which each type of reform has had success, under what conditions, and the difficulties associated with each. LPP overlaps the various reform categories, but leans most heavily towards organizational learning initiatives, which are intended to provide schools with the tools needed to advance themselves, thereby avoiding the pitfalls of the other approaches while borrowing promising elements from each. The chapter concludes by summarizing the theories from across the literature most relevant to LPP, which informed my analysis.

Control Policies

In an attempt to more tightly manage the way schools function, districts, states, and the federal government have instituted reforms to remove some of the instructional autonomy traditionally held by teachers. By both increasing oversight for achieving specific outcomes and by imposing penalties, authorities centralize decision-making and encourage similarity across schools. Such approaches, which became especially prevalent in the 80s and early 90s but certainly exist in various forms today, have been characterized as "control" strategies (Rowan 1990), or as "outside-in" or "top-down" approaches (Fullan, 1994). These policies assume that

by more closely dictating and monitoring teacher behavior, daily instruction will align with external standards of practice, increase efficiency, and improve outcomes for students (Cohen & Bhatt, 2012; Cohen & Moffit, 2009; Rowan, 1990; Smith & O'Day, 1993). Rowan (1990) identifies two types of control reforms, curriculum alignment and behavior controls. Curriculum alignment reforms include district or state mandated curriculum guides and objectives that align to learning standards, tests, and graduation requirements. These have been found to impact instruction and increase student achievement as measured by tests of basic skills (Cohen, 1987; Darling-Hammond & Wise, 1985). However, such reforms are also found to "encourage a technocratic mindedness" (Bullough et al., 1984 cited in Rowan, 1990 p. 363) where teachers do not question the goals for students as they are set in the standards, guides, or tests, and thus produce a less holistic and child-centered approach to instruction. In addition, as tests are primarily measuring basic skills, teachers deemphasize instruction in more sophisticated skills. There are arguments that this problem can be remedied by using assessments that measure higher-level skills, so test preparation is actually considered strong instruction. Common Core State Standards (CCSS)-aligned tests, which attempt to measure problem solving and other critical thinking skills fall in this category. There has been considerable anticipation about how the standards and tests could shift instruction (Drew, 2012; Porter, McMaken, Hwang, & Yang, 2011), and some small scale implementation studies indicate changes in instruction (Goldsworthy, Supovitz & Riggan, 2013; Kober & Rentner, 2012), but other research on Common Core implementation focus on the challenges of making instructional shifts to the CCSS (Smith & Their, 2017; VanTassel-Baska, 2015).

Of course, Rowan was writing prior to the CCSS and prior to the past 25 years of accountability reforms, which consist of an unparalleled endeavor by policymakers to improve

school outcomes through laws and policies that attempt to impact what teachers do in their classrooms. These reforms include the Improving America's Schools Act of 1994, Goals 2000, No Child Left Behind (NCLB) in 2001, Race to the Top (RTTT) in 2009, and most recently, the wave of teacher evaluations that are linked to student test scores. The results of the large array of studies on each of these reforms indicate that accountability policies have had both positive and negative impacts on teacher practice and student outcomes. Through an analysis of the National Assessment of Educational Progress (NAEP) data, Hanushek and Raymond (2005) found that the accountability policies of the 1990s improved student achievement as measured by performance on the high-stakes tests, but did not narrow the black-white achievement gap nor increase achievement on other measures. Dee and Jacob (2011) found that NCLB led to overall increases in math but not reading test scores. Unintended consequences of accountability policies have also come to light, including increases in exclusion rates from testing, cheating scandals, increases in drop-out rates (Hanushek & Raymond, 2005), a focus on students who perform just below cut-scores (Hursh, 2005), narrowing of the curriculum, and lower teacher morale (Darling-Hammond & Wise, 1985; Jacob, 2005; Hursh, 2005; Furhman & Elmore, 2004; Rosenholtz, 1987; Perlstein, 2007).

Beyond the mixed impact on teacher and student outcomes, a common criticism of accountability policies is that, unlike the mandated curriculum policies described by Rowan, they rely on capacities of the local education authorities to determine how to implement them, and thus produce variable results based on the judgment and expertise of district officials and school-based staff (Cohen & Bhatt, 2012). Schools that have the capacity to execute reforms without straining their resources may excel, while schools with fewer resources can suffer from the additional demands, as implementation saps energy and time from school staff. Thus, in worst-

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case scenarios, command reforms that aim for standardized implementation can exacerbate inequities in student experiences across schools. Command policies may be beneficial to schools in the way they provide concrete guidance about what teachers should teach, particularly in the case of mandated curriculum and accountability policies. However, the risks include reducing teachers' autonomy to the point where instruction and curriculum are weakened, as well as producing heavy strain on schools that are struggling with multiple new mandates.

Commitment Policies

The second category of approaches to school improvement recognizes the challenges of influencing schools through bureaucratic controls and therefore does not aim for uniformity in implementation. These reforms fall into what Rowan termed the "commitment" approach and what have also been called "bottom-up" or "inside-out" reforms (Cohen & Ball, 1999; Elmore, 2004). Broadly, they derive from a two-pronged theory of action that states that school faculties are in the best position to determine what kinds of changes are needed for their students, and that educators are more likely to carry-out reforms that they have a hand in creating. They include devolution policies, teacher leadership initiatives, and teacher collaboration initiatives.

Devolution

Policies that devolve authority to schools often have school leaders either select from reform options or develop school improvement plans (SIPs) based on educators' inquiries into their own needs. These approaches acknowledge that school contexts differ and require tailored approaches to change. They also aim to take advantage of teachers' existing expertise and to foster investment in changes that are meaningful to teachers, thereby avoiding concerns regarding teachers' will (McLaughlin, 1987). Initiatives along these lines tend to involve empowering schools to make decisions that would otherwise be made at the district-level, often

in the form of local control or site-based management (SBM). Overall, SBM and local control have been shown to increase teacher investment and commitment (Bryk et al., 1998), but a meta-analysis of implementation studies on SBM indicates that productive decision-making depends on individual teacher beliefs and attitudes (Leithwood & Menzies, 1998).

Teacher Leadership

Commitment strategies also include teacher leadership initiatives, which involve teacher leadership roles where select faculty provide mentoring or coaching to other teachers or participate in school-wide decision making. Teacher leadership roles may be implemented in isolation or they may occur in the context of SBM, where teachers are involved in school improvement plan creation. These initiatives have been shown to increase satisfaction and retention for the teacher leaders, as they provide career advancement without teachers having to leave the classroom, but there is limited evidence that they impact other faculty or student outcomes (Marks & Louis, 1997; Smylie, Lazarus & Brownlee-Conyers, 1996). At the same time, "distributed leadership," or leadership that is shared across school staff, is associated with stronger school outcomes (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010) as well as with school improvement, as involving more faculty in the development of school-wide changes facilitates consistent practice across classrooms and the dissemination of new ideas (Harris, 2008; Leithwood et al., 2009a).

Professional Learning Communities

And perhaps the most widespread form of commitment strategies are those that focus on teacher collaboration. These include professional learning communities (PLCs), where teams of educators determine instructional changes based on reflections on their practice (Darling-Hammond, 1997; Dufour, Eaker, & Many, 2016). Stoll, Bolam, McMahon, Wallace, and

Thomas (2006) defined PLCs as, "a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way" (p. 223). According to McLaughlin & Talbert (2006), PLCs, serve three functions: "They build and manage knowledge; they create shared language and standards for practice and student outcomes; and they sustain aspects of their school's culture vital to continued, consistent norms and instructional practice" (p. 5). PLCs exist in various forms, but tend to employ adult learning strategies, which involve educators engaging in examinations of their own practice for the sake of improving student outcomes. One strategy is known as action research or action learning, where educators "learn by doing" and reflect on their work to answer questions, solve problems, and contribute to the larger body of knowledge about effective teaching practices (Rapoport, 1970; O'Neil & Marsick, 2007). Another form of PLC-activity is known as collaborative inquiry, which is quite similar to action research but has a stronger emphasis on the democratic participation of all inquiry team members (Bray, Lee, Smith & Yorks, 2000). Of course, action research and inquiry take different forms in different schools, with some emphasizing collaborative decision-making, others focusing on data use, and still others repurposing PLC time to implement new mandates.

Depending on what form they take, empirical research suggests that PLCs can lead to increases in teacher satisfaction and student achievement (for a review, see McLaughlin & Talbert, 2006) and data-based inquiry, in particular, is associated with positive student achievement (Panero & Talbert, 2014). Much of the PLC research is based on measurement of features of schools' professional community that are associated with increased student outcomes, and PLCs tend to include these features: a focus on student learning, sustained work in the PLC, collaboration with educators within the school as well as outside the school, teacher influence

over process and content, and increasing teachers' understanding of the theoretical underpinnings of what they learn (McLaughlin & Talbert, 2006). Dufour et al. (2006) provides a similar list of the conditions of effective PLCs, although they also include collective inquiry into best practice, an action orientation (learning by doing), commitment to continuous improvement, and focus on results. Stoll (2006) identified eight characteristics including, shared values and vision, collective responsibility, reflective professional inquiry, collaboration, group, as well as individual leaning, mutual trust, inclusive membership, and openness, networks and partnerships that access external ideas (p. 227-228). Finally, other researchers emphasize how without strong leadership, commonly held missions, structured formats for collaboration, dedicated time, and access to new knowledge, teacher collaboration is associated with non-significant or even negative outcomes (Graham, 2007; Kelchtermans, 2006).

Overall, commitment policies, including devolution, teacher leadership, and teacher collaboration, which engage educators in the decision making behind reforms, have potential for enhancing teachers' experience and dedication to implementing changes. But there is limited evidence about their impact on students. And similar to the key challenge with command policies, the results of commitment policies depend on the conditions that already exist in schools.

Distinction between Control and Commitment Policies

Policies that align with the control approach are often associated with accountability, but commitment strategies can also have strong accountability systems attached to them. The distinction between "control" and "commitment" lies in whether both process and outcomes are regulated (control), or whether just outcomes are monitored, as is often the case in commitment approaches where schools are held accountable for results but are given the freedom to achieve

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those results through processes they determine. In some examples, and notably during the Joel

Klein administration (2002-2011) in New York City, devolution policies involve an

accountability-autonomy exchange, where schools receive greater autonomy in the way they

function in exchange for greater accountability for their outcomes (O'Day, Bitter, & Gomez,

2011). Challenges associated with school empowerment policies are well documented through

studies of local control in Chicago and elsewhere, which demonstrate how schools may not be

equipped to figure out how to improve themselves (Bryk et al., 1998; Elmore, 2006; Elmore,

2002). Richard Elmore (2000) criticized accountability and empowerment policies for asking

educators to do their work differently without providing them with resources needed to make

these changes happen. He called for "reciprocity of accountability for capacity" (p. 21), where

schools that are held accountable for outcomes receive necessary assistance for improvement.

Although the lack of such reciprocity is associated with command reforms, commitment reforms

that focus on devolving authority to schools may also benefit from additional support such as

funding, access to external expertise, and guidance on specific processes for self-improvement.

Human Capital and Teacher Quality Policies

Amidst the challenges of impacting teachers' behavior through either command or

commitment strategies, a third, more recent attempt to change the instructional core focuses less

on teacher behavior, and more on improving the quality of the teacher workforce by reforming

how teachers enter and exit the profession, and to a lesser extent, by changing the distribution of

teachers across schools. The rationale here is that since teachers have considerable discretion, the

best way to improve instruction is to ensure that people who become teachers know how to use

that discretion well. Or, put more negatively, since it is so challenging to change teachers'

practice—to "make" good teachers—the best approach is to determine which teachers do well,

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retain them, attract them to "hard-to-staff" schools, and remove the others. Advocates of this viewpoint cite "teacher effectiveness" research, which describes how teacher impacts on student test scores demonstrate that teacher quality makes a true difference for student outcomes, even when accounting for the non-random sorting of students into schools by comparing teachers within a single school (Aaronson, Barrow, & Sander, 2007; Kane & Staiger, 2008; Nye, Konstantopoulos, & Hedges, 2004; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004). Researchers also point to spillover teacher effects of having a concentration of effective teachers in a school that can positively impact instruction across a faculty (Koedel, 2009; Yuan, 2015).

One approach to bringing more effective teachers into schools came through the provisions of NCLB, which required that all schools have "highly qualified teachers," defined as holding a bachelors degree, state certification or licensure, and proof they know the subject(s) they teach. Another contrasting approach is to change the traditional criteria used to identify teachers and offer alternative routes to teaching such as teacher residency programs or Teach for America (TFA). These programs have excelled at bringing many new teachers to the profession, although enrollment in TFA is now declining, and its impact on student outcomes is mixed (for reviews, see Decker, Mayer, & Glazerman (2004); Heilig, & Jez, 2010; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005). Finally, education officials have also tried using performance incentives to attract stronger candidates, as well as financial bonuses to bring more effective or experienced teachers to hard-to-staff schools. The former has not led to increased student outcomes in the U.S. (Fryer, 2013; Springer & Gardner, 2010), and the latter has not led to significant increased placement of teachers in high-needs schools, nor retention of teachers in those schools (Fowler, 2003; Clotfelter, Ladd, Vigdor, & Wheeler, 2006).

Another approach to teacher quality involves weeding out, or "deselecting" the less effective teachers (Hanushek, 2009). Given the challenge of predicting which teachers will be effective before they begin teaching, the intention is to accept from a large pool, and then remove those that do not demonstrate strong performance. In order for such policies to work, however, we need reliable teacher evaluation systems that can identify weaker teachers, as well as a large enough pool of teachers who can replace those who are deselected. Spurred by provisions in RTTT, states and districts have expended a tremendous amount of resources developing teacher evaluation systems, but these have not led to much deselection, as most of the evaluation systems rate the vast majority of teachers as effective, and some state tenure laws make it difficult to remove teachers. In addition, teacher evaluations have stirred up political battles and are viewed by some educators as an attack on the profession itself (Mead, Rotherham, Brown, 2012). Finally, the very premise of deselecting is problematic, as it accepts that more students will experience early-career teachers before they have been deemed effective or ineffective (Staiger & Rockoff, 2010).

Overall, policies aimed at improving teacher quality by changing the rules of entry and exit are thorny, costly, and have an inconclusive impact on student outcomes. And even more crucially, they bump up against issues of supply and demand. Every state reported districts with teacher shortages in the 2015-2016 school year, and the percentage of high school and college graduates interested in careers in education is declining (Higgins, 2015; U.S. Department of Education, 2015). The current state of the teacher labor market does not allow school and district leaders the flexibility in personnel decisions that most of the reforms described above demand; so no matter how sophisticated hiring and firing procedures become, if teacher quality is to improve, policies must attend to the capacity of the current teaching force.

Capacity Building

Although the idea of capacity building is fairly absent from the major education policy debates and the mainstream media, it has entered into thousands of reforms over the decades (Cohen & Ball, 1999). "Capacity" refers to the abilities and resources needed to achieve a particular goal, or in other words, *the potential* to achieve a goal (Corcoran & Goertz, 1995). In education reform, instructional capacity, "the capacity to produce worthwhile and substantial learning" (Cohen & Ball, 1999), is most often the focus of reform. Traditionally, attempts to improve instructional capacity primarily come in the form of "teacher training" or professional development (PD). PD often involves workshops led by external staff developers on pedagogy, curriculum, or the use of new materials. Districts frequently require these workshops, or schools may select trainings related to new initiatives or school needs. The trainings tend to be designed by district officials, university professors, or professionals from independent education organizations. Although some studies indicate that such PD may lead to changes in classroom practices and teacher knowledge, there is little evidence to suggest it leads to improved student outcomes (Borko, 2004; Barber & Mourshed, 2007; Lumpe, 2007; Darling-Hammond, Chung Wei, Andree, Richardson & Orphanos, 2009; Desimone, 2009; Glazerman et al., 2008). The explanations for the limited impact of traditional PD fall into two broad categories; one relates to the way the PD is designed and carried out, and the other relates to a narrow conception of capacity building itself.

PD is derided for being executed in a way that is disjointed from teachers' daily practice. It often does not provide knowledge and skills that can actually be applied in classrooms, and it is presented with little acknowledgement of teachers' particular contexts, including the specific students they serve and the collegial relationships in schools. It comes from "outsiders" who do

not know about the realities of teaching in a given locality. In addition, traditional PD does not adhere to the principles of adult learning. Lindeman (1926) explained that adult learning needs to be contextual, where the subject matter is applied to the needs of a given work context, as opposed to presented as an abstract subject. Numerous scholars have explained how PD is a far cry from this approach, it is not experiential, it is not sustained, and it does not involve application to practice (Corcoran, 1995; Darling-Hammond and McLaughlin, 1996; Lieberman, 1995; Little, 1993; King & Newmann, 2001; Newmann, King, & Youngs, 2000; Renyi, 1996; Supovitz, 2006; Youngs, 2001). Relatedly, Guskey (2002) asserts that traditional PD programs do not adhere to "the process of teacher change" (p. 382). Traditional programs follow a model that states that PD leads to changes in teachers' classroom practice, which produces changes in teachers' beliefs and attitudes, which bring about changes in student learning outcomes. Drawing on research about how teachers are motivated by witnessing their students' learning, Guskey describes an alternative process, where changes in teachers' practices followed by changes in student outcomes produces change in teachers' beliefs and attitudes. He thus advocates for experiential PD where educators are engaged in implementing new innovations in their classrooms early on, and where they receive information about student outcomes on an ongoing basis. This perspective of PD thus advocates for an inquiry approach, which overlaps with the work of PLCs described above.

Aside from what traditional PD lacks in its design elements, another criticism is that it solely focuses on developing individual teachers' technical expertise, which overlooks other contributions to instructional capacity. For instance, Cohen and Ball (1999) criticized PD that trained teachers in the use of new curricular materials because it assumed that teachers' skill in using materials would automatically lead to student learning. Instead, they describe how student

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learning derives from the interaction of three instructional units: teachers, material technologies, *and* students (the "instructional triangle"). As Dewey (1938) explained, just like teachers, students bring prior experiences to classrooms and thus they impact the progression of their own learning experiences. With this more sophisticated understanding of instructional capacity, many recommend that teacher PD attend to students' experiences and backgrounds as they relate to teachers' presentation of material.

Given the accumulation of PD research, scholars have identified key characteristics considered necessary for effective PD. Reviewing the literature, Darling-Hammond & Richardson (2009) explained how effective professional learning experiences are focused on student learning, integrated with broad school improvement work, sustained over long periods of time, and involve active learning where teachers engage in "joint work" (Little, 1990) to address problems that individual teachers cannot solve on their own. Desimone (2009) called for a new research paradigm for assessing PD based on the "preliminary consensus" about effective programs. She proposed assessing PD based on whether it involves the five "critical features" that empirical evidence suggests are associated with changes in knowledge, practice and student achievement, including: (1) content focus, (2) active learning (including peer observations and feedback exchange), (3) coherence (with both teachers' beliefs and with schools' policy context), (4) sustained duration, and (5) collective participation (including PLCs). Darling-Hammond, Hyler, and Gardner's (2017) more recent review of experimental or quasi-experimental studies that demonstrated positive impacts on student outcomes found that effective PD had most or all of the following seven features: (1) content focus, (2) active learning using adult learning theory, (3) collaboration, typically in job-embedded contexts, (4) models and modeling of effective practice, (5) coaching and expert support, (6) opportunities for feedback and reflection, and (7)

sustained duration. While these catalogues differ slightly in their specificity and terminology, they all include not only the infusion of new knowledge and new skills, but they integrate adult learning theory and ask for professional learning to occur in ways that acknowledge school context, including job-embedded collaboration.

School Capacity

One would imagine, then, that such PD would be implemented most smoothly in schools that already have strong social networks supported by collegial structures such as PLCs, as well as other contextual features that support teachers' professional learning. Acknowledging this, most frameworks for effective professional development include mediating and moderating contextual factors, such as school culture, school leadership and the policy environment, that can impact the implementation and impact of even a well-designed PD program (Borko, 2004; Desimone, 2009). Darling-Hammond, Hyler, and Gardner's (2017) review describes the conditions that inhibited implementation of high-quality PD across studies, including: inadequate resources, lack of a shared vision about what high-quality instruction entails, lack of time for implementing new instructional approaches during the school day or year, failure to align state and local policies toward a coherent set of instructional practices, dysfunctional school cultures, and inability to track and assess the quality of professional development.

Thus, capacity building, when conceived purely in terms of individual teacher learning, even when adhering to the features of high-quality PD, is not actually attending to the aspects of an entire school that influence teachers' and students' abilities to learn. For this reason, many advocate for a conception of capacity building that includes school characteristics aside from teacher skill and knowledge (Bryk, et al., 2010; Hatch, 2013; Leana, 2011; Newman, King, Youngs, 2000). These scholars shift the concept of capacity building from the notion of building

instructional capacity to the notion of building *school* capacity or what is called *organizational* capacity across sectors. As with instructional capacity, school capacity refers to the resources and abilities needed to produce student learning, but these constructs acknowledge how school-level characteristics, such as social capital, principal leadership, and program coherence, influence classroom-level characteristics, which in turn impact student learning.

School capacity is also often discussed in terms of schools' abilities to productively implement reforms that are aimed at improving student learning. In their extensive study of school reform in Chicago, Bryk, Sebring, Kerbow, Rollow and Easton (1998) described the differential impacts of the 1988 *Chicago School Reform Act*, and came to the conclusion that schools that benefitted from the reform had certain common characteristics in the way they were organized. They had common goals that were upheld by strong leadership and collegial ties among faculty that allowed reforms to spread. These schools had organizational characteristics pre-reform on which to capitalize when implementing changes.

Deriving from such research on the variable impacts of reforms on different types of schools, as well as from research on high-performing organizations in other non-profit and for-profit sectors, there are a number of frameworks that present a more complex view of school capacity. Newman, King, and Youngs (2000) conceptualized school capacity as having five major components: (1) teachers' knowledge, skills, and dispositions, (2) professional community, (3) program coherence, (4) technical resources, and (5) principal resources. Bryk, et al.'s "Framework of Essential Supports" (2010) includes five slightly different categories derived from research on effective schools in Chicago: (1) leadership as the driver for change (2) parent-community ties, (3) professional capacity, (4) student-centered learning climate, and (5) instructional guidance.

Although the frameworks for school capacity differ slightly, they present overlapping concepts. Importantly, they all acknowledge the importance of leadership, educators' individual skills and expertise, as well as the relational practices among professionals in a school. And the definitions of Newmann et al.'s "professional community" and Bryk et al.'s "professional capacity" both include social ties, trust, and collective commitment. And at their core, all of these frameworks acknowledge the importance of communication among educators that might allow for practices to be shared, analyzed, and critiqued across classrooms.

For Bryk et al. (2010), professional capacity consists of four elements defined in the following ways (p. 54-56): (1) "quality of human resources" is a school staff's knowledge and pedagogical skill, as well as the school's ability to recruit and retain capable teachers and to remove less effective ones; (2) "quality of professional development" is defined as sustained learning opportunities, including time for inquiry and reflection related to the schools' goals; (3) "normative dispositions: an orientation toward continuous improvement" is defined as the faculty's values and beliefs that make them "active agents for change," including an ongoing commitment to improving the school and an openness to innovation; and (4) "professional community" is defined as a faculty with a collective responsibility for identifying common problems and collaboratively solving them. Professional community involves "new work arrangements" that expose teachers to each other's practice, to school-wide decision making and that make "critical dialogue" about teaching practice common.

The authors discuss this fourth element, professional community, as a "middle ground" between two extreme views of teaching—one in which teaching is a technocratic practice, where teachers should follow prescribed rules that dictate all choices, and one that views teaching as an individualistic "art" that is so complex and contextualized based on student need, that any

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outside guidance would be a hindrance. The idea of a professional community is a happy medium between the two poles because it does allow for teacher agency and choice, but in the context of norms and accepted expertise that guides individual discretion. The community of educators develops a normative control over teacher practice as they establish a common language and engage in critical inquiry into each other's practice.

Even though the research community has developed sophisticated understandings of the multifaceted nature of school capacity, capacity-building initiatives rarely address, or even taken into account, all of the components presented in the frameworks described above, and they continue to focus on developing individual teachers' skills and knowledge. A 2017 survey of over 6,000 teachers across the U.S. conducted by Learning Forward found that although school leaders are committed to professional learning, and student outcome data is used, professional learning is rarely job-embedded and does not include the exchange of feedback among teachers regarding their practice (Learning Forward, 2017). Professional learning experiences have yet to integrate what we know about professional learning communities, experiential adult learning, and school capacity. In particular, capacity-building initiatives do not attend to developing the professional community considered so vital to school improvement or to the need to contextualize adult learning so it relates to actual changes that could be made in schools. Part of the challenge is that even with a thorough understanding about the conditions in schools that allow for systematic changes in teacher practice, it is not clear how schools, let alone policies, can *create* these conditions. It is hard to imagine, for example, how a district might mandate or develop social ties among faculty, or how a district might set and maintain expectations for critical reflection.

Learning Organization Reforms

One way districts might do so is by supporting schools to engage in processes of self-improvement and problem solving that borrow principles from the fields of organizational learning and continuous improvement (Fullan, 1991; Leithwood, Leonard & Sharratt, 1998; Louis, 1994; O'Day & Smith, 2016; Senge, 1996). The "learning organization," a term first used by Peter Senge (1990), is an organization where "people are continually discovering how they create their reality. And how they can change it" (p. 12). Senge's model for the learning organization focuses on the need for members of an organization to engage in "systems thinking," which acknowledges the complexity involved in both understanding problems and developing solutions, and in particular, how problems and solutions must consider all aspects of the organization. Systems thinking is one of five "disciplines" for individual thinking and group interaction that make up Senge's model. It also includes "personal mastery," defined as a process of continuous clarification toward objective reality; "mental models" or working to understand the hidden assumptions and beliefs that guide one's view of the world; "building a shared vision" or ensuring goals and missions are understood by all members of an organization; and "team learning" or fostering the learning that requires dialogue in teams, which goes beyond what individual members could learn on their own.

Although Senge described the key disciplines of learning organizations, he did not describe the actual processes involved in knowledge creation. Nonaka and Takeuchi (1995) offer a comprehensive model for what they call the "knowledge-creating" organization. Numerous scholars have applied Nonaka and Takeuchi's model, which is based on analysis of Japanese production companies' success in the midst of economic crises, to education (*see, for example*: Fullan 2007; Hargreaves, 1998; Katz & Earl, 2010; Novak, 2010; Wenger, 1998). Nonaka and

Takeuchi define "organizational-knowledge creation" as, "The capability of a company as a whole to create new knowledge, disseminate it throughout an organization and embody it in products, services, and systems" (p. 3). In essence, all school improvement efforts aim for organizational-knowledge creation, such that new knowledge penetrates the entire school and is expressed in instruction and student learning. Nonaka and Takeuchi define knowledge as "justified true belief" that is used in service of some action. It involves both an understanding of what is "true," but also includes the context-specific perceptions that make up beliefs (p. 58). They describe how an organization's capability to create knowledge lies in the interaction between two types of knowledge: tacit and explicit. Drawing on Polanyi's (1966) distinction between the two, Nonaka and Takeuchi explain how tacit knowledge is not easily communicated across individuals, as it is comprised of mental models as well as know-how, crafts, and skills developed through on-the-job socialization. Explicit knowledge, on the other hand, can be articulated and disseminated through formal language. Western cultures preference explicit knowledge in their understanding of "information processing," but it was the emphasis on tacit knowledge, Nonaka and Takeuchi argue, that led to Eastern companies' success. As tacit knowledge is made explicit through the process of "externalization," it can be disseminated; and as explicit knowledge is acted upon, it is "internalized" and becomes tacit and thus part of people's ways of working. When members of an organization, particularly with different roles, come together and assume responsibility for creating solutions to problems that would normally be addressed only by managers, knowledge is combined to create new bodies of knowledge that guide the work of an organization.

The notion of tacit knowledge as a key resource in knowledge production is especially relevant to education. In general, members of organizations develop tacit knowledge about how

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to do their jobs by learning from experience and from the norms of the community of practice in which they work (Wenger, 1998). But teaching is unique in the way that educators' tacit knowledge also develops as they respond to students in the moment, independently figuring out what does and does not produce intended results. In this sense, teachers' tacit knowledge may be even more implicit than in other work communities, as more practice goes unseen, and there is traditionally little opportunity to reflect on practice and even less opportunity to attempt to articulate what is learned through experience. Thus, organizational learning in school settings requires creating time, space, and structures for reflection. Dewey (1937) explained the importance of educators engaging in "reflective thought" where they analyze the differences between what was expected in their instruction and what actually takes place; Schon (1983, 1987) discussed the importance of teachers being "reflective practitioners," Karen Seashore Louis (2006) calls for "reflective dialogue" among teachers, and Bryk et al. (2010) explains the importance of "critical dialogue." In Nonaka and Takeuchi's analysis, they describe how "externalization," or the transfer of tacit to explicit knowledge occurs through the process of "concept creation," when teams are tasked with creating a new idea to solve a problem. As individuals work towards a solution, they articulate their tacit understandings by describing what they mean using metaphors, analogies, and examples. These forms of expression provide partial understandings that, when questioned and built upon through discussion with other team members, leads to more concrete ideas about how to proceed in creating new concepts.

District examples. There are a few examples of continuous learning approaches implemented at the district level, which provide some insight into how continuous learning approaches can be applied to school systems. Supovitz (2006) describes how Duvall county schools in Florida became close to what he called "learning for teaching organizations" that

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focused work on improving the quality of instruction in schools, as opposed to the traditional focus on managerial functions. He explained how the district employed a hybrid of control and commitment strategies, mandating an instructional vision while at the same time "engaging members at all levels of the organization in their own learning" (p. 225) around the specific challenges they experience. Supovitz recommended that such learning take place in the form of structured inquiry aided by the use of evidence to make decisions, and a "support relationship" between the district and schools. David and Talbert's (2012) account of academic improvement in the Sanger Unified School District in California similarly presents an account of continuous learning where the district developed PLCs in all schools that worked to solve context-specific problems of practice while drawing on various PD opportunities provided by the district.

Reflecting on a number of district examples of continuous improvement efforts, O'Day and Smith (2016) provide four useful distinctions between continuous improvement approaches and approaches that focus on outcome accountability. The former attends to processes as opposed to outcomes, views failures as a natural part of the improvement process and as learning opportunities, considers contextual factors and attends to variation produced by context, and fosters internal, as opposed to external, accountability mechanisms (p. 317-318). In addition, and given these features, continuous learning approaches take considerable time compared to more command-style reforms. Since they emphasize searching for contextually appropriate changes, and allowing for detours in that search, continuous learning may take longer to demonstrate results than the implementation of an externally validated "best practice." But, from a continuous learning perspective, developing the capacity for improvement in the course of determining changes, as well as developing the most appropriate change, is worth the time and effort. This of course raises questions about how learning organization reforms could bump up against existing

accountability contexts, and how sustainable the reforms, themselves, may be, if they are not able to produce rapid results.

Developing learning organizations. Much of the theory and research on organizational learning and knowledge creation within organizations stems from case studies that describe how organizations were able to innovate and improve in the midst of uncertain conditions. These studies examined organizations' existing features and processes. More recently, scholars have used these ideas to develop guides, programs, and toolkits to support organizations to become learning organizations. For example, Gephart and Marsick (2015) created a trademarked model called, "Strategic Leverage Through Learning," which provides a "blueprint" for organizational learning. Langley et al.'s *Improvement Guide* (2009) provides a step-by-step account of how to engage in "improvement science," which involves "plan, do, study, act (PDSA) cycles," where practitioners develop, test and disseminate changes across an organization. Senge's *Schools that Learn* (2012) lays out the specific functions teacher and school leaders can perform to carry out the five disciplines. And Bryk, Gomez, Grunow, and Mehiew's (2015) *Learning to Improve, How America's Schools Can Get Better at Getting Better*, applies improvement science to schools and aligns to trainings offered by the Carnegie Foundation for the Advancement of Teaching and Learning (CFAT).

Improvement science emphasizes the use of evidence to guide all decision-making. But unlike experimental science, which entails implementing interventions with fidelity if they are proven to be effective, improvement science acknowledges that contextual variables impact both implementation and results, and encourages gathering local evidence to allow for immediate learning and adaptations by the implementers themselves. This "practical measurement" (Yeager, Bryk, Muhich, Hausman, & Morales, 2013) may not allow for determining precise

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causal links, but can provide implementers with rapid feedback to inform refinements. Implementers may try an intervention that has been proven to be effective through experimental methods, but with improvement science, that intervention is just a starting point, as there is an acknowledgement that it will need to be adapted to the specific school and students, and adapted further based on immediate results of implementation across different contexts. In fact, learning from results in multiple contexts is a key aspect of the theory behind improvement science, which is why it also often involves networks of organizations learning together.

Network Approaches and Interschool Collaboration

Network approaches involve different organizations exchanging information about common problems or interests. In some models, members across the network actually develop solutions together. In education, these have been coined "education improvement networks" (Peurach, 2016), "networked learning communities (NLCs)" (Kerr, Aiston, White, Holland & Grayson, 2003), and the Carnegies Foundation for the Advancement of Teaching (CFAT) calls them "networked improvement communities (NICs)" (Bryk, 2014; Bryk et al. 2015). Borrowing from the medical field (McCannon & Perla, 2009), the idea is that lessons learned from rapid implementation in multiple sites are shared, increasing the impact of what would normally be learned from one context (Peurach, 2016). Further, organizations may reach a limit in their ability to improve their own capacities, thus they may benefit from accessing external sources of knowledge provided by the network (Englebart, 2003; Wenger 1998).

Networks take many forms, including networks created by professional development associations such as Bread Loaf Rural Teacher Network or the National Writing Project (McDonald & Klein, 2003), networks of schools engaging in interschool collaboration, or networks of individuals interested in a specific topic (Little, 2005). Among these types, there

may or may not be an "intermediary organization" coordinating and supporting network activities, as is the case with LearnDBIR initiative, the National Center on Scaling Up Effective Schools, CFAT, and the SERP Institute (Peurach, 2016). And within any of these formats, network structure and functioning can vary dramatically in terms of the size of networks, whether or not all members have equal status or hierarchical relationships, whether networks involve participation by entire organizations or select members, and of course, the activities in which networks engage (Atkinson, 2007). In particular, some networks may serve to primarily exchange ideas, while others may involve organizational learning processes such as the joint problem solving associated with NLCs and NICs. Given the wide range of network categories, and the broad definition of networks, the education policy community has yet to determine a typology of networks, let alone shed light on the efficacy of networks as an educational innovation.

There is, however, an emerging understanding of what qualities of networks are likely to lead to positive reactions from network participants, as well as a smaller body of research that examines networks' impacts on student outcomes. For the case of networks that incorporate improvement science principles into their work, CFAT has released briefs and vignettes about its NIC work. A 2017 vignette describes the impact of a NIC that sought to improve developmental (remedial) math courses in community colleges. Nationally, only 5% of community college students earn college credit in math after 1 year. After implementing Pathways, a sequence of courses developed by a team of researchers and community college professors assembled by CFAT, 48% of the students in the Pathways sequence earned college credit in math. The development team used improvement science methods, including systematic investigation into students' perceived barriers to math success and rapid implementation and measurement of new

interventions across a number of different community colleges. Comparisons between students in the Pathways course and similar students in other developmental courses indicate positive outcomes in degree attainment and transfer to four-year colleges for Pathways students (Norman, 2017). These findings demonstrate the efficacy of an intervention created through a very specific NIC that consisted of a special group of individuals engaging in the development process. It raises the question of whether and how such a special set of circumstances could be replicated, as well as how similar results could be achieved outside of the CFAT context.

Interschool Collaboration. The research on interschool collaboration sheds light on the opportunities and challenges for K-12 school networks that also aim to harness knowledge from across multiple sites, although in different formats than NICs. Interschool collaboration is especially prevalent in Great Britain, where it has been a major part of the nation's educational improvement strategy for the past 20 years (Earl & Katz, 2006; Glatter, 2003; Little, 2005). Some of these programs, especially the earlier ones, encourage higher-performing schools to support lower-performing schools, while other programs facilitate more egalitarian partnerships among schools. The former category includes the Beacon Schools initiative, which ran from 1998 to 2005. Schools would apply for Beacon status, and were selected based on high performance as determined by the Office for Standards in Education (Ofsted). Once granted Beacon status, schools received 35,000 to 40,000 pounds to share practices with other schools. In 2005 the Beacon program evolved into the Leading Edge program, which has "lead" schools, but more democratic partnerships (Entwistle & Downe, 2005; Rudd, 2004).

The latter category of egalitarian partnerships includes the Networked Learning Communities (NLC) program, which ran from 2000-2006 and included 1,000 schools in over 80 networks of 6-10 schools across England. The NLC was designed to promote, "groups of schools

working together to enhance the quality of professional learning and to strengthen capacity for continuous improvement" (Kerr et al., 2003). Networks were given significant flexibility in the way they functioned, but they were expected to adhere to four principles: (1) moral purpose, a commitment to success for all children, (2) shared leadership, (3) inquiry-based practice, and (4) adherence to a model of learning (Jackson & Temperley, 2007). This category also includes the City Challenge Programme, where "families" of schools with similar populations were encouraged to collaborate (Hutchings et al., 2012).

Egalitarian forms of interschool collaboration also aim to bridge cultural divisions across school sectors. For example, the Shared Education Program (SEP) was created in Northern Ireland in 2007 to encourage greater exchange between Protestant and Catholic schools, both for the sake of school improvement and increasing shared understandings between sectors (Duffy & Gallagher, 2014; 2016). Similarly, a program in the city of Ramle, Israel encouraged collaboration between Arab-Israeli schools and Jewish schools, where principals and teachers from the two sectors worked together to implement "shared life education," a program that encourages inclusive social values (Payes, 2015). In both Ramle and Northern Ireland, students, along with educators, actually engaged in interschool visits.

There are fewer documented examples of interschool collaboration in the U.S., although Los Angeles has experimented with various models. Another case of using interschool collaboration to bridge boundaries, the Los Angeles Education Success Project brought leaders and educators of district and charter schools together for symposia and colloquia (Kindel et al., 2015). The Annenberg Challenge also implemented school networks in L.A. to support organizational capacity development of participating schools, as well as to reduce the challenges associated with students transitioning between elementary, middle and high schools. The

program created "school families" of 5-7 schools based on student feeder patterns, where each family would select an external partner to support them in their work (Wholstetter, 2003).

Over a decade of research on these and other interschool collaboration programs highlights common implementation issues, results, and the conditions for success. Numerous studies indicate that individual networks within a single program function in quite different ways. Some of this is variability in implementation, but network program models also tend to be designed with intentional flexibility. For example, the structure of the work between Beacon schools and their partners varied greatly by the local education agency as well as individual schools' approaches. A report released by the U.K.'s National Foundation for Educational Research (NFER) explains how four models of implementation emerged, where Beacon schools either disseminated practices to other schools, provided customized support to other schools based on the problems partner schools were facing, where Beacon schools "learned together" with their partner schools, and finally, some Beacon schools acted as a "broker," helping schools navigate the Beacon network to find the specific support they needed (p. 23). The report's authors explain how the last two models involved the most intensive work and were also associated with positive reactions from program participants. In fact, even as Beacon school leaders explained the challenge of finding time to support other schools so intensively, they said that they preferred when the relationships were deeper and more collaborative (Rudd et al., 2002). Similarly, the SEP in Ireland actually developed a typology of partnerships to monitor implementation. On one end of the continuum is the category, "schools in isolation," and on the other end, schools are in "symbiotic partnerships," which are based on common needs (Duffy & Gallagher, 2016). Notably, the more advanced ends of these continua look similar to the improvement science model of networks, where schools engage in joint problem solving.

Results associated with interschool collaboration. In their 2007 meta-analysis of

interschool collaboration literature, Atkinson et al. explained how interschool collaboration

produced gains for schools, school staff, and students. Schools experienced economic gains by

pooling resources across schools, as well as overall improvement from implementing new

practices, standards, or curricula based on what they learned from other schools. Staff reported

learning new skills, as well as feeling less isolated and more confident. Students gained links to

students at other schools and, in some cases, demonstrated learning gains on achievement

assessments. For Beacon schools, interviews with participants indicated that they believed the

program led to increased staff development, improved practice, increased staff and student

morale, more external connections, and increased resources. For partner schools, the results were

similar, but improvements to practice were the most frequently mentioned result (Rudd et al.,

2002). For NLCs, researchers found that the program supported processes for building capacity

for school improvement, though no evidence of short-term gains in student performance were

found (Chapman, 2008). Observations, interviews and focus groups with participants in the SEP

indicate social as well educational impacts, including building relationships between students in

the schools, and improving connections between schools and community services. Participants

also spoke of school improvement and capacity building (Duffy & Gallagher, 2016).

Conditions and processes. In all cases, school outcomes varied across networks within

programs, leading to understandings about the conditions needed for effective collaboration. Key

factors that supported collaboration were positive relationships among participants across

schools (Atkinson, 2007; Chapman, 2008; Duffy & Gallagher, 2014; Glatter, 2013), facilitators

that guided participants through the collaboration, a focus on teaching and learning, access to

external supports, a focus on continuous learning (Chapman, 2008; Jackson & Temperley, 2007),

processes that developed shared aims across schools, distributed leadership and smooth communication channels, staff qualities and skills, particularly related to facilitative leadership, and funding and prioritization for the collaboration (Atkinson, 2007; Chapman, 2008; Duffy & Gallagher, 2014; Glatter, 2013; Kerr, 2003). One descriptive study found that "successful networked learning activity" additionally involved "learning on behalf of others," where participants engaged in learning activities to help solve the problems of their colleagues within and across schools (Jackson & Temperley, 2007).

Looking at just the NLC context, which, with its emphasis on inquiry, most closely resembles LPP, Katz and Earl (2010) investigated the conditions under which knowledge was created at both the school-level and the interschool network-level. They tested a model of knowledge creation with six factors that enable knowledge creation, which they hypothesized would lead to changes in educator thinking and practice and student learning. They identified the factors based on what prior literature stated to have "the potential to create the conditions for knowledge creation and sharing to occur in ways that are sufficiently powerful to result in significant changes in practice" (p. 28). The enablers were: purpose and focus, relationships, collaboration, inquiry, leadership, and capacity building and support. To test their theory, they surveyed educators from 662 schools across England engaging in 50% of the NLC networks (60 networks). Surveys asked respondents about the knowledge-creating and sharing activities in which they engaged both at the school and network levels, as well as about changes in their thinking and practice. They used factor analysis to group and refine components of their theory; and they explored relationships between survey responses and student achievement levels to identify the conditions critical to student outcomes. They found that the conditions with strong associations with student achievement were slightly different at the school and network levels,

and therefore divided their list of enables into two categories, network factors and school factors, presented below.

Figure 1, Katz and Earl's 2010 Model

Improvement in Student Learning, Engagement, and Success ← Distributed and Sustained Changes in Practices and Structures in Schools ← Professional Knowledge Creation and Sharing ←

SCHOOL
Focus
Relationships and collaboration
Capacity for collaborative enquiry
Formal leadership
Distributed leadership
Joint work that challenges thinking and practice

NETWORK
Focus
Relationships
Collaboration
Enquiry
Formal leadership
Distributed leadership
Joint work that challenges thinking and practice

Taken together, research on the conditions needed for fruitful interschool collaboration indicates that schools and networks with strong professional communities are more likely to benefit from interschool collaboration. In other words, the conditions needed for effective PLCs apply to cross-school learning communities as well, which necessitates the development of professional ties and common areas of inquiry across schools.

   Challenges. Similar challenges to productive interschool collaboration were identified across a number of different program models. Nearly all studies mention the difficulty of finding the time necessary for engaging in interschool collaboration (Atkinson, 2007; Hutchings et al., 2012; Stevenson, 2007). Relatedly, the logistics and funding needed to allow teachers to leave

their classrooms was frequently cited as a problem. For example, in the SEP program in Ireland, one of the major challenges was transporting students, finding space in schools to accommodate the visitors, and funding for transportation as well as substitute coverage, especially because the Protestant and Catholic schools were geographically far from each other (Duffy & Gallagher, 2014; 2016). In addition, social dilemmas were frequently mentioned, including tensions between schools, which in some cases derived from contextual differences (Atkinson, 2007; Hutchings et al., 2012; Rudd et al., 2004; Stevenson, 2007), as well as from feelings of competition (Atkinson, 2007; Entswistle & Downe; Glatter, 2013; Penney, 2004; Stevenson, 2007). In particular, studies of networks with hierarchical arrangements identify feelings of resentment and mistrust regarding the "better school" status, which was compounded by the fact that lead schools often received more financial resources than the partner schools. Beacon school teachers and school leaders, for example, would actually try to diminish their Beacon status for the sake of establishing stronger relationships by communicating to other schools how much they wanted to learn as well as teach (Rudd et al., 2004). And even once Beacon became Leading Edge, participants spoke of resentments about "lead" status and about fears about schools poaching teachers from each other (Stevenson, 2007). A similar UK initiative with "Specialist" schools found similar results, where competition created tensions among partners (Penney, 2004).

Although much of the qualitative research on interschool collaboration highlights the tensions involved in hierarchical relationships across schools, there is quantitative evidence to suggest that such relationships produce stronger outcomes for schools. Chapman and Muijs (2014) compared a matched sample of 264 schools in networks from across 50 districts in England and Wales to the same number of comparison schools that are not in networks and

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found that network schools demonstrated more growth in student outcomes. The impact was greatest for schools in networks where higher performing schools had the specific goal of supporting lower performing schools, indicating that the hierarchical model may be appropriate in some contexts, even though it caused difficulty in the Beacon program and in other similar initiatives. In fact, in Shanghai, the Empowered-Management Program takes this model to an extreme where the program matches high-performing schools with lower-performing schools under a contractual agreement. The higher-performing school is only paid under the contract after "turning around" the lesser-performing school. I was not able to find any reports of the efficacy of this program, but it has been renewed numerous times and is spreading to other parts of China (Jenson & Farmer, 2013).

All told, the research on interschool collaboration indicates that school networks have the potential for enhancing educators' professional development and fostering changes in practice that could lead to improved student outcomes. However, there is tremendous variability in the way interschool collaboration is carried out by individual schools in individual networks. Given the growing consensus about what conditions foster more effective collaboration, the current research base indicates that programs will produce the best results that adequately fund interschool collaborative activities, that figure out how to promote positive relationships between schools, especially by resolving issues of competiveness that could surface from hierarchical arrangements, that provide guidance on processes, often through program facilitators, and that move schools toward joint work around common goals.

Theoretical Relevance to LPP

LPP can be categorized as both a commitment approach and capacity-building initiative that has program design elements relevant to the research on professional learning communities,

professional development, school capacity, organizational learning, and of course, networks in the form of interschool collaboration. LPP's core features—interschool collaboration, inquiry, and collaborative teams composed of teacher and school leaders—cut across these many categories, thus providing a comprehensive approach to school improvement that attempts to pull promising features from the different models.

Looking at the various approaches to capacity building, key conditions, features, and processes come up repeatedly. Organizing the information above by the most commonly emphasized features, it becomes clear what the research community views as crucial for the success of capacity-building initiatives: collaboration, distributed leadership, trust and relationships, dispositions, coherence, inquiry, data use, reflective dialogue, access to external knowledge, commonly held focuses, and a significant duration of time devoted to any initiative. Table 1, on the following page, summarizes the features of each approach, based on the most recent and comprehensive reviews of research on each topic.

Table 1. Core Features of Capacity Building Approaches

	Professional Learning Communities	Professional Development	School Capacity Frameworks	Organizational Learning & Improvement Science	Interschool Collaboration
Collaboration	Collective learning[a]	Job embedded[d] Collective participation[e]	New work arrangements[f]	Team learning[h]	Within and across schools[l,m]
Distributed leadership	Collective responsibility[b]	…	Leadership as driver for change[f]	Flat organizational structures[i]	Distributed leadership[l,m]
Trust & relationships	Mutual trust[b]	…	Professional community[f]	…	Positive relationships across schools[l,m]
Dispositions, norms, and values	Openness[b]; commitment to continuous improvement[c]	…	Orientation toward innovation and commitment to improvement[f]	Failure viewed as learning opportunity[j]	…
Coherence	…	Coherence with beliefs & policy context[e]	Program coherence[g]	Systems thinking[h]	…
Inquiry processes & data use	Action orientation[c]	Active learning utilizing adult learning theory[d,e]	…	Uses variation in performance to learn; PDSA cycles[j]	Inquiry[m]
Reflective Dialogue	Reflective professional inquiry[b]	Opportunities for feedback and reflection[d]	Critical dialogue[f]	Tacit and explicit knowledge transfer[i]	Joint work that challenges thinking and practice[m]
Access to external knowledge	Networks that access external ideas[b]	Coaching and expert support[d]	Instructional guidance[f]	Integrates internal and external knowledge[k]	Expertise from network and facilitators[l]
Focus	Focus on results[c]	Content focused[d,e]	Student centered working climate[f]	Building a shared vision[h] Focus on system outcomes[h,j]	Shared goals across network[l]

[a]Wenger, 1998
[b]Stoll, Bolam, McMahon, Wallace, and Thomas, 2006
[c]DuFour, DuFour, Eaker, & Many, 2006
[d]Darling-Hammond, Hyler & Gardner, 2017
[e]Desimone, 2009
[f]Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010
[g]Newman, King, & Youngs, 2000
[h]Senge, 1990
[i]Nonaka & Takeuchi, 1995
[j]O'Day & Smith, 2016
[k]Seashore Louis, 2006
[l]Atkinson, 2007
[m]Katz & Earl, 2010

For my analysis of LPP, I did not set out to test any one theory of capacity building. For one, the program does not fit squarely into any one of these categories. And more important, my goal was to reveal information that is relevant to policymakers interested in increasing school capacity, which realistically involves a multifaceted approach building on numerous schools of thought about how to improve schools. Thus my analytic categorizes, which I use for both analysis and for organizing results, are based on the prominent features that arise from across the literature.

Research Gaps

Although the research base goes a long way in identifying the potential of and conditions needed for fruitful collaboration, it tends to fall short of describing the actual processes involved in creating these conditions (Kerr et al., 2003; Little, 2005). The basic process model frequently presented in the capacity-building literature states that these various core features produce increased teacher knowledge and skills, which can lead to changes in teachers' thinking and beliefs, subsequent changes in practice, which ultimately lead to improved student learning and outcomes (Desimone, 2009; Katz & Earl, 2010); or according to Guskey (2002), professional development leads to changes in teachers' practices, student outcomes, and then teachers' beliefs and attitudes. These process models fall short, however, in describing how the key features are developed and how they actually translate to changes in practice and thinking. In particular, key questions remain unanswered: How are such positive relationships developed among educators, especially in uneven partnerships across schools? How can schools be guided towards developing shared aims? What do processes of collaborative problem solving across schools look like? How do schools access external resources and translate them into changes that they can implement in their schools? And, what program inputs are necessary to create these conditions?

There is a major gap in the literature when it comes to understanding the day-to-day workings of

educators engaged in professional learning, and especially in interschool collaboration.

Chapter 3 Methods

This dissertation is based on a secondary analysis of data from a program evaluation of

LPP conducted by the DOE's Research and Policy Support Group (RPSG) in collaboration with

Columbia University's Center for Public Research and Leadership (CPRL).[3] As a researcher at

CPRL, I collaborated with RPSG to lead the qualitative component of the evaluation with

support from seven teams of graduate and professional students between August 2014 and June

2017.[4] The sections below describe the research methods for the program evaluation, including

the rationale for the case study research design, site and participant selection, and data collection

methods. I then discuss the analytic approach I used for the dissertation, and the chapter

concludes with a discussion of threats to validity and how I addressed them.

Case Study Rationale

The primary goals for the qualitative component of the DOE evaluation were two-fold:

(1) To provide the district with programmatic recommendations that could inform

implementation and improvements to program design, and (2) to provide "on-the-ground"

accounts of the program for prospective participants and other interested stakeholders. In order to

achieve these dual objectives, we employed a multiple-case (Yin, 1994) or comparative case

method (Agranoff & Radin, 1991), which allowed us to understand how the program is

implemented and the processes in which schools engage across different contexts. Yin (1994)

writes that the case study method "investigates a contemporary phenomenon within its real-life

context, especially when the boundaries between phenomenon and context are not clearly

evident" (p. 13). Understanding how school context interacts with the program model is

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[3] CPRL is based out of Columbia Law School. It partners with schools of education, law, policy, social work, and business throughout the country to engage graduate and professional students in research and consulting projects with school districts, state departments of education, and other education organizations.

[4] I received permission from both the NYCDOE and CPRL to use the data collected for the program evaluation for my dissertation.

especially important for LPP because it is an intentionally flexible program that asks schools to focus on goals most suited to their particular needs. Further, case studies can be used for both theory-building and theory-testing (Yin, 2011); researchers can explore how the mechanisms in a program model yield intended results, and can develop theories about how the intended results may be achieved in different contexts.

The unit of analysis, or the "case" under investigation, varied during different years of the evaluation. During the first year, the research team focused on how different schools collaborated, and thus the cases were the interschool networks of three schools working together in what the DOE called "triads." During the second year, when larger networks were introduced, we researched triads as well as networks of 6-8 schools. We also engaged in an additional, narrower focus of individual schools in each group, so our case studies were at the network-level and the school-level. In 2016-2017, we continued to take a multi-level approach. For the dissertation, I focused on the school as the unit of analysis, which allowed for a larger sample size, and produced results that could inform other school-level policies, as opposed to producing results that apply only to interschool initiatives. The program evaluation used intrinsic case studies, which focus on better understanding and presenting the internal workings of a case. For purposes of the DOE, the research goal was to better understand how LPP functions in order to articulate the program's processes and to improve program design. This dissertation, on the other hand, aims for instrumental case studies, which investigate cases for the purpose of understanding broader phenomena (Stake, 2005). I intended to answer research questions about how schools districts, broadly, can help schools to become knowledge-creating institutions.

Site Selection

The research team had no influence over which schools participated in the program, and we selected interschool networks after they were admitted to LPP and put into their interschool groupings by the DOE. Schools were put together in networks that had similar intended focus areas for their work in the program and, in most cases, that served the same grade levels. In the first year of the program (2014-2015), schools were asked to rank other matching criteria in terms of importance, including, geographic proximity, similar student population, being in the same network, having the same superintendent, being with a school they already knew or had worked with previously, and schools were given an opportunity to list particular schools. Schools applying to be host schools were additionally asked if they were interested in working with partner schools with new principals. In the following 2 years, schools were not asked to list these preferences, and matching was primarily based on learning focus areas.

The population of LPP schools is diverse and representative of the district as a whole. All five boroughs, all 32 community school districts, and schools with varying performance levels participate in LPP. LPP partner schools entered LPP with slightly lower average proficiency rates on state tests in mathematics and English language arts than the district schools overall; and LPP host schools entered LPP at slightly higher proficiency rates than district schools. In 2016-2017, about 40% of LPP schools were high schools or secondary schools, about 27% were elementary and early childhood schools, 25% were middle schools, 6% were K-8 schools, and 2% were K-12 schools. Like the district's schools, the majority of LPP schools serve sizable populations of students in poverty as well as large numbers of students receiving special education services. See Table 2 below for a demographic comparison between LPP schools and all district schools. In addition, special types of schools, including International Schools (which

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serve students who have been in the country for 2 years or less), District 75 schools (which serve students with disabilities), transfer schools (which serve students who have been held back twice in elementary or middle school and transfer from another school), Renewal Schools (in the lowest performing 5% of the district), Early Childhood Centers, and magnet schools are all part of LPP. A small number of charter schools were part of LPP in 2014-2015, although in subsequent years charter schools participated in another iteration of LPP, the District-Charter Collaborative.

Table 2. Demographic Information for LPP and DOE Schools (2016-2017)

	% Asian	% Black	% Hispanic	% Other	% White	% Students with Disabilities	% English Language Learners	% Poverty
LPP	9	32	46	2	11	24	14	82
DOE	16	27	41	2	15	19	13	77

As much as LPP is an inclusive program, there are differences between LPP schools and non-LPP schools by virtue of LPP schools having made the decision to apply to the program. Principals tended to complete the application collaboratively with other members of the administration and teacher leaders, although principals were solely responsible for making the decision to apply. LPP principals may be more interested in interschool collaboration, teacher leadership, or inquiry than principals that did not apply. It is also possible that schools were interested in receiving the additional financial support provided through the program in the form of additional compensation for Model/Master teachers and principals, as well as supplemental funds intended to support program activities. There also may be differences between schools accepted to the program and those that are not, even though the acceptance rate is fairly high (in 2016-2017, 62% of schools that applied to the program were accepted and participated). The DOE accepts schools that it considers ready to engage in the program based on written applications and on district officials' visits to the applicant schools. It may therefore favor

schools with a minimum level of infrastructure support for interschool collaboration and inquiry, as well as schools that the DOE views as being an appropriate match for other specific schools in the program.

We began our case study selection process after schools were admitted to the program, and selected new, but overlapping, samples of networks during each year of the evaluation. For all 3 years of the evaluation, we used a purposeful selection method (Light, Singer, & Willet, 1990), although our approach and criteria shifted each year based on the needs of the evaluation.

Year 1 (2014-2015)

During the first year of the evaluation, we sought to understand how LPP was implemented in a variety of schools, and thus employed "maximum variation" sampling (Guba & Lincoln, 1989) within a "sequential sampling" process of two stages (Tashakkori & Teddlie, 2010). The first stage involved selecting six out of the 24 triads in the program to observe between September 2014 and January 2015. We included triads with elementary, middle and high schools, and located in four of the five boroughs across New York City. Schools in Staten Island were not selected due to the infeasibility of doing frequent observations there. In addition, we selected schools that were focusing on different learning focus areas (LFAs) from across the domains of instruction, school culture, and school structures and systems, which schools were asked to describe in their applications. During the first year, LFAs were selected from a pre-defined list, and during the following 2 years, applicants developed LFAs within one of the DOE Framework categories (see the following chapter for a more detailed description of the application process). We also ensured that each triad in the sample had a different Facilitator, as we hypothesized that facilitation styles would impact implementation, and sought heterogeneity

in this respect as well. Finally, we examined the student populations of schools to ensure the

student demographics of the case study schools were representative of the district population.

The second stage involved narrowing to three out of the six originally selected triads for

more intensive data collection between February 2015 and June 2015. We selected three

"confirming cases" for deeper analysis. Confirming cases are those that are likely to provide

insight into emerging patterns in our analysis (Tashakkori & Teddlie, 2010). In particular, we

selected triads that displayed higher program implementation fidelity as demonstrated by

participation in regular school team meetings, interschool site visits, and sustained work around

particular focus areas. The target sizes of the sample were determined based on the capacity of

the research team. We could observe monthly site visits for six triads during the first half of the

year; and we could observe site visits, school team meetings and conduct interviews for three

triads for the remainder of the year. See Table 3 below for information on each school in the

sample, organized by triad. The rows shaded in grey are the confirming cases that were

researched for the entire year. All school names are replaced by pseudonyms.

Table 3. Year 1 (2014-2015) Case Study School Information

School	Host/ Partner	Grades	Borough	% Black	% Hisp	% Pov[a]	% ELL[b]	% SWD[c]	Network LFA[d]
P.S. 1	Host	PK-02	Manhattan	22	67	100	20	33	Language
P.S. 2	Partner	PK-03	Manhattan	11	61	49	19	25	acquisition
P.S. 3	Partner	K-5	Manhattan	2	83	100	53	17	
P.S. 4	Host	9-12	Brooklyn	72	22	79	1	14	Post-
P.S. 5	Partner	9-12	Brooklyn	22	22	62	7	17	secondary
P.S. 6	Partner	9-12	Brooklyn	90	6	78	9	17	readiness
P.S. 7	Host	9-12	Brooklyn	83	14	78	2	22	Teacher
P.S. 8	Partner	9-12	Brooklyn	78	21	88	3	44	growth &
P.S. 9	Partner	10-12	Manhattan	32	42	62	2	15	teams
P.S. 10	Host	6-11	Queens	19	37	64	1	19	School
P.S. 11	Partner	6-7	Queens	16	50	64	8	23	culture
P.S. 12	Partner	6-8	Brooklyn	70	24	83	6	21	
P.S. 13	Host	PK-8	Bronx	25	70	92	11	18	Teacher
P.S. 14	Partner	K-5	Queens	2	94	95	45	16	leadership;
P.S. 15	Partner	PK-5	Bronx	22	77	93	25	22	student SEL
P.S. 16	Host	PK-8	Brooklyn	3	95	95	43	23	Supporting
P.S. 17	Partner	K-2	Brooklyn	28	62	89	21	30	ELLs
P.S. 18	Partner	6-8	Bronx	17	82	89	28	25	

[a]Pov: Poverty (based on the number of students with families who have qualified for free or reduced price lunch, or are eligible for Human Resources Administration (HRA) benefits); schools with 100% poverty in this sample are Universal Meals Schools, where all students automatically qualify for free lunch

Year 2 (2015-2016)

In response to programmatic changes made between the first and the second year, including the introduction of larger networks of six-eight schools, the research team used slightly different selection criteria. The DOE was also interested in introducing new schools into the sample in order to explore the program in even more contexts, and to avoid burdening all of the schools from year 1 with continued research. However, for longer-term investigation, we did select one of the triads from the first year of research to continue in the sample. As in the first year, we sought a heterogeneous sample that represented different grade levels, boroughs, LFAs and school types in order to understand how LPP works in different contexts. To understand how schools that had been in the program over the course of 2 years function, we selected triads and larger networks with at least two schools returning to the program for the second year. The final sample included three triads: one with a general education population that was in the study the first year, one District 75 triad, and one triad made up of schools from the Internationals Network for Public Schools, which serves students who have been in the country for four years or less and who score in the bottom quartile on English language assessments (http://internationalsnps.org/). The research sample also included two larger networks, one with eight elementary and middle schools in Brooklyn, and one with seven high schools in the Bronx. The triad that was in the sample during the first year of the research left the program in December of 2015, and so our final sample included only two triads and two larger networks with no overlap from the first year.

Focal school selection. In response to the DOE's increased interest in how individual schools were engaging in the program's newly codified inquiry process, the Cycles of Learning, in the second year of the program, we selected focal schools from each triad and cohort for more in-depth study of their inquiry processes. Focal schools were selected in December 2015 again using the confirming cases approach. We selected schools that were consistently engaging in school team meetings, site visits, and that were beginning to implement new practices based on their inquiry work. We selected all host schools as focal schools, as well as one focal partner school from each triad and two focal partner schools from each cohort. Table 4 presents the year 2 sample. Focal schools are marked with asterisks.

Table 4. Year 2 (2015-2016) Case Study School Information

School	Host/ Partner	New/ Returning	Grades	Borough	% Black	% Hisp	%Pov[a]	%ELL[b]	%SWD[c]	Network LFA[d]
P.S. 10[e]	Host	Returning	6-11	Queens	19	39	63	2	20	Instruction-
P.S. 19	Partner	Returning	6-12	Brooklyn	43	34	70	12	22	al
P.S. 12	Partner	Returning	6-8	Brooklyn	65	28	73	7	25	consistency
P.S. 20*	Host	New	9-12	Queens	2	38	92	83	2	Restorative
P.S. 21*	Partner	Returning	9-12	Brooklyn	19	36	100	80	3	Justice
P.S. 22	Partner	Returning	9-12	Brooklyn	6	29	92	86	3	circles
P.S. 23*	Host	New	K-12	Bronx	32	59	73	18	100	Assessment
P.S. 24*	Partner	Returning	PK-12	Bronx	34	60	80	22	100	use in
P.S. 25	Partner	Returning	K-12	Manhattan	28	46	65	17	100	instruction
P.S. 26*	Host	Returning	K-5	Brooklyn	5	9	8	2	14	
P.S. 27*	Partner	Returning	P-5	Brooklyn	45	14	47	4	19	Math and reading differentia- tion strategies
P.S. 28*	Partner	New	P-8	Brooklyn	59	25	63	4	15	
P.S. 29	Partner	New	K-8	Brooklyn	39	17	30	1	20	
P.S. 30	Partner	New	P-1	Brooklyn	10	10	10	0	14	
P.S. 31	Partner	New	P-1	Brooklyn	0	69	91	52	15	
P.S. 32	Partner	New	P-4	Brooklyn	81	14	96	2	25	
P.S. 33	Partner	New	6-7	Brooklyn	87	11	75	6	25	
P.S. 34*	Host	Returning	9-12	Bronx	26	64	90	4	20	Various, including teacher leadership, interdis- ciplinary instruction
P.S. 35	Partner	New	9-12	Bronx	31	66	88	12	27	
P.S. 36	Partner	New	9-12	Bronx	24	71	88	11	27	
P.S. 37*	Partner	Returning	9-12	Bronx	30	65	88	7	19	
P.S. 38*	Partner	New	9-12	Bronx	35	51	72	2	21	
P.S. 39	Partner	New	6-12	Bronx	27	6	100	6	25	
P.S. 40	Partner	New	9-12	Bronx	31	56	82	5	19	

*Focal school
[a]Pov: Poverty (based on the number of students with families who have qualified for free or reduced price lunch, or are eligible for Human Resources Administration (HRA) benefits); schools with 100% poverty in this sample are Universal Meals Schools, where all students automatically qualify for free lunch
[b]ELL: English Language Learners
[c]SWD: Students with Disabilities
[d]LFA: Initial Learning Focus Area, determined collaboratively by network during initial interschool collaboration
[e]This triad was in the sample in 2014-2015 and left the program in December 2015

Year 3 (2016-2017)

In the third year, the research focus again shifted to develop a more thorough understanding of how schools achieve the following stated program outcomes: (1) "strengthen school capacity to engage in continuous improvement," (2) "improve school and educator practice and student outcomes," (3) "establish a system-wide culture of collaboration," and (4) "develop strong school and teacher leaders" (LPP Framework, 2016-2017). For this reason, in collaboration with the research team, DOE program officials selected cases that they thought demonstrated early signs of moving towards these outcomes. The case study sample was smaller than in previous years to allow the research team time to engage in a deeper analysis of artifacts from a larger sample of schools. We analyzed the CoL documentation of about 40 schools. In the fall of 2016, there were only two networks included in the case study sample – one triad and one "quad" of four schools – each with a focal school that was in the sample during the first year of research. In order to describe how outcomes were achieved in more contexts, in the spring of 2017, we added two more networks that included schools from the sample during the second year, including the District 75 triad and the network of seven high schools. The District 75 triad included two returning schools that we had researched the previous year, as well as one school that was new to the program. The high school network included all of the same schools as the previous year. We focused our research activities on one school in each network, for a focal sample of four schools, all of which were in the sample for 2 years. Table 5 on the following page presents the 2016-2017 sample.

Table 5. Year 3 (2016-2017) Case Study School Information

School	Host/ Partner	New/ Returning	Grades	Borough	% Black	% Hisp	% Pov[a]	% ELL[b]	% SWD[c]	Network LFA[d]
P.S. 41	Host	Returning	9-12	Brooklyn	17	70	83	3	18	
P.S. 8*	Partner	Returning	9-12	Brooklyn	78	19	87	5	50	Student
P.S. 19	Partner	Returning	9-12	Brooklyn	40	28	64	13	22	empowerment
P.S. 42	Partner	Returning	9-12	Brooklyn	66	27	80	3	23	
P.S. 16*	Host	Returning	K-8	Brooklyn	4	94	95	42	22	Dual language
P.S. 43	Partner	New	PK-5	Brooklyn	12	34	100	14	13	instruction
P.S. 44	Partner	New	6-8	Brooklyn	34	39	82	26	25	
P.S. 23	Host	Returning	PK-12	Bronx	32	59	72	23	100	Assessment use;
P.S. 24*	Partner	Returning	PK-12	Bronx	34	61	74	23	100	supporting students
P.S. 45	Partner	New	K-12	Brooklyn	43	23	51	31	100	with Autism
P.S. 34	Host	Returning	9-12	Bronx	21	69	86	6	22	
P.S. 35	Partner	Returning	9-12	Bronx	30	67	88	17	29	
P.S. 36	Partner	Returning	9-12	Bronx	25	69	87	14	26	Various, including
P.S. 37	Partner	Returning	9-12	Bronx	26	69	88	9	21	interdisciplinary
P.S. 38*	Partner	Returning	9-12	Bronx	30	52	72	4	21	instruction, SEL,
P.S. 39	Partner	Returning	9-12	Bronx	29	66	100	6	25	lesson planning
P.S. 40	Partner	Returning	9-12	Bronx	30	58	78	7	22	

*Focal school
[a]Pov: Poverty (based on the number of students with families who have qualified for free or reduced price lunch, or are eligible for Human Resources Administration (HRA) benefits); schools with 100% poverty in this sample are Universal Meals Schools, where all students automatically qualify for free lunch
[b]ELL: English Language Learners
[c]SWD: Students with Disabilities
[d]LFA: Initial Learning Focus Area, determined collaboratively by network during initial interschool collaboration

Interviewee Selection

During each year of the research, we sought to interview program participants that represented different program roles and that would be able to provide an account of the LPP experience. We requested interviews with principals and teachers, and limited our requests to program participants who regularly participated in LPP activities. We selected at least one principal or assistant principal and one teacher from all host schools in the sample. Depending on the year, we also selected either a teacher and principal from at least one partner school from each interschool network. For host principals, we only had one option of who to interview, because each network has only one host principal. We would occasionally interview the assistant principal in place of or in addition to the principal if the principal made this request. When choosing between partner principals to interview, we selected partner principals of the focal school under investigation. During the first year, when there were no formal focal schools, we

requested interviews with partner principals who appeared most open to discussing their experience with LPP.

When selecting teacher interviewees, we selected one or two teachers from LPP teams consisting of four to six participants. Again, we requested interviewees who consistently participated in program activities (i.e. attended most site visits and most school team meetings) and would therefore be able to offer their perspectives on many aspects of the program. In the second year, we favored participants who were taking on more of a leadership role in LPP (e.g. facilitating meetings, circulating agendas) in order to understand how LPP may contribute to leadership development, one of the program's explicit intended outcomes. In the third year, we interviewed one Model Teacher from each of the four focal schools who had been in the program for 3 years, as well as one host principal, one partner principal, and one Facilitator.

Data Collection

Data collection involved multiple methods including direct observation, interviews, and artifact analysis. Using different data sources allows for triangulation, or the confirmation of findings across sources to provide greater internal validity (Fielding & Fielding, 1986). We also used multiple data sources for "complementarity and expansion" (Greene, 2007). Observations and interviews are complementary because observations provide descriptions of settings and behaviors and interviews provide participants' perspectives. They also yield information about events that could not be observed (Weiss, 1994). Over the 3 years, the research team worked with a total of 45 schools, however, the intensity of data collection varied considerably for each school based on the year and whether or not a school was selected to be a focal school. In the first year, when the research team focused on interschool collaboration within the three triads that we studied for the entire year, we interviewed participants from every school in the sample

and observed most interschool site visits, but we observed very few school team meetings. In the second and third years, we observed most interschool site visits, but only conducted interviews and observed school team meetings for focal schools in each network. Below I describe the data collection choices in more detail.

Observations

All networks included in the case study samples were assigned two researchers who conducted interschool site visit observations together and took turns observing school team meetings. Researchers observed all scheduled school site visits, a sample of school team meetings, and occasional trainings and meetings for principals and Facilitators. For some schools, we additionally observed the implementation of changes as a result of LPP work, including school-wide professional development sessions led by LPP team members. Observations were non-obtrusive and involved writing detailed, narrative accounts of all that occurred during site visits. After each observation, researchers wrote memoranda summarizing the events and reflecting on emerging themes related to the schools' inquiry processes, relationships between schools, host-partner dynamics, the roles of Master/Model teachers and principals and Facilitators, and challenges. Even though observations were generally non-participatory, they occasionally involved elements of participant-observation, where researchers took part in team-building activities and icebreakers in order to establish trust with research subjects.

In 2014-2015, the research team observed 43 site visits, 13 school team meetings, nine principals meetings, two host principal trainings, eight Facilitator meetings, and three program-wide events, including the school teams' orientation and two "Share Fairs" where participants across the program presented what they had accomplished in LPP in posters and PowerPoint

presentations. In 2015-2016, researchers observed 41 site visits, 45 school team meetings, two principal training sessions, one Facilitator training session, and two program-wide events, including the orientation and one Share Fair, and seven events where changes were implemented. In 2016-2017, researchers observed nine site visits, 14 school team meetings, three Model Teacher training sessions, one Facilitator training, the school team orientation, and 5 other events where changes were implemented. See Table 6 below for a summary of observations by year.

Table 6. Observations by Year and Type

Year	Inter-school Site Visits	School Team Meetings	Principals/AP Meetings[a]	Program-Wide Events[b]	Facilitator trainings	Host Principal Trainings	Partner Principal trainings	Model Teacher Trainings	Other Events[c]
2014-2015	43	13	0	4	8	2	0	0	0
2015-2016	41	45	9	3	2	1	1	0	7
2016-2017	17	30	0	1	1	0	0	3	5
TOTAL	101	88	9	8	11	3	1	3	12

[a]Includes principals meetings that took place in addition to interschool site visits; other principals meetings took place during site visits
[b]Program-wide events include orientations and program-wide "Share Fairs"
[c]Other events include the implementation of changes at individual schools that were connected LPP work.

Interviews

As described above, participants from each triad and cohort in the sample were selected for interviews. All interviews were semi-structured, following loose protocols that included both "episodic" questions that asked about specific events (Flick, 2000) and "generalized account" questions that asked for characterizations or opinions about the program (Weiss, 1994). Interview protocols included questions from a number of recurring categories, including relationship development, program roles, inquiry, changes being made in schools, successes and challenges (see Appendix A for a selection of protocols used). We conducted interviews with different participants at different time points during the year. We generally interviewed principals in the middle of the school year, after they had a chance to experience the program for a few months and could discuss their goals for engaging in the program, and we interviewed

teachers toward the end of the year to learn their perspectives on how the program impacted them after nearly a full year of participation. All interviews were audio-recorded and the recordings were professionally transcribed.

Twenty-three interviews were conducted with principals, Facilitators, teachers and other school staff during SY 2014-2015. Nine of these interviews were with teachers or instructional coaches, 10 were with principals and assistant principals, one was with a school social worker, and three were with Facilitators. Thirty-three interviews were conducted in SY 2015-2016. These included interviews with 16 Model Teachers and instructional coaches, 12 principals and assistant-principals, and five Facilitators. Seven interviews were conducted in SY 2016-2017 with four teachers, two principals, and one Facilitator. See Table 7 for a summary of interviews by year and participant and Table 8 on the following page for interviews by school.

Table 7. Interviews by Year and Participant

Year	Principals	Assistant Principals	Teachers[a]	Facilitators	Total interviews
2014-2015	9	1	11	3	23
2015-2016	10	1	16	4	32
2016-2017	2	0	4	1	7
TOTAL	21	2	31	8	62

[a]Includes one social worker interview, one assessment coach, and one dean. All teachers interviewed in 2015-2016 and 2016-2017 were Model Teachers.

Table 8. Interviews by School

School[a]	Research Year(s)	Host/ Partner	Principal Interviews	AP Interviews	Teacher Interviews[b]	Facilitator Interviews
P.S. 10	2014-2015	Host	1	0	2	
P.S. 11	2014-2015	Partner	1	0	1	1
P.S. 12	2014-2015	Partner	1	0	1	
P.S. 13	2014-2015	Host	1	0	1	
P.S. 14	2014-2015	Partner	1	0	1	1
P.S. 15	2014-2015	Partner	1	0	1	
P.S. 16	2014-2015	Host	1	0	1	
P.S. 17	2014-2015	Partner	1	0	1	1
P.S. 18	2014-2015	Partner	1	0	2	
P.S. 20	2015-2016	Host	2[c]	0	1	
P.S. 21	2015-2016	Partner	0	1	1	1
P.S. 22	2015-2016	Partner	0	0	1	
P.S. 23	2015-2016	Host	1	1	1	
P.S. 24	2015-2016	Partner	1	0	2	1
P.S. 25	2015-2016	Partner	0	0	1	
P.S. 26	2015-2016	Host	2[c]	0	1	
P.S. 27	2015-2016	Partner	1	0	1	
P.S. 28	2015-2016	Partner	0	0	1	1
P.S. 31	2015-2016	Partner	0	0	1	
P.S. 32	2015-2016	Partner	0	0	1	
P.S. 34	2015-2016	Host	2[c]	0	1	1
P.S. 37	2015-2016	Partner	0	0	1	
P.S. 38	2015-2016	Partner	1	0	1	
P.S. 40	2015-2016	Partner	0	0	1	
P.S. 8	2016-2017	Partner	1	0	1	1
P.S. 16	2016-2017	Host	1	0	1	0
P.S. 24	2016-2017	Partner	0	0	1	0
P.S. 38	2016-2017	Partner	0	0	1	0
	TOTAL		21	2	31	8

[a]Table only includes schools where at least one interview took place.
[b]Includes one social worker interview, one assessment coach, and one dean. All teachers interviewed in 2015-2016 and 2016-2017 were Model Teachers.
[c]The same principal was interviewed twice.

Artifacts

For all of the case studies in the sample, the research team collected and reviewed artifacts from site visits and school team meetings. During the first year of research, artifacts primarily included meeting and site visit agendas, protocols for activities, note-taking templates, and action plans. In the second 2 years, Cycles of Learning (CoL) documentation was the primary artifact analyzed. In 2015-2016 schools were asked to document their work on Google Docs that were accessible to their Facilitators and other members of their interschool network. In 2016-2017, the documentation tool was changed to Google Spreadsheets that the central office

program team could access. These tools asked for information about school teams' established norms and the roles for each team member, about the LFA, year-long goals and problems of practice, and incremental goals for individual CoL, plans for implementing changes, local data collected to measure progress toward cycle goals, and lessons learned from implementation and data analysis.

Analytic Approach

I analyzed a sample of interview transcripts and field notes from site visit and school team meeting observations in qualitative analysis software (Dedoose). Below I describe how I developed a series of codes, which I used to analyze the data only from the analytic sample. Then, I describe how I selected the analytic sample, and finally, how I generated findings based on the analysis.

Codebook Development

The initial list of codes was developed with an etic perspective, guided by my research questions and based on prior literature, the LPP program model itself, and the themes that emerged throughout the program evaluation. After coding portions of the data, I conducted emic coding, developing additional sub-codes based on the themes that arose from the coding process itself.

Etic codes. To answer my first research question, "What is LPP's program design and in what ways is it being implemented?" I included codes for all major structural aspects of the program (e.g. "Roles," "Inquiry," "Interschool Collaboration," "Matching"), as well as a code for "Challenges." To answer the sub-question, "To what extent is LPP, as part of the Fariña administration's overall approach, a transition away from and/or an extension of the policies from the Klein-era?" I applied the code, "District" to any reference to the current or former

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administrations. For the second question, "How, if at all, does LPP foster change in schools?" I first developed a series of codes based on the key features identified across the professional learning community, professional development, school capacity, organizational learning, and interschool collaboration literature presented in Chapter 2. These included, "Dispositions and norms," "Common objectives," "Collaborative structures/new work arrangements," "Distributed leadership," "Trust and relationships," "Focus and accountability," "Critical/reflective dialogue," "Inquiry and data," and "Coherence." I also included a code for "Sources of ideas" to probe more deeply into how schools developed new knowledge that may not be captured from the codes above. To better understand the type of collaboration, I included codes based on Little's (1990) continuum for collaboration, including, "Storytelling and scanning," "Aid and assistance," "Sharing," and "Joint work" for within-school collaboration and across-school collaboration.

I coded excerpts of field notes and interview transcripts whenever one of these topics was explicitly discussed, and whenever there was evidence of one of these conditions being developed or inhibited. For example, to understand how dispositions manifest in LPP, I applied the "Dispositions and norms" code to all instances when interviewees expressed a mindset related to how they approached the work of LPP, including what perspectives and values they thought were important for productive participation in the program and what dispositions they thought inhibited participation. These tended to arise in response to interview questions like, "What are the characteristics of an effective LPP participant?" or "What challenges have you experienced in the program?" I also coded instances of particular mindsets being reinforced or developed by program activities to understand how program inputs contribute to dispositions. For example, when creating norms, participants may discuss how everyone should agree to "be

receptive to feedback," or Facilitators might compliment participants on how open and vulnerable they have been.

To draw connections between these concepts and outcomes, I also developed codes for all outcomes observed while conducting the program evaluation, including, "Leadership development," "Job satisfaction," "Changes in school practice," "Changes in educator thinking," "Changes in classroom practice," and "Student outcomes." I assigned these outcome codes whenever an interviewee explicitly described an outcome, or when field notes displayed evidence of these outcomes being achieved. "Changes in school practice" included references to the implementation of new school-wide systems such as new data systems, new systems for teacher collaboration, or professional development systems. The code, "Changes in classroom practice" was assigned any time participants discussed changes to their instruction. In order to differentiate between changes in practice that were made by individual teachers on an ad hoc basis from coordinated changes done by the entire LPP team or done by teachers across a school, I included "ad hoc" and "coordinated" sub-codes. The code, "changes in educator thinking" was assigned when interviewees explained coming to a new understanding in terms of their approach to teaching or engaging in the process of improvement. For example, the following excerpt was assigned this code, "I think we get better at making goals… I think every cycle we go through there are less people that are resistant to it or are, like, 'Well, I can't do that. It's not working for me,' you know?" The code, "Changes in student outcomes" was applied when participants described changes to student behavior or academic achievement, usually in response to interview questions, "Have you seen any student results after implementing [change]?" Finally, to understand how LPP teams disseminated new knowledge across their schools, I included a code

for "Disseminating knowledge" and applied it whenever participants described transferring what they were learning with educators outside of the LPP teams.

To answer the third research question, "How do these changes vary across contexts?" I applied structural codes (Bernard, 2010) to all data sources. These included codes for new versus returning schools, grade levels, interviewee role (teacher, principal, Facilitator), host versus partner schools, research year, and triads versus larger networks. I also included a code for "Pre-LPP conditions," which I applied whenever participants described their schools' states before they entered LPP. I used the excerpts tagged with these codes, combined with school accountability data, to categorize schools as entering with lower or higher capacity. Schools that I categorized as having lower capacity were described by their principal and/or teachers in negative terms and were rated as "Developing" on the Quality Review for Teacher Teams and Leadership Development (indicator 4.2). After coding all transcripts and notes in my analytic sample, I explored differences between groups by querying text with specific codes assigned to just one group. For example, I reviewed all text coded with "Challenges" for host schools separately from partner schools to explore different trends between the two groups.

Emic codes. After coding an initial five transcripts, I revised my codebook based on descriptive coding, adding codes for new concepts that emerged from the data (Miles & Huberman, 1984). I added codes that did not fit in the categories already identified but related to ideas that came up repeatedly, including "Flexibility and structure," "Reason for joining LPP," "Program evolution," "Pacing," and "Suggestions for LPP." I also developed a series of sub-codes to identify more specific topics and mechanisms. For example, for "Challenges," I added sub-codes for the types of challenges that emerged from the data, including, "host-partner tensions" and "logistics and time." For "Sources of ideas," I added the sub-codes, "Interschool

collaboration," "external standards of practice," and "Facilitator." For "changes in school practice," I included the sub-codes, "Teaming," "Peer observations," "Data use systems," "Consistent instructional systems," and "Professional Development systems." I continued to add sub-codes while coding, which resulted in a final list of 115 codes. See Appendix B for the complete codebook.

Analytic Sample

The findings presented in this dissertation draw on what I learned from the entire sample throughout the 3 years of data collection—while engaging in observations and interviews,[5] while discussing emerging findings for the program evaluation with the research team and the central office LPP program team, and while writing, reading, and commenting on internal team memoranda for every fieldwork event. However, for formal analysis in qualitative software (Dedoose), I selected a sample of the data for analysis using the codes described above. I selected this sample in phases; after analyzing a portion of the data, I then expanded my sample to fill holes in my understanding. I describe this process below.

Selected interviews. I began by coding the transcripts from host principal interviews because host principals provide a broad understanding of how the interschool networks function; they interact with all other members of the interschool network, including all partner principals, the Facilitator, and the other LPP team members. The research team conducted interviews with most host principals in the sample except for the three triads that were only part of the study in the fall of 2014 and for one network in the third year. I coded 10 of the 12 host school principal or assistant principal interviews, eliminating two interviews that were with principals interviewed twice and for whom I believe I sufficiently captured their perspectives after coding

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[5] I attended about 60% of the observations and conducted or was present for about 80% of the interviews.

one interview. After coding the host principal interviews, I coded interviews from focal partner schools for each network. I began with principal and teacher interviews of the four schools for which I had 2 years of data, and then additionally coded interviews with other teachers, principals, and Facilitators from the focal schools' interschool networks that were referenced in those interviews to develop a more complete understanding of their work. I then coded a sample of interviews from other networks to ensure I was capturing diverse perspectives from across the years of the program. I selected these remaining interviews based on information from the host principal interviews that indicated they would reveal more information about emerging themes. I ultimately stopped selecting more interview transcripts to code when no new concepts were arising from the process. In the end, I coded 35 out of the 62 interviews with participants across 15 unique schools and across eight unique networks. Table 9, below, presents the interviews that were coded by year and interviewee role. Appendix C provides a summary of the content of LPP work for each of the 15 schools in the analytic sample.

Table 9. Coded Interviews by Year and Interviewee Role[a]

	Host principals /assistant principals	Partner principals/assistant principals	Host teachers	Partner teachers	Facilitators
2014-2015	3/3	4/6	3/4	2/7	1/3
2015-2016	6/8	3/4	2/4	3/12	3/4
2016-2017	1/1	1/1	1/1	2/3	0/1
Total	10/12	8/11	6/9	7/22	4/8

[a]Numerators present the number of interviews coded; denominators present the total number of interviews conducted. Multiple interviews took place in some schools and some interviewees were interviewed twice.

Selected field notes. I also selected a sample of field notes for coding. In order to understand how participants in interschool networks first developed relationships, I coded the set of first interschool site visit notes for every network in the sample for which we were able to observe the first interschool visit. The rest of the field notes selected for coding were identified because they were illustrative of major themes coming out of analysis of the interviews. For

example, I selected site visit notes that presented examples of joint work identified in interviews, and other notes that presented examples of tensions between host and partner school participants. I then selected a sample of notes from school team meetings for the four schools on which I had 2 years of data. For each of these, I selected school team meeting notes from the beginning, middle, and end of their participation in LPP in the hopes of understanding the progression of the schools' work over time. I selected schools for which I had the most data, because, even though I did not code all of the field notes for those schools, I had a much greater understanding of their individual work from actually doing the fieldwork and reviewing the summary memoranda throughout the project. In total, I coded 19 out of 101 sets of site visit field notes and 22 out of 81 sets of school team meeting field notes. These events took place at 20 unique schools and represented schools from 11 unique networks.

Generating findings. I developed findings, which are presented in the following results chapters, by identifying themes during the coding process as well as after the coding process, when reviewing excerpts of text assigned individual codes from across the analytic example. Findings are based on the most prevalent themes, exceptions to those themes, variations on those themes, and connections between themes. For example, when reviewing the excerpt assigned with the code "Dispositions and norms," I found many instances where excerpts also were assigned "Facilitator." By then reviewing excerpts of texts with both codes, I began to understand the various ways Facilitators worked to encourage certain dispositions, leading to findings about how LPP supports the development of dispositions through the Facilitator role. I also examined instances where the "Dispositions and norms" code co-occurred with "Challenges," which led to the development of a finding regarding how tensions regarding host and partner roles can inhibit certain dispositions. I followed similar processes for all major codes.

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As I coded, I also developed school-level variables related to implementation and outcomes, and categorized each school in the analytic sample according to these variables. For example, I categorized schools as having made coordinated changes to practice after coding a number of data sources related to a given school that provided evidence of coordinated work (e.g. an interviewee described how the entire LPP team implemented a new a practice). Categorizing schools in this way helped me to understand the amount of variation across my sample with regard to various aspects of program implementation. For example, all individual school teams within the analytic sample engaged in "joint work," but only some of the interschool networks did. Through this process, I was able to understand which achievements were common to all schools, as well as which ones were correlated with specific conditions and processes.

Finally, my findings were validated through reviews by LPP program team officials at the central office who read earlier versions of the dissertation and provided feedback about whether my conclusions aligned with their understandings. They did not require changes or make direct edits; they offered suggestions and I made the ultimate decisions regarding all content.

Validity and Generalizability

Due to the nature of my secondary analysis and the fact that selection decisions were made for the purposes of the program evaluation, there is a risk of selection bias. In particular, selection bias may threaten the credibility of the conclusions I hope to make since networks, focal schools, and interviewees were selected, in part, based on their level of engagement in the program. Thus, any conclusions I draw may not be applicable to policies that aim to influence schools and educators who may not have the levels of engagement found in the sample. However, the in-depth interviews and multiple observations allowed me to explore how even

these more motivated educators have been influenced by the program, as well as to investigate their views on how the program was impacting their colleagues, which provided perspectives about a larger group of educators.

Despite having a large qualitative sample, the extreme variation made it challenging to draw conclusions about specific types of schools since I have small numbers of each type (e.g. just one District 75 triad, just 2 larger networks, just 1 International Schools triad). Related to this issue, my study was also limited by the fact that the sample changed from year to year. I addressed these issues by focusing more on the schools that remained in the sample or returned to the sample between year 1 and year 3, and for which I had the most contextual information.

As with any research that involves fieldwork, there is a chance for reactivity, where research subjects may react differently than they would have if they were not being studied (Maxwell, 2013). Such reactivity was reduced during this study because of the intensive and long-term data collection that allowed research subjects to become used to the researchers.

Even without complete control over the sample selection and data collection methods, the rich data derived from the program evaluation enabled me to draw conclusions about how a district can provide supports for developing schools' professional capacity, and how schools and educators engage with such supports in different contexts. The following chapter describes the LPP program in detail, drawing on findings regarding program implementation from both the qualitative data and program artifacts.

Chapter 4 New York City Context and The Learning Partners Program

The Learning Partners Program (LPP) was designed to support NYC schools in the planning and implementation of changes in areas they identify for improvement. It aims to accomplish these objectives by empowering groups of teachers and school leaders to implement school-wide changes that they generate from interschool collaboration and a structured inquiry process. The district facilitates interschool collaboration by bringing together "host" schools with strengths in specific areas with "partner" schools seeking to improve in similar areas. It grants teachers the authority to engage in school-wide decision-making by placing them on "LPP teams" and giving them formal leadership roles called "Model Teacher" or "Master Teacher," which come with extra compensation, additional time away from their classrooms to engage with colleagues, and added responsibilities. The district also provides direct training and support to school teams through the position of central office Facilitators, experienced educators who guide participants through LPP. Other supports include professional learning opportunities on inquiry, leadership, and collaborative practices for teachers and principals throughout the school year.

Through all of these components, the district aims to not only foster specific improvements in school practices that can lead to gains in student learning, but to provide schools with the capacity for making ongoing enhancements. In this respect, the program intends to develop schools to become learning organizations, with collegial cultures that support self-examination, innovation, and ongoing access to external expertise from other schools in their Learning Partners networks. Below, I address my first research question by describing the political context in which LPP arose, how it is part of both a transition away from, as well as a continuation of, the prior administration's policies, the precursors to LPP, and finally, the program's components and intended outcomes. The information presented in this chapter is

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based primarily on publically available information on the DOE's website, LPP program literature, as well as from data collected for the program evaluation.

Shift Away from the Klein-Era Reforms

LPP's focus on providing supports for school improvement by facilitating interschool collaboration is part of an intentional move away from the school policies that preceded Chancellor Carmen Fariña's administration. The DOE administrations under Mayor Bloomberg and the chancellors he appointed, particularly Joel Klein (2002-2011), were known for strong accountability measures and a sharp focus on academic outcomes (McDonald, 2014; O'Day, Bitter, & Gomez, 2011; Klein, 2014). In contrast, Fariña's administration shifted to a more holistic view of schooling and an emphasis on capacity building. The shift is especially apparent in five reforms: the administration's framework for school improvement, changes to the school accountability system, changes to school support structures, the introduction of differentiated leadership positions for teachers and school leaders, and the establishment of programs focused on collaboration and capacity building, including the Renewal Schools Program, the Progressive Redesign Opportunity for Schools of Excellence (PROSE), Community Schools, and programs in the newly created Office of Interschool Collaborative Learning (OICL), which houses LPP along with two other collaboration programs.

The DOE created the "Framework for Great Schools" (the Framework), which replaced the prior administration's "Citywide Instructional Expectations" (CIEs). The CIEs were presented in an annual document that outlined instructional changes expected of schools each year, especially in regard to implementing the Common Core State Standards and a new teacher evaluation system (Goldsworthy, Supovitz, & Riggan, 2013). The current Framework, in contrast, presents broad features needed for school improvement including, but not limited to,

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rigorous instruction. It is based on the organizing scheme presented in Bryk et al.'s (2010)

Organizing Schools for Improvement, which derives from an extensive study on school reform in

Chicago where researchers validated 36 measures of school quality predictive of student

achievement in elementary and middle schools and grouped them into five elements necessary to

produce school improvement. The DOE adjusted the language of the elements to align with its

current initiatives, and developed six dimensions of school quality. These are presented

graphically in the Framework with Student Achievement in the center, surrounded by the

elements, Supportive Environment, Rigorous Instruction, and Collaborative Teachers, which are

then surrounded by Effective School Leadership and Strong Family-Community Ties, which are

surrounded by Trust (see Figure 2).

Figure 2. DOE Framework for Great Schools

Although the Framework's explicit acknowledgement of the numerous elements of

school quality differs from the Klein administration's more singular focus on academic

outcomes, the departure from the previous approach is not so straightforward. The prior

administration did not necessarily undervalue or ignore a variety of contributors to school

quality. Its theory of action was based on the premise that the central office's role is to set

common objectives, hold schools accountable to them, and allow schools the latitude to

accomplish them through methods best suited to their contexts. There were some exceptions to this approach, including the Quality Review, a site visit review process, which has continued under the current administration, where schools receive scores based on an extensive rubric that sets expectations for school processes for professional development, school culture, as well as academic systems. The Klein administration also required schools to establish collaborative inquiry teams of teachers that engage in a structured process to identify interventions to support subgroups of students. For providing direct capacity-building support to schools, the administration set up a school support structure through School Support Organizations (SSOs) and Children First Networks, where principals selected networks within SSOs based on their needs, regardless of geography, and in some cases, collaborated with other schools in their network (O'Day & Bitter, 2011).

Still, even these more process-oriented policies under the Klein administration did not have the focus on capacity building that exists under the current administration. Quality Reviews and inquiry teams provided schools with processes through which to self-examine, which is certainly a first step towards capacity building, but they do not necessarily provide schools with the supports needed to address the problems they identify through self-examination. Nor do they establish the trust and psychological safety necessary to get educators to honestly engage in such self-assessment practices (Bryk & Schneider, 2002; Evans, 1996). Networks were intended to support collaborative learning across schools, however a minority of networks reportedly functioned in this way (O'Day & Bitter, 2011). In contrast, the current administration has focused on providing supports for improvements, including placing a high value on establishing trusting relationships among educators in and across schools. Despite these distinctions, there is substantial overlap between the assumptions underlying the approaches of the Fariña and Klein

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administrations. Both recognize the importance of school-level actors, as opposed to outsiders, driving change, and both acknowledge the importance of self-examination as a first step towards improvement, but while the Klein administration coupled self-examination with strong accountability measures, the Fariña administration has sought to couple it with capacity building supports that can help enact change.

In addition to creating the Framework, the Fariña administration changed the school accountability system to align with the Framework elements and to remove the competition associated with the previous system. The Klein administration's "Progress Reports" assigned schools A-F grades based on multiple measures, including student progress on state tests relative to schools with similar populations, absolute student performance on state tests, Quality Reviews, and the DOE Learning Environment Survey (a survey administered to all parents, teachers and third through twelfth grade students). Fariña replaced the school Progress Reports with "School Quality Reports" that assign ratings of "excellent," "good," "fair," and "poor" in each of the six dimensions of school quality on the Framework, as well as on Student Achievement. The metrics used to develop the Progress Report and School Quality Report ratings are similar, but the packaging has changed significantly through the elimination of summative letter grades and the addition of multiple categories of school quality.

The Fariña administration's approach to capacity building, as a major district priority with greater involvement from the central office, comes through in its dissolution of the Children First Networks. The Networks were replaced with Field Support Centers that are geographically based and intended to provide assistance to schools in their area. In particular, they support the design of professional development (PD) for schools, especially during a newly required 80 minutes of weekly PD, part of the renegotiated city contract with the teachers union in 2014.

Under this new system, schools are required to provide teachers with more PD, and they have less discretion in determining the nature of the PD, as support from Field Support Centers is supposed to be vetted through district Superintendents (Viega, 2017).

Another capacity building approach comes through in new leadership positions that were also established in the 2014 United Federation of Teachers contract. Teachers can apply to be Model, Master, or Peer Collaborative Teachers and principals can apply to be Model or Master Principals, roles that come with salary additions and responsibilities intended to spread teacher leaders' expertise across faculty in their schools, and principals' expertise across schools. Assistant principals can apply to be Assistant Principal Ambassadors, who are assigned to Renewal schools for 1 year of support (NYCDOE website, Career Opportunities for School Leaders, n.d.). These positions are presented as "new career pathways," providing greater role differentiation for both teachers and principals, but they also emphasize peer-to-peer collaboration and learning.

Teachers are eligible to apply for the leadership positions if they are current, full-time educators in the DOE, are tenured, and received an Advance teacher evaluation overall rating of "Satisfactory" or better. The application process involves submitting an online written application and participating in an in-person interview with a joint DOE-UFT selection committee. Principals then select from the pool of qualified teachers leaders and make final staffing decisions. Principals apply for Model and Master positions by completing an online application and are selected by their Superintendent, subject to approval by the Chancellor. The salary additions vary for different roles and leadership tiers: Model Teachers receive $7,500 for the year, Master Teachers receive $20,000, Model Principals receive $15,000, and Master

Principals receive $25,000. Teacher leadership positions last up to 2 years, at which point teachers must re-apply (NYCDOE website, Teacher Career Pathways n.d.).

To further increase collaboration and provide more capacity-building supports to schools, Fariña established the Office of Interschool Collaborative Learning (OICL), which, according to the Office's website, "builds the capacity of school communities within a focus area by providing structured, supportive opportunities for collaboration between schools, tailored coaching, leadership development, resource sharing, and constructive feedback" (NYCDOE, Interschool Collaboration website, n.d.). The office administers programs that create networks of educators within and between schools engaging in various forms of structured, collaborative problem solving. In addition to LPP, OICL houses the Middle Schools Quality Initiative (MSQI) and the Showcase Schools Program (SSP). MSQI began in 2012 as a partnership between the New York City Council's Middle School Task Force and the DOE. It supports collaborative teams of teachers implementing research-based literacy practices. SSP facilitates visits to "host" schools by teams from other schools interested in learning about specific practices, which is similar to the LPP model, although the partnerships between schools are not sustained for as long or with as much intensity as in LPP. Another iteration of LPP, The District-Charter Collaborative (DCC) was also recently added to OICL's programs. DCC supports collaboration between small networks of charter and district schools focusing on common problems of practice.

Outside of OICL, three other new programs were established shortly after Fariña's administration took office, which also exemplify the focus on capacity building. The Renewal Schools program aims to support 94 schools performing in the bottom 5% in the state by providing increased accountability and oversight as well as partnerships with community-based organizations, mental health services, and extended school days. The Progressive Redesign

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Opportunity for Schools of Excellence (PROSE) allows schools that have demonstrated success

to innovate through increased flexibility in the UFT contract and in DOE regulations, with an

emphasis on collaboration. And the Community Schools initiative involved transforming almost

100 schools into "neighborhood hubs" where families can develop greater social ties, access

social services, and exchange resources. Through all of these programs, the district creates

formal links between traditionally siloed schools and communities, thus creating education

improvement networks where communities of educators working on similar problems in

different contexts learn from one another to discover and implement solutions. Unlike the

Children First Networks, these new forms of collaboration involve more district oversight

regarding which schools collaborate with each other, as well as in terms of the type of

collaborative practices in which they engage.

Precursors to Learning Partners

As much as Fariña's changes are a departure from the approach of the Klein

administration, the core idea of developing collaborative communities of educators engaging in

inquiry grew out of previous DOE initiatives. Most notably, LPP derives from the work that took

place in Community School District 2 in the 1990s, where Fariña worked under Superintendent

Anthony Alvarado. Numerous scholars have chronicled the story of District 2 because of

schools' significant academic gains during Alvarado's 11 years there (1987-1998) (Elmore &

Burney, 1997 & 2002; Fullan, 1997; Liebman & Sabel, 2003; Malloy, 1998; Stein, Hubbard, &

Mehan, 2004). Elmore & Burney (1997) describe how District 2 provided educators with

structures and supports to seek and develop new knowledge in service of improving instruction.

The primary supports included opportunities for collaboration both within and across schools, as

teachers were given time to observe each others' classrooms and to exit their buildings and see

practices in new contexts, as well as time to engage in "the slow process of instructional improvement," which involves accessing expertise from various sources, planning, implementing, and then reflecting on what's learned. In this sense, even though the goal of the reforms in District 2 was to improve instruction, there was also a culture shift towards an ethos of continuous improvement. Elmore and Burney wrote,

> District 2 staff don't say exactly what they regard as the ideal end state of systemic instructional improvement, but presumably it is not a stable condition in which everyone is doing some version of "best practice" in every content area in every classroom. Rather, the goal is probably something like a process of continuous improvement in every school, eventually reaching every classroom, in which principals and teachers routinely open up parts of their practice to observation by experts and colleagues, in which they see change in practice as a routine event, and where colleagues participate routinely in various forms of collaboration with other practitioners to examine and develop their practice. This is clearly not an end state in any static sense, but rather a process of continuous instructional improvement unfolding indefinitely over time (p. 11).

As this quotation illustrates, Alvarado and other District 2 leaders aimed to create conditions in schools that allowed for ongoing enhancements, and they did this by changing the ways that teachers engaged in their work as well as providing a unifying focus related to a specific instructional goal. Culture change was not expected to come in isolation; it happened as part of the process of instructional improvement, which was both necessitated by and reinforcing of academic changes. Only with this approach could the shift towards "see[ing] change in practice as a routine event" happen. Fariña drew on her experience with District 2 in later efforts. When she was Deputy Chancellor of schools under Klein in 2005, she began the Collaborative Communities of Practice initiative, largely modeled on her experience in District 2, where schools from each region that were exemplary in specific criteria, including school culture and strong academic outcomes, were selected to host visitors looking to improve in those areas (Fariña & Kotch, 2014).

At about the same time as the Collaborative Communities of Practice initiative, the DOE instituted collaborative inquiry teams where teachers systematically identify and address skill gaps among sub-groups of students by examining student achievement data and student work and then planning instructional changes based on this evidence. These changes were meant to produce improvement on a small scale that could then be spread across school communities. The model was based on a program established by Baruch College and New Visions for Public Schools known as the Structured Apprenticeship Model (SAM) for school administrator training (Talbert, 2011; Panero & Talbert, 2013). The program was implemented gradually between 2007 and 2010, when all schools and 90% of teachers were expected to participate in inquiry teams. Although inquiry teams are no longer officially required, they continue to exist in various forms across DOE schools, and schools are encouraged to engage in inquiry through various resources, including the "Vision for School Improvement," a document available on the DOE website that explains how to mobilize the Framework for Great Schools.

The Learning Partners Program: "A Signature Initiative by Chancellor Fariña"

On the one hand, LPP can be understood as the culmination of Chancellor Fariña and New York City's previous experiences with teacher collaboration, school networks, and inquiry initiatives. The Chancellor certainly valued the program as one that represented her core beliefs about how school improvement can happen through respect for the expertise of educators and collaboration, and early on her tenure, referred to the program as her "signature initiative." On the other hand, with the focus on interschool collaboration, it is part of a more recent wave of initiatives shaped by the recent popularity of improvement science, which places value on both inquiry processes as well as education improvement networks. On its website and in program materials, the 2017-2018 LPP mission is stated as:

The Learning Partners Program (LPP) is designed to leverage the rich reservoir of expertise that resides in our school communities to improve student outcomes. By engaging networks of schools in structured interschool collaborative learning experiences, schools in our system acquire the tools and skills to solve problems of practice.

The mission references one of the key program elements, interschool collaboration, and indirectly references its other two, teams and inquiry, the mechanisms for solving problem of practice. In written program materials, LPP presents these program elements as driving towards the following four long-term outcomes:

1. Strengthen school capacity to engage in continuous improvement

2. Improve school and educator practice and student outcomes

3. Establish a system-wide culture of collaboration

4. Develop strong school and teacher leaders

Together, the core elements and outcomes comprise an "LPP Framework," created by the central office LPP program team within the Office of Interschool Collaborative Learning (OICL). The program team is made up of program directors and Facilitators who work directly with LPP schools, as well as other program support staff. The program team is responsible for all LPP messaging and resources that go to schools, as well as for changes made to the program over the years, although they collaborate with other offices within the Division of Teaching and Learning to ensure alignment across central office initiatives.

The LPP Framework serves as a logic model for the program, as well as a set of expectations for schools. This information is presented in various program documents, often with program outcomes presented first, followed by descriptions of the program elements. The LPP Framework is distributed to schools at program orientations, referenced by program Facilitators throughout the course of school year, and available to all schools on a shared platform (Google Drive) for program resources. Each element (school teams, interschool collaboration, and CoL)

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is presented with common "practices" or expectations for processes that all schools are supposed to carryout. Below I first describe LPP's application and matching process, and then describe what these three program elements entail in more detail based on the program literature and the data collected during this study.

Application, Selection, and Matching Processes

When principals apply to be part of LPP, they apply for their school to either be a host school or a partner school, and they state their intended Learning Focus Area(s) (LFA) for their potential work in the program. Schools are accepted after members of the central office program team review applications and conduct school visits. Host schools are selected based on their demonstrated strength in their LFA, as they are asked to describe how they excel in this area in the application. They are also selected based on their experience in supporting collaborative adult learning. The application asks schools to "Describe successful experiences your school has had in leading adult learning - either with your own staff or with another school community," and to provide examples of improvements they have made in their schools. Site visits further assess potential host schools' capacity for supporting other schools, and are used to gather information about what partner schools they could work with in an interschool network. Partner schools are also assessed based on their demonstrated readiness to engage in collaborative learning, as well as their openness to engaging with other schools.

Schools with similar intended LFAs and, in most cases, schools that serve the same grade levels, are put together in networks. In the first year of the program (2014-2015), schools were asked to rank other matching criteria in terms of importance, including, geographic proximity, similar student population, being in the same network, having the same superintendent, being with a school they already knew or had worked with previously, and schools were given an

opportunity to list particular schools with which they would like to work. Schools applying to be

host schools were additionally asked if they were interested in working with partner schools with

new principals. In the following 2 years, schools were not asked to list these preferences, and

matching was primarily based on LFAs.

The options for LFAs varied slightly from year to year. During the first year of the

program, schools were asked to list two potential LFAs from the following list:

1. Supporting **teacher growth** – making professional learning part of every teacher's experience
2. Developing **teacher and assistant principal leadership**
3. Using the **inquiry process** to develop and monitor approaches to improving student outcomes
4. Addressing **gaps between where students are and the expectations of the Common Core** through curriculum alignment and/or targeted academic interventions
5. Supporting **English Language Learners** both in and out of the classroom
6. Supporting **students with disabilities** both in and out of the classroom
7. Providing **academic interventions** for struggling students
8. Strengthening instruction in a **specific content area** (e.g. mathematics, literacy, arts, science)
9. Fostering **student voice, ownership and independence**
10. Building students' **social-emotional development**
11. Creating **positive school culture**
12. Fostering **post-secondary readiness and retention**, including college guidance and college preparatory curriculum
13. Promoting **family and community engagement**
14. Building **external partnerships** to enhance student opportunity
15. Planning for **strategic use of resources** including, staff, physical plant, and budget
16. Addressing historically **difficult-to-move** school-based problems

In the second and third years, schools were no longer given the above list of options, but instead,

to better align LPP with the DOE Framework for Great Schools, were asked to select one to two

of the Framework Elements in which they would like to focus (Rigorous Instruction, Supportive

Environment, Collaborative Teachers, Strong Family-Community Ties, Effective School

Leadership) and to describe more specific leaning focus areas, which they could come up with

themselves. The application provided example LFAs for each Framework element:

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Framework element	Example of related learning focus areas
Rigorous instruction	Supporting students with disabilities both in and out of the classroom
Supportive environment	Improving school tone and culture through the implementation of socio-emotional learning curriculum in the elementary classroom
Collaborative teachers	Supporting teacher growth and shifting culture by moving departmental meetings from compliance to professional learning
Strong family-community ties	Serving students and families in the community through partnerships and innovative practices
Effective school leadership	Developing and strengthening teacher leadership in a high school setting

In 2016-2017, of the Framework Elements listed on applications (schools could list two), 34% were "Rigorous instruction," 32% were "Collaborative teachers," 14% were "Supportive environment," 10% were "Effective school leadership," 6% were "Effective synthesis of all Framework elements," 4% were "Strong family-community ties." Overall, the matching process supported schools' development of common focuses across networks, but in some cases, schools' focus areas would shift once the school year started, leading to some challenges in finding alignment across schools. Chapter 6 discusses these challenges, as well as how they were addressed, in greater depth.

School Teams

In the LPP Framework and on the Memorandum of Understanding (MOU) between participating schools and the district, schools are instructed to develop an "effective school-based inquiry team" made up of teacher leaders and school administrators who meet at least twice each month to move through their CoL inquiry process, plan for interschool site visits and reflect on those visits. LPP teams tend to consist of the school principal, assistant principal(s), and Model or Master teachers, and less frequently, of teachers without these designations. Only the hosts of the larger networks of "LP plus" schools had Master Teachers and Master Principals, while triad host schools may have Model Principals, and almost all LPP schools in the program may have

Model Teachers, with the exception of early childhood centers. Although not technically part of the school-based LPP team, central office Facilitators who work with schools across the interschool networks often join LPP team meetings to provide support or guidance, and to communicate what is happening across schools. The LPP Framework delineates the roles of teachers, assistant principals, and Facilitators, and lists their duties for participating in LPP team meetings, as well as in regard to planning for and engaging in interschool collaboration, in inquiry, and the transfer of lessons learned from LPP to larger school communities. It lists different responsibilities for teachers and principals in host versus partner schools, discussed in more detail below in the section on interschool collaboration.

Although the program provides guidance regarding participation in school team meetings, it allows for considerable flexibility in the way school teams function. In some schools in my sample, principals facilitated school team meetings, moving the team through agenda items; while in other schools, a Model Teacher would emerge as the leader and run meetings. This often happened when principals were not able to be a consistent presence at meetings. Most meetings were democratic, with all team members participating and playing a role in decision-making. And for some schools, particularly those entering the program with less experience in teacher collaboration and teaming, the Facilitator would lead meetings and gradually encourage team members to join him or her in drafting agendas and leading agenda items.

In the beginning of the school year, school team meetings often involved norm-setting discussions about topics such as preparation for team meetings (e.g. "Prepare agenda 24 hours in advance;" "Complete all pre-work"), participation during team meetings (e.g. "Don't hog the mike;" "Listen without a plan in your head,"), and follow-up after team meetings (e.g. "Complete next steps"). Many teams in my sample also defined roles for various members of the

school team, identifying who would be responsible for note taking and, in the second and third years, for documenting CoL inquiry work. Early discussions often also included identifying the more specific focus areas in which the schools will work. As the year progressed, these team meetings also involved preparing for interschool site visits by figuring out what the school team would present, in what areas they would ask for feedback, and what activities and materials needed to be prepared. And after interschool site visits, teams used the biweekly meeting time to reflect on what they experienced, and to discuss and refine any action steps that may have come out of a site visit. Finally, throughout the year, school team meetings were used to plan for and reflect on any implementation of new practices, as well as any evidence collected on the efficacy of those practices. These discussions were often done through protocols, which ensured that all members of the team had an opportunity to participate and kept conversations focused. Many protocols were introduced by Facilitators and included tools from the National School Reform Faculty (NSRF website, n.d), including the Consultancy Protocol used to solve problems, and the Final Word protocol, used to have a structured conversation about a text. Other protocols came from McDonald, Mohr, Dichter, and McDonald's (2007) *The Power of Protocols*, and still others, particularly those used for identifying root causes to problems and potential changes to practice, were "improvement science tools" from Bryk et al.'s (2015) *Learning to Improve*. Protocols were part of the LPP culture, and over time, schools in my sample that initially were not familiar with them would learn about them from Facilitators and other schools in the network, and then would use them more and more.

While all schools in LPP are meant to progress towards the goals they set for themselves, and all schools within an interschool group are meant to work together to achieve their goals, host schools are meant to play an even more supportive role in relation to partner schools. At the

beginning of the year, especially, host schools often provided direct assistance to partner schools and took a lead in planning initial interschool visits and events. Thus, school team meetings for host schools were often more focused on planning how they will support partner school teams, while school team meetings for partner schools were often more focused on their own inquiry process.

For every focal school in my sample for which the research team regularly observed biweekly team meetings, school teams engaged in what could be categorized as "joint work" (Little, 1990) where all members worked collaboratively toward a goal that could not be reached had they worked alone. The inquiry structure, discussed in more detail below, combined with the expectation to meet every two weeks, ensured that the collaborative work took on this co-dependent and purposeful nature.

Interschool Collaboration

The major mechanisms for interschool collaboration are interschool site visits, monthly full- or half-day events where the school teams from all schools in a triad or quad visit one school to engage in activities related to the triad LFA and to each school's inquiry process. For larger networks, all schools would occasionally come together for some visits, but based on formative research findings that demonstrated schools were more likely to sustain collaborative work in smaller networks, the DOE recommended that LP plus networks split into sub-groups of smaller learning communities from across the schools. During site visits, the hosting school team typically provided background on the school, often including a description of the school's "journey" that led it to its current state. The team also often provided a "lens" or guiding question for the visit that related to the LFA and the school's current work towards its goals. With this lens in mind, school teams participated in various activities, which included lesson

observations and debriefing sessions, analysis of videoed instruction, workshops, discussions of texts, feedback exchanges, data analysis and team- and trust-building activities. As with school team meetings, most activities involved structured protocols, although those used at site visits tended to encourage "low-inference" observations before critical feedback was exchanged and next steps were developed. For much of a single site visit, participants from different schools interacted with each other, though there was also often time for individual school teams to plan how what they experienced could be adapted to their specific school context.

Site visits tend to be planned collaboratively by school teams who may have solicited input from other members of the network. Nearly all host schools and some partner school in my sample would email other schools in their network before building an agenda, asking if there was anything in particular that the other schools wanted to see. Partner schools tended to devote the majority of time at site visits soliciting feedback in areas they were working on, while host schools devoted more time to demonstrating their strong practices. In the beginning of the school year, the Facilitator and/or the host school principal would often provide a considerable amount of guidance in planning, particularly for schools new to the program. Facilitators, who engaged in weekly meetings at the central office where they aligned on their work, ensured some consistency across site visits of all participating schools, as they brought suggested agenda templates, protocols, and activity ideas. Table 10 on the following page presents all of the site visit activities observed, listed in order of frequency.

Table 10. Interschool Site Visit Activities

Common interschool site visit activities at the beginning of year	• Norm setting • Relationship building • Discussions of LFA and individual schools' goals within LFA • School orientations (presentations on school context, including student population, history of school in relation to LFA, school tours)
Common interschool site visit activities throughout the year	• Lesson observations[a] • Debriefing discussions where feedback is exchanged • School team planning • Presentation of focus or lens for site visit • Team building • Presentations on hosting schools' systems or practices related to LFA • Watching videos of instruction and discussing • Shared reading exercises • CoL inquiry updates • Reflection on individual site visit, and occasionally, on the work of the network thus far • Workshops about new practices (would often include simulations of instruction where teachers acted as students) • Discussions or interviews with students
Common interschool site visit activities at the end of the year	• Presentations on CoL inquiry findings • Discussions about what was learned from each other • Discussions of plans for following year

[a]Lesson observations took many forms, including brief walkthroughs focusing on single practices, or longer observations focusing on many practices; depending on a school's inquiry focus, these would be observations of LPP participants' classrooms or they would be observations of non-LPP teachers across the school. They almost always included structured note taking templates.

In addition to site visits, LPP encouraged other forms of interschool collaboration. Principals often engaged in monthly meetings where they discussed problems of practice related to both their schools' involvement in LPP as well as other issues in their schools. And some networks designed additional collaboration events, where school team participants engaged in extra, shorter visits to learn more about a specific practice that was introduced in a site visit. One triad in my sample actually planned an overnight retreat in upstate New York to further develop their professional relationships. Finally, interschool collaboration occurred electronically between in-person visits, as participants emailed about plans before site visits took place and shared notes and resources afterwards. In addition, the central office program team set up an extensive Google Drive system where each network had shared folders for each school that contained documentation of schools' inquiry, as well as other resources.

Considering interschool collaboration in terms of Little's (1990) continuum, all networks in the sample engaged in the sharing of ideas and resources. Some additionally provided direct aid and assistance to help each other solve problems and achieve their goals. And a small number actually engaged in joint work where networks collaboratively worked to solve common problems and work towards common goals. Schools engaging in joint work tended to have highly aligned focuses for their CoL inquiry. In some cases, a host engaged in joint work with a partner school, but partner schools did not engage in joint work together.

Cycles of Learning Inquiry Process

In the second year (2015-2016), the program team introduced the CoL inquiry process, which is partly based on research from the first year, and also derived from the Division of Teaching and Learning's training with the Carnegie Foundation for the Advancement of Teaching and Learning (CFAT). The CoL delineate stages and benchmarks that schools are encouraged to work towards through LPP. The stages emphasize creating common goals and using data to guide decision-making. The process begins with "preliminary work" when teams are expected to establish team structures and roles, engage in self-assessment to identify an evidence-based problem of practice within the network's LFA, and to set a year-long goal that, if achieved, would solve the problem of practice. Although schools are given the discretion to determine the content of their work, they are encouraged to use DOE accountability tools, including the Quality Review, teacher evaluation ratings, student outcome data, as well as feedback from the interschool network and the LPP Facilitator, to ensure they are working on an area in need of improvement. Then, teams engage in cycles, each of which begins with a planning phase where schools identify a smaller goal that they will address through a "change idea," or an idea for a new or refined practice, a plan for implementation, and measures they will

use to assess the efficacy of the change. Change ideas varied based on Learning Focus Areas (LFAs) and individual school goals. For schools working on content area focuses, change ideas tended to be specific instructional techniques, while for schools working on cultural changes, a change idea might be a new approach to teacher teams. In some cases, change ideas melded cultural and instructional focuses, as teachers, for example, led PD on new student engagement strategies, which both worked to strengthen teacher leadership and improve instructional practice.

After planning their change ideas, teams are asked to move on to the implementation stage, where they execute the change idea and collect data on the results. Much of the implementation happens throughout the school year in teachers' classrooms and in grade team meetings or department meetings. The LPP team members are then expected to "reflect and adjust" where they discuss and document how implementation went, analyze the evidence gathered, and based on what they learned, make modifications and determine next steps. In the last stage of the cycle, school teams are supposed to "share lessons learned" with the broader school community and with the interschool network. School teams then repeat the cycles either by building on the first change idea or by establishing new sub-goals and practices to achieve their year-long goal. The DOE provided flexibility in the pacing and number of cycles, with some schools engaging in one or two long cycles, and others performing many more; some schools implemented multiple change ideas at once, while others focused on just one. Table 11 presents three examples of the content of partner schools' work through the CoL. Appendix C presents more information about schools' CoL for the entire analytic sub-sample.

Table 11. Examples of CoL Content

School	Network LFA	Year-Long Goal	Problem of Practice	Cycle Goal	Change Idea	Data Used to Measure Progress
P.S. 8	Student empowerment	Develop students' ability to communicate with each other	Students are interacting negatively	Include student collaboration in lesson plans	Have students rate themselves on collaboration rubric	Lesson observations; collaboration rubric ratings
P.S. 24	Refining assessment to support rigorous instruction	By June 2017, 80% of standardized assessment students will increase Fountas and Pinnell reading levels	Students did not make adequate growth in reading	By November, 2016, 100% of targeted teachers use Fountas and Pinnell running records to accurately assess student reading levels	Professional development around Fountas and Pinnell and the Literacy Continuum	Guided reading tracking sheets used during small group instruction; informal observation
P.S. 38	Lesson planning, interdisciplinary instruction, social-emotional learning	Improve teacher practice and collaboration	We do not have an environment where teachers learn from one another	Create a professional setting for teachers to work together	Implement teacher-led professional learning series	Teacher surveys

CoL variation, breadth and pacing. As can be seen just from the examples in Table 11, schools' CoL work varied considerably in terms of scale and type. Some schools worked on major structural changes related to school organization, faculty collaboration or data systems across the school, while others worked on specific classroom practices. In the latter case, classroom practices may have cut across many subjects, where teachers worked on topics like differentiation, using data to inform instruction, or fostering positive interactions between students. And in fewer cases, classroom focuses were related to a specific subject area, such as improving student reading levels by improving guided reading practices. The focus area range was intentionally large because it allowed schools to work on any area of school practice they deemed most important and likely to improve through interschool collaboration. Also, allowing

for both structural, cultural and academic focuses was in-line with the administrations' theory of action behind the DOE Framework, which acknowledges that many elements of school quality—not just academic content—must be in place for school improvement. In the analytic sample, schools that entered LPP with lower levels of social capacity tended to focus on improving structures that would foster more collaboration between teachers; while schools that entered the program with strong professional cultures already in place tended to focus on classroom practices. Given the variety of approaches to the CoL, the pacing of the work varied greatly, raising the question of how long it takes to properly assess schools' progress in LPP. Of the schools in the sample that were in program for 3 years, the pace of change was much faster in their second and third years, especially for schools that initially worked on structural changes. Thus, many schools' progress in LPP can best be understood through multi-year investigation.

Presentation and implementation of the CoL. In the second two years, schools were introduced to the CoL at a "School Team Orientation" the summer before the school year began where Facilitators explained the stages and walked teams through a case study of a school in LPP. Then, Facilitators served as coaches through the CoL process as they attended many school team meetings and provided guidance on how to develop goals, change ideas, and data sources. In addition, schools received guidance on how to conduct inquiry through numerous CoL resources available through the Google Drive system. These included a CoL overview with the stages presented as checklists of key activities to be completed, a roadmap that provided recommended pacing and examples of goals, change ideas, and data sources, and examples of CoL from other schools. Schools were also expected to complete the CoL Documentation Tool, a Google spreadsheet that asked team members to record their goals, change ideas, predictions, data sources, results, as well as the thinking that went behind their decisions throughout the

inquiry process. Teams were encouraged to fill these out on an ongoing basis so that documentation served as an additional guide for moving through the CoL, as well as a record of schools' and networks' progress that the central office can access. In the third year (2016-2017), the central office program team had access to all schools' documentation and was able to track completion rates.

Although most schools in the research sample engaged in some form of inquiry where they experimented with new practices, reflected on the implementation of those practices, and then made refinements, the implementation of inquiry varied in the extent to which schools were aware of and used the language of the CoL, the extent to which they used data to measure their results, and the extent to which they documented their work on the CoL Documentation Tool. Not surprisingly, schools that received the most hands-on support from Facilitators were more likely engage in all CoL phases, use the CoL language, identify measures, and document their work. Schools that were returning to the program in the second year, who had experienced LPP without the CoL, and who were not receiving as much Facilitator support as schools new to the program, did not follow the process with as much fidelity.

Integration of the Program Elements

Although school teams, interschool collaboration, and the CoL are presented as separate program elements, they are intended to occur simultaneously. In the current year, the central office team produced guidance in a "LPP Handbook" that explains how the "core elements work together" as "School teams work on a problem of practice through the CoL inquiry process and accelerate the impact of their school improvement efforts by learning with their triad/quad." In my sample, many schools integrated the elements as they planned what they would do for inquiry and documented their work in school team meetings. At interschool site visits, schools

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learned ideas for changes and demonstrated the implementation of change ideas in lessons for other network members to observe and critique. Overtime, through its literature and messaging from Facilitators, the program encouraged more and more alignment between schools' focuses, encouraging greater integration between school-level inquiry and interschool collaboration.

Additional Program Inputs

While the three program elements of school teams, interschool collaboration, and the CoL organize participant expectations, they do not include all program inputs that contribute to program outcomes. In particular, the program provides funds to schools to pay for substitute teachers when LPP teams are engaging in site visits, to cover the cost of supplies and materials associated with LPP, and to cover release time for LPP participants who engage in extra work. In addition, the program offers a "professional learning series" for Model Teachers and for principals and assistant principals on leadership development and inquiry.

Program facilitators. The full-time Facilitators support three or four networks by joining their site visits, a sample of team meetings, and providing logistical support to ensure interschool collaboration takes place. Facilitators worked to establish trust among LPP participants by facilitating initial meetings, organizing team-building activities, and helping them to establish norms and address conflicts. Facilitators also provided ideas for interventions related to specific LFAs, as all of them have been former teachers, instructional coaches, and/or school leaders. Along with host school teams, Facilitators thus provided a starting place for intervention ideas. Across my sample, Facilitators took on different roles depending on their own styles, principals' requests and openness, and the needs of individual schools. Their roles ranged from providing minimal logistical support to being a consistent sounding board and collaborator in the planning of both interschool collaboration and inquiry. Facilitators tended to provide more support to all

schools towards the beginning of the school year, and then sustained support most with schools new to the program. They also differentiated their approach, providing more assistance to schools with limited experience with inquiry.

Evolution of the Program

LPP has experienced numerous changes that led to its current state, including alterations to its scale and program model. Over time, increasing numbers of schools have participated in the program. In the spring of 2014, the program began as a small pilot of 21 schools divided into seven triads. In the 2014-2015 school year, 11 schools from the pilot continued in the program, and it grew to include 73 schools that were again primarily grouped in triads, and in one instance, in a group of four. In 2015-2016, 42 schools remained in the program after reapplying, and the program doubled in size to include 146 schools in 23 triads, one group of two schools, one group of four schools and ten larger groups of 6-8 schools participating in the program. In 2016-2017, 130 schools returned for their second or third year, and the program expanded to include 190 schools in 28 triads, 6 groups of 4, 1 group of 2, and 10 plus cohorts of 5-9 schools. In the third year, the program team decided that schools could remain in the program for up to 3 years, after which time, they "graduate" from the program, but may apply for additional funding to support ongoing collaboration with their network.

Based on program officials' experiences and program evaluation findings from the first full year of the program, as well as a desire to scale-up the program in a thoughtful way so it could reach more schools while conserving district resources, the DOE made three significant structural changes to the program in 2015-2016. First, the district introduced LP plus, which allowed for more schools to participate in the program with less central office support, as the larger networks were led by experienced host schools that had been in the program in the first

year. Second, the career pathway program with the Model and Master teacher and principal positions was introduced as a core feature of LPP. Third, the DOE introduced the CoL as the primary mode for inquiry. Schools participated in inquiry during the first year, but the process was less codified and was mainly led by Facilitators. The intention was for schools to be able to execute the inquiry process in a more rigorous way and with less support from the central office. In 2016-2017, the DOE did not make as many structural changes, but provided the LPP Framework and increased expectations for documentation of schools' CoL, again in an effort to make inquiry more rigorous and more of an independent process. The central office also established an "LPP Homepage" on Google Drive, which linked more resources to schools about how to engage in inquiry.

Over time, the program has fine-tuned its approach for providing resources and processes for interschool learning, individual school change, and educator leadership development. It has become more structured in the way that it has codified an inquiry process and increased expectations for schools' documentation of their work, but it continues to avoid dictating the nature of the specific changes to practice that schools will implement. It rests on the assumption that schools will be in the best position to improve if they are given support to determine growth areas based on their perceived needs, and then given even more support to develop and execute customized plans for improvement. With LPP, support comes in the form of interschool networks, inquiry processes, and Facilitators who guide participants through the program. It also involves fostering new configurations among school staff, as it asks teacher leaders to work alongside principals and assistant principals, both within schools and across interschool groups.

In the following chapter, I describe how these various program inputs contributed to schools' development of conditions crucial for knowledge creation, as well as the challenges that

arose and how they were addressed.

Chapter 5 Conditions for Knowledge Creation

LPP intends to improve practice through school-based professional learning activities. Approaches of this type are premised on the idea that schools can tap into the knowledge that already exists among educators and use it to improve practice. LPP proclaims this viewpoint with its tagline, "The Answer is in the Room," printed on all program materials and repeated frequently by program officials at orientation and training sessions. However, not all LPP schools enter the program as knowledge-creating organizations with the conditions needed *to access* the answer in the room. In fact, traditional school organization, with fairly isolated classrooms, stands in direct conflict with knowledge creation and dissemination. Without exposure to others' practice, and with limited opportunities for teaching to be enhanced through observation and feedback, there are few opportunities for teachers to learn from their colleagues. This chapter describes how schools that entered the program with varying degrees of social capacity, including some with no teacher collaboration systems at all, developed conditions that de-isolated teachers and allowed for learning among colleagues and schools. First, however, it provides more background on the current state of teacher collaboration in New York City schools.

Over numerous administrations, district leaders have made efforts to foster knowledge creation in schools by setting expectations for principals to be instructional leaders who design meaningful PD, conduct classroom observations, provide evidence-based feedback, establish professional learning communities, create inquiry or action research teams, and build other teacher collaboration structures intended for professional learning. Indeed, at a LPP orientation session, Chancellor Carmen Fariña stated that, "The days of closing the door and working alone in your classroom are long gone." But even with such an understanding, and even if the

infrastructure needed for collaboration were in place, in order for it to yield positive results for students, we know that collaboration must occur in settings that have additional conditions, which are less about team structures, and relate more to the social relations among faculty, as well as the professional activities and processes that take place within these structures (Dufour et al., 2006; Hargreaves & Fullan, 2012; Kruse, Seashore Louis & Bryk, 1994; Leanna, 2011; Little, 1982; Seashore Louis, 2007; McLaughlin & Talbert, 2006; Stoll, 2006).

One of the ways the DOE encourages the type of teacher collaboration that could yield positive results for students is by including measures of teacher collaboration in its various accountability tools. With these, the district sends the message that collaboration is important, and by reviewing the criteria by which they will be rated, schools obtain guidance on what characteristics their collaborative structures should have. The monitoring tools include the Learning Environment Survey, which asks teachers about their collaborative activities, and the Quality Review (QR) and Principal Practice Observation (PPO), where schools are evaluated through site visits conducted by DOE officials who rate schools on a number of indicators that focus on school processes. The QR rubric highlights teaming and collaborative inquiry with the indicator 4.2, "teacher teams and leadership development," which is defined as, "engag[ing] in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning" (2016-2017 QR Rubric). Of schools that received a QR in 2015-2016 (n=473), 41% received a "Well Developed" rating, 49% received "Proficient," 10% received "Developing" and less than 1% received "Underdeveloped." In LPP and in my sample, the range in ratings was similar, although overall, they were lower (see Table 12 for a comparison of ratings).[6] As one would expect, the spread in ratings indicates that there is

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[6] QRs and QR summary data are publically available on the NYCDOE website.

variation in the quality of collaborative practices across the district, with some exhibiting robust

systems for professional learning and with others barely having systems at all.

Table 12. Ratings on Quality Review Indicator 4.2

	% Well Developed	% Proficient	% Developing	% Underdeveloped
Research Sample[a]	36	45	18	0
LPP (2016-2017)[b]	31	55	14	0
District (2016-2017)	41	49	10	<1

[a]Includes all schools (host and partner) in sample between 2014-2017 for which QR data is available (n=44) and presents most recent QR rating prior to entering LPP
[b]Includes all schools (host and partner) in LPP for which QR data is available (n=187) in 2016-2017 and presents most recent QR rating prior to entering LPP

Reading just a few of the QRs for schools receiving different ratings reveals how

collaboration varies from school to school and in what ways the district believes schools should

improve in this area. According to the QR reviewer for the one school in the city rated as

"Underdeveloped" for indicator 4.2 in 2015-2016, the school did not have consistent team

structures in place that engaged all teachers. Reviewers frequently described schools rated as

"Developing" as having team structures, but as not yet translating their collaboration into

changes in teacher practice or progress toward goals for students. For example, one QR reviewer

provided the following evidence for a "Developing" rating, "Although teacher teams follow a

Looking at Student Work protocol, which provides an opportunity for teachers to discuss

implications for individual students, across different teacher team notes, frequently, the next

steps are not instructional." For another "Developing" school, a reviewer wrote, "They stated

that despite their work in inquiry and the identification of student challenges, they did not have

the expertise to move the work to the next level." In sum, schools lacking in teaming and inquiry

may still need structures for faculty to engage in collaborative learning; or, even with these

structures in place, teachers may need support, including additional expertise, to make the

collaboration productive. Extant research confirms that teacher collaboration does not

necessarily lead to improved teacher practice or improved student outcomes. Educators may

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simply share ideas without any actual change in classroom practice, ineffective practice can be reinforced through collaboration, and team meetings can become venting sessions (Little, 1990).

LPP works against these pitfalls by providing program inputs intended to create the conditions necessary for collaboration that could lead to school improvement. Below, I discuss how program inputs contributed to the structural conditions needed for knowledge creation, which included the creation of new work arrangements and distributed leadership. I then describe how LPP encouraged certain dispositions and fostered trust among participants. Throughout, I also present the inhibitors to the development of these conditions. These findings are based on trends from the entire sample of 45 schools that became apparent in the memos written after all fieldwork events over the 3 years of research. Quotations from interviews and excerpts from field notes are taken from the sub-sample of 20 schools selected for more intensive analysis, which included extensive coding. The following findings focus on how LPP created the structural, dispositional, and social conditions for organizational learning, while the following chapter addresses the content of what schools actually learned.

Collaborative Structures & Distributed Leadership

A high-functioning professional community requires "new work arrangements," or opportunities for educators to interact with each other in service of improvement (Bryk, Sebring, Allensworth, Easton & Luppescu, 2010). Relatedly, effective schools have distributed leadership, where staff members in various roles take collective responsibility for student learning and school-wide functioning (Bryk, Sebring, Allensworth, Easton & Luppescu, 2010; Lee & Loeb, 2000; Leithwood, Mascall & Straus, 2009; Louis & Marks, 1998). The data from LPP schools in my sample indicate that the program developed new arrangements within and across schools, and in doing so, distributed leadership across faculties. Within schools, new work

arrangements existed in the form of the LPP team that met biweekly, and then, in many cases, additional arrangements spawned from the work done by the team where LPP teachers led other teacher teams, facilitated professional development (PD) for their broader school communities, engaged in coaching with non-LPP teachers, and conducted peer observations. Across schools, LPP's interschool networks of triads, quads and larger groups engaged in monthly intervisitations and often participated in additional collaboration, including principals meetings and coaching cycles between small groups of host and partner participants. Both within and across schools, program roles produced by the host and partner designations and the Model and Master Teacher and Principal positions also contributed to new configurations. See the summary of collaborative structures in which participants from the sample engaged in Table 13.

Table 13. Within School and Network Collaborative Structures

Within School Collaborative Structures	Interschool Network Collaborative Structures
• LPP team that meets biweekly (required by LPP), often with Facilitator • LPP team members lead school-wide PD • LPP team members are part of grade teams, content teams, and school leadership teams • Model Teachers on LPP team coach other teachers in school and engage in peer observations and feedback exchanges	• Interschool network that has monthly site visits (required by LPP), often with Facilitator • Principals' meetings • Additional site visits of smaller groups from network • Coaching between host principal and partner principal • Coaching between host Model Teachers and partner Model Teachers

Below I describe how LPP developed new work arrangements and distributed leadership at the school-level, and then how it did so at the interschool network-level. My discussion here is primarily about the structure of the arrangements, while the work accomplished within these structures is discussed in the following chapter on knowledge creation and dissemination.

Collaborative Structures and Distributed Leadership at the School-Level

At the school level, LPP developed new work arrangements through both its requirement that all LPP schools establish a team that meets biweekly and through the flexibility provided to principals regarding team composition, which allowed schools entering the program with

different capacity levels to form teams in ways that led to the dissemination of practices across their schools. In some cases, this involved creating new alliances among school staff who did not normally interact, and in other cases, involved providing greater voice to members of the faculty who did not normally participate in school-wide decisions.

LPP's presentation and reinforcement of the requirement to form a team that would meet biweekly encouraged the schools in my sample to sustain engagement with the program. The Memorandum of Understanding said that schools should create teams "with consistent membership and includes the LPP Model/Master Principal, Teacher(s) and other key staff" (LPP 2016-2017 MOU). The program reinforced the requirement through discussion of biweekly LPP team meetings at the program orientation, by stating what was expected to occur at biweekly team meetings in the LPP Framework, and by having Facilitators remind participants of the expectation to meet and by joining many of the meetings themselves. In the first full year of the program (2013-2014), Facilitators attended most biweekly meetings, and then in subsequent years, when the number of schools they supported increased from about six to 10 schools, they attended a sample, prioritizing meetings in the beginning of the school year, for schools that were new to the program, and for schools that required the most support in navigating the Cycles of Learning (CoL) inquiry process. One Facilitator explained that for schools that struggled to meet regularly [Kimberly,[7] January 2016],

> We go back to the MOU if somebody's acting – like a principal is saying, "I can't meet this time, I can't meet that time." It's like a good – tool to take out and to [say], "Listen, this is what we agreed on."

Of the focal schools in my sample, the majority sustained biweekly meetings throughout their time in LPP. Numerous principals and teachers reported that they felt accountable for holding their team meetings, and contrasted this to other team meetings that would fall by the wayside

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[7] Pseudonyms are used for all participant and school names.

because of other priorities. One LPP team member explained [P.S. 24 Instructional Coach,

March 2017]:

> I think that it has helped maintain a focus for us. So the things that you want to do, the things that you think you need to do... It's not, "Oh, we couldn't meet today," or, "Oh, we – let's push it back." In other words, "No. This is LPP time. We have to do it. We have to meet."

Of the minority of schools in my sample that did not sustain biweekly team meetings, these tended to be host schools in the first 2 years of the program. Members of these school teams explained that they did not see a need to meet regularly, except when it was time to plan for an upcoming interschool site visit at their school, or when they were reflecting on a recent site visit. These schools tended to already have strong team systems in place, including grade team meetings, content team meetings, and instructional cabinet or school leadership team meetings, which served to align practices and spread innovations across schools. They therefore did not see a reason for an additional regular meeting. In the third year of the program, LPP stated the expectation that host schools should engage in their own inquiry cycle related to the interschool network's focus area, as opposed to just supporting the partner schools' inquiry, and more host schools in my sample in that year engaged in regular team meetings. Some schools, both host and partner, that entered LPP with strong team structures already in place, melded LPP biweekly meetings with cabinet meetings or instructional leadership meetings, and reserved agenda items for LPP-related discussions.

LPP team composition. In partner schools especially, LPP teams differed from most other school teams because they were made up of staff members who did not normally have the opportunity to collaborate with each other on school-wide issues, and because they were selected by the principal with the express purpose of bringing about school-wide change. Unlike the fairly common grade teams or content area teams which involve membership based on role similarity,

LPP teams had greater role diversity and thus were more similar to instructional leadership teams or councils. However, rather than addressing the numerous school-wide issues that those teams tackle, LPP team discussions focused more on areas of inquiry that were tied to their LPP interschool collaboration.

Principals had the flexibility to form their teams in ways they deemed most advantageous for promoting school change, though they were guided in their decisions by program messaging. In a summer orientation for program participants in 2014, program officials provided written guidance that explained how the selection for teams should take into account four sets of criteria, including potential participants': (1) "stance," including whether they view themselves as learners and are positive and flexible; (2) "expertise," including expertise in the Learning Focus Area (LFA); (3) "diversity" across "leadership, seniority, expertise, role and background;" and (4) "leverage," meaning the ability to commit to the program and holding the respect of colleagues. In my sample, there was considerable team diversity with regard to role. At the elementary level, all LPP teams included representation from different grade levels. At the middle and high school levels most teams included teachers from across subject areas. And oftentimes, teams would include additional staff such as special education teachers, paraprofessionals, instructional coaches, or guidance counselors.

Regarding other aspects of team composition, school leaders explained a complex set of considerations that included which teachers' work was relevant to the school's intended LPP focus, which teachers were interested in and ready for leadership roles, and which teachers were most likely to influence their peers. In other words, teams were not generally created for the sake of simply professionally developing their members, but for the sake of using these members to develop new ideas that could be spread across the school. Principals, who ultimately decided the

team composition, were given the flexibility to prioritize different considerations that they deemed most important, and I saw team formation decisions differ based on the LPP focus area, as well as the culture and needs of the school.

Team composition for schools entering with lower capacity. Principals of schools that entered LPP at a lower capacity level (as indicated by teachers' and principals' comments about the school's current state at interschool site visits and in interviews, and by lower ratings on QR indicator 4.2) created LPP teams with the purpose of bringing about a school culture shift, and did so by strategically selecting team members who had the potential to influence their peers across the school. One principal of a large elementary partner school that began its year in LPP with a "Developing" rating on QR indicator 4.2 and that was self-described by an LPP team member as having a "compliance culture" explained the rationale behind the team's composition [P.S. 14 Principal, March 2015]:

> I had to keep in mind the political realities of the building…. If I was going to move this [LPP work], I needed to have [the union chapter leader] onboard with the work, so he wasn't sitting there as, as a stone thrower into the work. Thankfully, it's actually, at least with him, it's worked out because he's, he's actually been onboard with it, which, which has been great…. Could I have put a younger team or a team that would have really, really, really pushed the work even further than what it's been pushed? I could have. But I also have had to keep in mind the political realities because if I had just done that, then I had put teachers that I knew could have done it, they—they didn't have enough political capital within the building.

The P.S. 14 principal saw a distinction between teachers who were amenable to change and teachers who had political clout, and thus could inspire change across the building. While this may seem like a no-win situation, he viewed the LPP team as an opportunity to engage at least some of the veteran teachers in determining steps for improvement, and to make changes more likely to penetrate the rest of the school, as opposed to selecting a team of people more ready to innovate, but who would not have as much influence. Eventually, P.S. 14's LPP team did rebuild

grade teams and created committees made up of teachers from across the school that worked on various aspects of school culture. They also designed PD sessions to help team leaders across the school align on objectives and common practices for their teams. In the final interschool site visit for this school's triad, the observers from the other two schools saw some of the grade teams in action and then in their exchange of feedback afterwards, one teacher remarked on how, "[The LPP team] established a culture where [teachers] can ask [each other] for help." The principal described a similar understanding of the culture shift:

> School culture has really shifted-- started to shift. It's not where I want it to be, so I'm not making claims that this is some sort of utopia…. I'll give ya an example. I had-- you know, one of my APs was telling me that she actually has teachers inviting her into her classroom, "I want you to see this great work that I'm doing." …Now there's an atmosphere where people feel free to take these risks, and feel open enough and they feel comfortable… That was not anywhere near the case 2 years ago, at all…. My whole [goal] when I first started with [LPP] was that I [would] ha[ve] a culture where people felt comfortable enough taking risks-- really work-- looking out for each other, and really doing things for the benefit of the school, versus the benefit-- for themselves.

P.S. 14's principal viewed LPP as an opportunity to change the culture in his school to one with greater collective responsibility, which he was able to do by carefully composing an LPP team with the "political realities" of his school in mind. The ultimate culture changes were confirmed in the school's QR; the rating on indicator 4.2 increased to "Proficient" that year and the reviewer described the teams as having distributed leadership structures and as being focused on student work and learning. Although a number of different factors likely contributed to these improvements, the fact that the principal had the discretion to strategically select team members in service of creating new alliances between himself and influential teachers was critical.

In addition to strategically creating new alliances through LPP teams, principals used the LPP team to distribute leadership to staff in roles who were rarely given access to conversations about school-wide functioning, which also enhanced principals' abilities to garner enthusiasm for

major changes. For example, in at least two cases, paraprofessionals were included on LPP

teams. In one case, the school had recently experienced significant turnover among teachers, and

the principal was using LPP to change the school culture among a relatively new faculty. There

was much less turnover among paraprofessional staff, and she saw an opportunity to enhance the

culture change by having them on the LPP team. She explained [P.S. 15 Principal, March 2015]:

> When I thought about the staff as a whole and the high mobility rate, while teachers were leaving, paraprofessionals were not. They were a constant in the school building. So it was – and they're the individuals of our staff that have been here for the longest period of time, 20 years or more. It made sense for me to empower that group of people and strengthen their practice, both for the school culture, but also to improve student learning. So that was strategic. ...When I think about resistance and I think about if there's any group of individuals that were the most resistant against my vision it was the paraprofessionals, yet they weren't leaving, because in their minds they were born and raised here. You know, they started their career here, so it's important that I actually brought them into the work and I empower them. It's slow progress, but they are really feeling empowered for the most part.

Again, as with P.S. 14, the P.S. 15 principal believed that key members of the school community

should be "at the table" for the improvement work. And as a result of including paraprofessionals

on the LPP team, they received more training and responsibility. At biweekly LPP team

meetings, we observed the team plan a PD series that paraprofessionals would attend, as well as

discussions about new responsibilities for paraprofessionals in the school's library. An excerpt

from field notes from a school team meeting where teachers reflected on the changes regarding

paraprofessionals state [P.S. 15 School Team Meeting Field Notes, March 2015]:

> [The LPP group reflected on how] paraprofessionals are now taking ownership of the library. They used to "own" a system they didn't understand. Now they truly own the system, and are excited to have the power to do good work. Stories come out about paraprofessionals who are taking initiatives all across the school now, even advocating for classrooms that aren't theirs. Earlier in the year certain paras didn't feel like their work was being valued, and this was an opportunity to change that feeling.

The theme of using LPP to spread "ownership," arguably a pre-curser to leadership, came up repeatedly, especially in lower-capacity schools where there was an impression that staff members did not yet feel responsible for the functioning of the school as a whole.

Team composition for schools entering with higher capacity. The two examples above were from schools where principals reported school culture problems that needed to be addressed. For schools where the culture was less challenging, where structures for teacher collaboration already existed and staff described themselves as being collaborative and committed to improvement when they entered the program, decisions regarding LPP team composition were more motivated by the specific focus area for the LPP work than by a concern about resistance to change across staff. In fact, another case where paraprofessionals were included was motivated by instructional needs. Paraprofessionals were included in a District 75 host school team because the school was working on increasing instructional consistency across classrooms, and paraprofessionals taught many of the small groups in these classrooms. Similarly, schools that focused on academic subject-specific focus areas, tended to have more teachers from that area, while schools working on assessment included more instructional staff, and schools working on behavioral or social-emotional issues included school counselors. The flexibility of the LPP teams allowed these higher capacity schools to select team members more based on the specific changes needed than on the social dynamics in the school.

Challenges regarding team composition for higher capacity schools. Some of the principals of schools with higher entering capacity expressed challenges regarding selections for who would be Model Teachers because they had numerous teachers they deemed worthy of the higher status and compensation. Two host principals, in particular, one from a LP plus group and one from a triad, explained how they already had numerous teachers with leadership roles who

did significant out-of-classroom work in their schools, and so it was hard for them to select

Model Teachers. One host principal stated [P.S. 20 Principal, January 2014],

> The Model Teacher thing kind of threw us off a little bit when it got added on [in the second year of the program], because I consider all of our teachers [to be] model teachers, and we ask all of our teachers to do the work that Model Teachers are being asked to do. It's like, "Open up their classrooms, work with each other collaboratively, give each other feedback." We do peer observations and all that stuff. So that was kind of a new thing for us, and we're like, "How do we add this more hierarchical kind of position in our school where we don't really have a lot of those kinds of positions?" We have leadership for all of our teachers in many ways. We ask everybody to step up in some way. We have committees. We have teachers who are chairs of their teams, their disciplines.... But we decided the best way to approach it was through the team leaders and to talk to the whole staff about it and everybody was on board. So then these three people stepped forward to apply and become the Model Teachers.

Another host principal of a LP plus network with a very large school expressed a similar view

[P.S. 26 Principal]:

> [The Model Teacher position] is very problematic in some ways in a school like ours. I would hope in most host schools at least because the fact is we have like 30 or 40 teachers who could easily be Model Teachers here who take on different leadership roles. We have math leaders and grade leaders and tech leaders. The idea that these 6 people because they're doing Learning Partners are getting paid $7,500, it's a little bit odd. They aren't doing anymore work than like another 20 people at least in the school who I do pay per session but it doesn't add up to $7,500.

As the principals of P.S. 20 and P.S. 26 describe it, the Model Teacher position in LPP was not

asking teachers to do more than they already do, given that leadership was already distributed

across their schools. These tensions raise a question about the limits of the program's flexibility

to conform to the needs of each participating school. Both host principals did ultimately select a

LPP team, and defined the role of the Model Teachers relative to other teachers in their schools

in ways that made sense to them, but they did not agree with the lack of equity in compensating

just LPP teachers for taking on work that was similar to what other teacher leaders already did in

their schools.

Such challenges were not expressed among partner schools, although one partner school principal and another host principal explained how they struggled with the fact that they were not supposed to have instructional coaches receive the Model Teacher designation, as they thought coaches were in the best positions to do the LPP work and were deserving of the status and compensation. Again, the LPP program structure, intended to build teaming structures and distribute leadership, bumped up against the distributed leadership formats that already existed in some schools.

Peer influence. Social network perspectives state that social structures in schools, in addition to other resources for professional learning, impact both the implementation of reform and teachers' ultimate instructional decisions (Daly, Moolenaar, Bolivar, & Burke, 2010; Penuel, Riel, Krause, & Frank, 2009; Spillane, Hallet, & Diamond, 2003). The new arrangements produced by LPP team composition altered social structures, and in some cases, allowed for the spreading of ideas across schools. In all schools in the sample, teachers and principals were aware that it can be difficult to encourage teachers to change their practice, and discussed how, given this reality, it was advantageous to have teachers leading the changes. In particular, participants explained how there was value in teacher leaders making changes alongside other teachers who respected them. One teacher explained, [P.S. 24 Teacher, February 2016]:

> I have a working relationship already with the teachers. And this year we're asking them to do a lot not only towards our LPP but towards just our regular school goal. They are very willing because I think they also see that as much as I ask them to do, I also equally have to do it. I have to unit plan, but I have to teach every period of the day.

The P.S. 24 Model Teacher is embodying Little's (1982) notion of "inclusivity," where, "Even where smaller groups explore new options for teaching, they are mindful of the consequences for other staff and prepare thoughtful strategies for including others or for preserving their good will (or at least neutrality)" (p. 336). To be sure, it was common for Model Teachers to express

concern about how other teachers might react to suggested changes and they frequently discussed challenges teachers may experience implementing a new practice. The principal of P.S. 24 similarly pointed out how teachers were in the best position to inspire change [February 2016],

> I actually – I love the Model Teacher thing. And I tell you – from me, I think that having them in the classes with the teachers doing the work together, it really had a large impact. So they pulled a lot of teachers along because, "If I'm doing it, you can do it, too." So I think that that was totally an effective thing.

There was evidence of peer influence in a number of schools where non-LPP teachers made changes to their practice after engaging in some form of collaboration with members of the LPP team. This happened most systematically in schools where the LPP team served as a hub of teacher leaders who also engaged in other team structures and could therefore easily spread new practices across a staff. For example, in a District 75 school, which has multiple school sites, each LPP team participant worked at a different site and was responsible for bringing new practices and systems to each of their sites. In a number of other schools, LPP team members were also grade or content team leaders, and would communicate what they learned from LPP through these other team meetings. These examples demonstrate how encouraging peers to influence each other in the service of school improvement both supported and stemmed from distributed leadership.

New configurations among teachers and principals. Beyond providing an opportunity to flexibly create teams in ways leaders deemed necessary to generate school-wide changes, the configurations formed by LPP teams contributed to new learning opportunities for individual participants. They also produced leadership opportunities for teachers as they worked with the administration.

When asked about their impression of the LPP teams, teachers described how it exposed them to colleagues with whom they would not normally work. One Model Teacher from a host school explained the value of working with faculty that she usually did not get to see, and how this taught her more about her school [P.S. 16 Model Teacher, May 2015]:

> Our school is K-8 and it's not a very big school, but because of that, like this is logistical, but it's actually super-important, our kids – we have three different lunch periods, and what that means is that we just don't see each other – the teachers don't see each other very often. And a lot of our meetings are by grade band, our lunch is by grade band, our meetings are grade band, so right away just collaborating with other people on different grade levels in my school and bringing in that perspective of what's happening, I was just learning so much about this place that I work. And then also just getting more perspectives on my students' needs and knowing where they're coming from and where they're going by talking to teachers in other grades.

For this P.S. 16 teacher, the excitement of the LPP team was related to learning how to best serve students by drawing on expertise to which she did not normally have access. For other teachers, there was value in being brought together to think about school-wide change and work "alongside" the administration. One partner school Model Teacher explained, [P.S. 38 Model Teacher, February 2017]:

> I think before the LPP existed, there was never really a space for teachers to come together and talk about school-wide change. I never engaged in that. That was more administrators did that. When we joined LPP, we finally had a space for teachers to come together and talk about school-wide change, but also sit with the principal and talk about having this at the table.

As the P.S. 38 teacher pointed out, the team's charge was school-wide change, but what made this charge clear and likely to be carried out was the fact that the principal was part of the discussion. Numerous teachers spoke about getting to work closely with administration. The teacher who discussed working with different grade levels above went on to say [P.S. 16 Model Teacher, May 2015]:

> It's also getting the opportunity to work much more closely with administrators. In the past I've primarily worked with them in terms of, you know, them evaluating me, or I

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certainly have collaborated on hiring and other things. But being able to see them really think through these bigger issues and thinking it through with them and with the Facilitator, that was like a whole other level that I hadn't really experienced…. And also it was just figuring out it's very different for coaches and administrators to collaborate as opposed to collaborating with teachers, because our time is very different, whereas coaches and administrators can—I mean their schedule is a little more flexible and ours just isn't. So that whole experience is like, sometimes decisions were made when we weren't there…. One of the biggest things I saw out of this is the opportunity to work more with administration as collaborators. And you know, more people who do that the better it is for the school, because you just get a better perspective on their job. It builds a lot more trust.

Collaboration between teachers and administrators was significant for this teacher because it allowed her and her peers to be part of decisions that they were usually not involved in making. And in her mind, engaging in such collaborative decision-making served two important purposes: it allowed for better decisions, "you get a better perspective," and it developed trust. In observations, there were numerous examples of teachers reminding administrators of the challenges involved in asking teachers to implement changes given classroom-specific constraints related to co-teaching arrangements, schedules, lesson planning, or testing; and on the other side, administrators often alerted teachers to school-wide issues that they may not have considered from their vantage point in one grade or subject area.

Distributed leadership within teams. Teachers' participation in school-wide change was not only facilitated by the requirement to be part of an LPP team, but by the way principals distributed leadership to teachers in their management of the teams. Host and partner principals who had been in the program for at least seven months explained how they approached working with teachers in team meetings by "stepping back" and letting teachers decide the direction of the work while ensuring ideas aligned to the broader vision for the school and that plans were feasible. Although host and partner principals had similar perspectives, their descriptions of stepping back were quite different. For host principals, stepping back and empowering teachers

was part of their vision of leadership and what they thought was necessary for impactful change.

Partner principals expressed an overlapping view, but they also explained how they were

stepping back as part of a deliberate strategy to get their teachers to view themselves as leaders.

One host principal said [P.S. 16 Principal, March 2015]:

> In going into this work I think that people have to go into it really with a collaborative spirit. I think that it's not something that should be led by the principal as the person who is leading all of the work. I think it really has to – in order to get the buy in from the staff and for the school to really grow from the experience I think it really has to be more of a collaboration between the members of the team.

And another host principal explained [P.S. 20 Principal, January 2015]:

> I think you have to trust the process and you have to be able to let go a little bit. You really need that leadership style to make something like this successful, because then if not, it just becomes all about you and I don't really think those things tend to stick very well. So if you want it to be something your teachers are developing and is going to stay, it has got to really come from that.

Both the P.S. 16 and the P.S. 20 principals understood that in order for changes to emerge and

"stick," teachers would have to help create that change and principals would have to "let go."

They came into the program with this understanding, and the school team meetings at both of

these schools were driven by the various members of the LPP teams.

Partner principals also expressed an understanding of the value of change stemming from

teachers, but they spoke about their leadership styles more in terms of encouraging their teachers

to view themselves as leaders, and gradually releasing responsibility. For example, one partner

principal explained the following after being in LPP for 2 years [P.S. 38 Principal, March 2016]:

> Initially [LPP] was a lot more work in that I had to figure out how to get them to believe in themselves, be more confident, and actually carry out more of the work. So, as it's progressed I'm really stepping back more and letting them run with it to empower them. And they're doing a lot of—they're doing what I did last year with empowering them: They're doing that now with the other team leaders—the grade team leaders and the content team leaders.… And now, I find myself more—I'll be a devil's advocate and just throw the curveballs at them to make sure they're covering all the— they're covering all the pieces in the puzzle, so to speak, and I provide whatever support. So, now it's more,

you know, "What do you guys need? Do you need help with this? Do you need me to get someone to take care of coverages?" and things like that. So, initially, it was a more active role for me. Now, I'm actually stepping back, you know, letting them do the work.

The P.S. 38 partner principal transitioned from a role of helping to lead the team and empowering team members, to ensuring they had the resources necessary to do their work. In observations of school team meetings at P.S. 38 in the second and third years, teachers set agendas, did most of the talking, and made nearly all decisions about next steps. And, as the principal mentioned, the team began to take a similar approach with non-LPP teachers across the school through their grade and content teams and through teacher-led PD.

Another partner principal in only his first year in LPP, presented his role with the LPP team slightly differently [P.S. 14 Principal, March 2015]:

My role is to get out of the way. And what I mean by that is—you know—what I'm trying to do is take a backseat leadership [role during] this whole process, because again, keeping in mind the past history of the school, where it was more of an authoritarian system, you know, I know that I'm very cognizant of the fact that every time I open my mouth, people take it as, "Okay, this is the way it has to be." So what I try to do is—even at [LPP] meetings, I just try to keep quiet and let them talk, let them hash out. And you know, I'll talk when I need to talk…. I feel like my role is to—encourage the good things that have happened and kind of start weeding out anything—not that—[there] hasn't really been anything—negative…. I don't know what name you put onto that, but it's just—I try to get out of the way. And I try to control it. 'Cause they need to feel that they're empowered.

The P.S. 14 principal described how he emboldened LPP team members, but his perspective is less about their individual changes, and more about the change of tone in the school, and the change in leadership style across the school—from one that was more "authoritative" to one that is empowering. The LPP team structures, with Model Teachers defined as school leaders, and with shared ownership of agenda items encouraged by Facilitators, supported him in making this shift. While the four principals had slightly different takes on what led them to take a "back seat," they all did so, and thus distributed leadership to the members of the LPP teams.

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Observations of these school teams generally confirmed the principals' descriptions. In some cases, principals were mostly silent during team meetings, only speaking up to move the agenda along or to address questions related to logistics. Other times, they participated more fully, but they were not the final decision-makers, and instead, encouraged the group to propose ideas and determine next steps.

At the same time, there were occasionally challenges associated with principals and teachers working together on matters of school-wide policy, especially when the baseline level of trust was lower at the school. I observed instances of principals guiding most of the decision-making, as well as teachers hesitant to voice concerns. However, these cases were not the norm, and, these school teams distributed decision-making more and more throughout their time in LPP, as teachers became more comfortable in leadership roles, as Facilitators introduced protocols that encouraged teacher voice in both school team meetings and at interschool site visits, and as schools participated in interschool collaboration and became part of an interschool culture where leadership was distributed across the LPP teams from different schools. In scenarios where teachers were more hesitant to speak, especially, Facilitators tended to take a leading role in creating agendas for school team meetings and encouraging teams to follow protocols where everyone was asked to participate. For teams where principals already engaged all voices, Facilitators were less active during meetings. So, while principals' individual styles and approaches certainly impacted the ways teams engaged in LPP, the fact that teams brought administrators and teachers together to work on school improvement with guidance from Facilitators, may have reduced the influence of particular principal attributes on the extent to which leadership could be distributed.

Collaborative Structures and Distributed Leadership at the Interschool Network Level

LPP's central program input—the interschool networks required to engage in monthly intervisitations—is, in and of itself, a new work arrangement where educators are brought into novel configurations by virtue of being exposed to colleagues outside of their schools. The program went further, however, by defining how school staff from different schools should engage with each other in these arrangements. The nature of interschool collaboration was guided by program messaging, the host and partner roles, and opportunities for collaboration between principals, all of which altered traditional hierarchies and social configurations.

Facilitators worked closely with new LPP schools to help them create their initial interschool site visit agendas, which frequently included observing classroom lessons, watching videos of instruction, and engaging in various activities and structured discussions related to the schools' goals. In this way, interschool collaboration was in-line with Bryk et al.'s (2010) definition of "new work arrangements," as it provided opportunities to make practice visible and to foster discussion about practice. Through these activities, there was access to expertise that may not have existed within a single school, and in addition, there was the potential for more receptivity to new ideas than there might have been had collaboration remained within a single school. A few participants explained how they realized they were more amenable to new ideas when they came from other schools than when they came from within their own school. One partner principal of a transfer high school in her third year of LPP explained [P.S. 8 Principal, February 2017]:

> I think that sometimes hearing the same thing from people who are outside [my school] allows you to divorce the emotion of hearing it from people who are inside, and then hear it for what it is. I know that they have no ulterior motives for telling me; there's no self-interested reason to say, "You know, you should really think about this structure of how you might structure your school or structure how you do something," whereas when I hear, and this is probably my own bias and something that I have to learn how to look

through better…. When somebody internally comes in, and maybe I've had history when I've felt like they're asking me for things, that I feel like you're not asking for the reason that I want you to ask. You're asking for some other reason, and now you're telling me this thing that's probably not a bad idea, but I'm not hearing it because I'm wrapped up in what is it that you're trying to get out of this, whereas I can hear it from one of the other people [from another school] and there has to be some logical reason to this. I have to jump into this, because they don't have any reason other than it seems to make sense to share that as an idea.

This example certainly does not prove that interschool collaboration lacks competing interests that could stand in the way of an open exchange of ideas, but it does demonstrate how for principals especially, there was value to working with colleagues outside of the home school context. And not only did the P.S. 8 principal view interschool collaboration as a forum where she could be more trusting of new ideas, but through interschool collaboration, she acknowledged her own biases, and was potentially reexamining her receptivity to ideas from her own staff as well.

The structure of interschool site visits also fostered distributed leadership across the interschool group. Even though host school teams had a leadership role across the triad, whichever school—host or partner—was hosting a visit, and the schools took turns, their school team led the visit by creating the agenda, providing information about the school's context through presentations and activities, and facilitating various professional learning activities. Further, the hosting school team tended to share the responsibilities involved in hosting a visit. When leading activities, the principal, assistant principals, Model Teachers and other staff took turns speaking. Towards the beginning of the school year, site visit agendas were often planned with support from Facilitators who explicitly encouraged different members of the school teams to "own" different agenda items.

Host and partner roles. Interschool collaboration also brought about new configurations in the way it created program-specific arrangements that actually disrupted more traditional

hierarchies within schools. As with the within-school LPP teams, principals worked alongside teachers in the interschool settings, but in addition, the host and partner designations came into play at interschool visits. This aspect of the interschool structure put educators into roles unlike what they had experienced previously. It is unusual that a principal or teacher from another school would have any influence over the work of a principal or teacher from another school. By creating these designations, LPP interfered with informal rules of seniority. Although host school principals often had more experience than partner school principals, host school teachers did not frequently have more experience than partner school teachers. Thus, the normal markers of hierarchy, job title and experience, did not determine host-partner dynamics. One Model Teacher from a host school described how she was initially nervous about this dynamic [P.S. 16 Teacher, May 2015]:

> Something that made me uncomfortable [was] leading peers of teachers, especially if they are people who are much more experienced than I am, just in terms of, you know, who am I to be saying anything when they have all this experience. And I think what LPP did was really show me that it's not always about your teaching experience…. So whether they have more experience or not isn't necessarily so vital as long as you're respectful of that and aware of that and incorporate that into whatever you're doing.

Although this teacher had to overcome discomfort in leading her peers, she did ultimately step into a leadership role in the interschool group, guiding them through activities related to their focus area, and she had legitimacy for doing so with the "host" designation. By providing a new form of hierarchy through the interschool roles, partner school teams had an entire group of practitioners from host schools that they could turn to for ideas.

As with many aspects of the program, there was flexibility regarding the extent to which host schools played a distinct role from partner schools. In some instances, host schools took on a leading and teaching role only at the beginning of the school year, but as the year progressed, interactions between school teams became more democratic. In other cases, they maintained a

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teaching and leading role throughout the year. Often, when the host school had a well-established set of practices in the interschool group's Learning Focus Area (LFA) that was more advanced than the partner schools' practices, the relationship was more hierarchical. But when the schools entered at more similar levels, the relationship was fairly egalitarian with hosts just taking slightly more responsibility for scheduling site visits. On the other end, there were instances when host school participants played a direct coaching role with partner school participants. In one plus group, each host Model Teacher was assigned to a partner school, and monitored and supported the progress of that partner school's team. In one triad, each host Model Teacher supported one or two partner teachers from a partner school. The host and partner program roles allowed for such configurations, without requiring it of networks with more egalitarian cultures. Most schools in my sample navigated this flexibility smoothly, although others struggled with the ambiguity, discussed in a section on challenges below.

Principal collaboration. A key aspect of LPP's interschool collaboration was that it created new relationships among principals who were encouraged to form supportive communities in their networks. At minimum, program guidance required that principals or assistant principals participate in monthly interschool site visits, and most schools in my sample followed this requirement. Those that did not explained that scheduling and time constraints prevented them from leaving their buildings, and so the rest of the LPP team from these schools would occasionally attend site visits without their principal. Beyond the monthly visits, which often included time for principals to meet together separately from the rest of the LPP participants, many principals engaged in additional, separate principals meetings or calls, which included discussions of what was going well and what could be improved across the interschool network, and how they could make adjustments to upcoming intervisitations. These meetings

also often included discussions of "problems of practice" about specific issues that principals were facing and wanted to discuss in a community of peers. In principals' meetings, especially, the hierarchy between hosts and partners was less apparent, and instead, the dynamics of who was stepping into a support-seeking versus support-providing role depended on who was hosting a visit, or who had the most pressing problem at the moment. In some interschool groupings, the host-partner roles provided a default hierarchy where the host could take on more of a teaching role, but the roles were open-ended enough where principals' preferences, styles, and needs determined the course of interactions. Beyond these meetings, in some instances, host principals took on a coaching role with partner principals, speaking to them on the phone when problems arose or engaging in extra school visits, neither of which were required by the program.

In the majority of interviews with principals, respondents discussed how being able to engage with other principals about problems they were facing was one of the key benefits of LPP. Some explained how this was a new experience for them, as they rarely interacted with other principals, and two in the larger plus groups explained how the LPP network worked to replace some of the support they had received from the Children First Network structure that was removed under the Fariña administration and replaced by the geographically-based Community School Districts. One partner principal in a plus interschool group explained the value of the network of principals [P.S. 38 Principal, March 2016]:

> We've become a critical friends group kind of environment where if you see… that there's a strength in [another principal's] school that I might want to pick his brain on it, then I'll – you know, I'll just reach out to him. And vice-versa. So, there's been – a lot of that has been going on between us where we see something that I might need help with and just ,"Oh, let me pick your brain or let me see if I can get my teacher to work with your teacher or get some communication going."

The P.S. 38 principal was describing collaboration in the form of "aid and assistance" (Little, 1990), where educators collaborate when they need help in a certain area, and the person

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seeking help has the duty to request it. In contrast, host principals presented a different view of

the collaboration with partner principals, and demonstrated a sense of internal accountability

where they took responsibility for the improvement of not only their own school, but for the

partner schools, which is more in line with what Little described as "joint work." In one instance,

a host principal described how he conducted a mock QR at a partner school to help that partner

principal prepare for an upcoming one. In another instance, a host principal worked closely with

a partner principal to troubleshoot challenging dynamics she was having with her teachers. She

explained her attempts to actually influence the way the partner principal was engaging with her

teachers [P.S. 16 Principal, March 2017]:

> One thing that I've been trying to do with [a partner principal], for example, is try to have her see her teachers in a different way, because I think that she always has that supervisory stance, and it doesn't always have to be so top-down. I think that if you want to improve teachers' practice, there has to be a level of trust and there has to be effective communication, and then if that breaks down, then it becomes challenging.

In this case, not only was the partner principal in a new arrangement with a principal from

another school, but the host principal from P.S. 16 was encouraging the partner principal to

engage in new arrangements with her staff. Of course, the sense of responsibility to help the

partner school did not solely derive from the interschool work arrangement; this principal had

qualities that motivated and allowed her to take on this responsibility. However, the host role and

the interschool network provided a structure in which she could act on those qualities in ways

she otherwise would not have.

Challenges with host and partner roles. Host principals occasionally expressed how it

was challenging to be in a hierarchical role relative to partner principals without having any true

authority over them. When asked about the challenges of being a host principal, another host

principal from a plus cohort explained [P.S. 34 Principal, April 2016]:

> The difficulty is that being the host principal, I am not [the] partner principals' supervisors. There are pros and cons to that, right. I have already expressed some of the obvious pros to that where I can have candid conversations that they don't feel I am going to evaluate them nor judge them because that's not my role. I am not their rating officer. The difficulty of that is they don't have to do anything that you say. It's just they can take it as suggestions.… My recommendation to central was that they can play a role in clearly defining the expectations for partner schools rather than having the host principal be the bad guy and impose their will upon people and saying, "Hey, you need to do a better job of showing up to meetings. Even though I don't evaluate you and I am not your supervisor." That's a hard sell, right? It's about, "Come on, this is really important. Just trust me. This is part of what you signed up for." It's easier for Central to play a role in telling them this is what you signed up for than the host principal who has to work with these partners.… Somebody would make a lot of money if they wrote a book on how to handle the supervising of colleagues that were your peers.

Even though a number of host principals mentioned the difficulty of influencing partner principals, like the one from P.S. 34 quoted above, they did not express a desire to have an evaluative role over the partners, nor did they advocate for partner principals having to take their advice. In fact, among some, there was a sense that overcoming the difficulties associated with influencing peers was a new skill that host principals were working to gain. They had to come up with suggestions for partner principals that the partner principals would want to take, since everything in LPP was framed in terms of doing what the participants, themselves, believed to be beneficial for their schools. This may have encouraged more thoughtfulness and facilitative leadership skills among host principals. These skills were actually addressed in centrally provided trainings for host principals led by Professor Lee Teitel from Harvard University. In addition, host principals consistently explained how working among peers was crucial to maintaining trust. And, on the other side, when partner school participants were asked what allowed them to be open with the other schools, they frequently explained how they appreciated how they were the ultimate decision-makers regarding their work in LPP. When asked how the challenge of influencing peers might be alleviated, host school principals suggested that the central office more clearly communicate and enforce the expectations for program participation

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for partner principals, presumably so that the interactions between hosts and partners would be more consistent, allowing for more influential relationships to emerge.

Even without host schools having any formal authority over partner schools, there were times when partners questioned the legitimacy of hosts, and times when hosts wondered about whether they were being positioned to support partner schools appropriately. These difficulties arose especially when partner schools thought they should be hosts, as well as when host schools thought they were matched with partner schools whose focus areas did not align to the host school's strengths. For example, tensions arose in one triad where one of the partner schools had a very experienced principal who had applied for a host school role. Initial site visits at each of these schools included showcasing of practices rather than a more critical dive into what makes practice strong and how it could be improved. It was as though the schools were more focused on proving their successes than figuring out how each school could improve. The other partner principal in the triad reflected on this dynamic and explained [P.S. 24 Principal, February 2016]:

> I think that that in some cases [LPP] can lead to some kind of a competition. "Well, I could've done this. I could do this. I could be this. I could –" and then maybe the extra pressure of the host feeling like they have to be perfect and that because they're gonna be under a scrutiny.

The Facilitator of this triad understood the discomfort in the roles as being more about matching host strengths to partners' areas for growth [Kimberly, January 2015]:

> If the host doesn't feel as if she has something to offer, then it's gonna be like, "Oh my goodness, you know, I'm host, and I can't lead the school from the assessment process because that is not my strong area." And I think that's one of the reasons why – the whole [initial site visits are] more like for the host, you know. The host likes to say, "Okay, let's see all the schools so I can see what they want, and leverage my strength." And so that's one of the reasons why we keep saying, "Okay, let's see your school and your school." It does slow down the process because no one can move – you don't really move forward until you've visited all the schools.

There was a consensus among the three principals in this triad that the schools were not matched appropriately, according to a common enough focus area. In fact, the host principal of this triad suggested that LPP have a two-stage application process, first for hosts, and then once strength areas are identified, for partner schools who could apply specifically for schools with particular focus areas.

In sum, the new work arrangements produced by both the host and partner roles, as well as by the Model and Master teacher and principal roles involved challenges when participants did not know what the roles should entail or when they did not trust the legitimacy of the assignments to those roles. In order to mitigate these challenges, and to more generally create a climate of positive collaboration, LPP explicitly encouraged certain dispositions and worked to establish trust among its participants, discussed below.

Dispositions and Trust

Bryk, Sebring, Allensworth, Easton, and Luppescu (2010) describe specific dispositions necessary for school improvement in their concept of professional capacity. They define "normative dispositions" as "an orientation toward continuous improvement." They state that, "undergirding any major school improvement effort is a distinct normative stance among the school faculty—a set of beliefs about teachers' responsibilities as active agents for change" (p. 55). They operationalized this into two measures: "orientation toward innovation" and "commitment to school." In other words, educators with normative dispositions have a school-wide perspective, where they are not only responsible for the instruction of students in their individual classrooms, but for the instruction of students across the school, and in turn, for instructional practice across the school. Teachers with these stances are also interested in improving their own instruction, and thus are willing to examine it or have it be examined by

others in the service of improvement. All of this adds up to a belief in the necessity of communicating and collaborating with other teachers about practice, and opening up practice to the scrutiny of peers.

Yet such "de-privatization of practice" (Little, 1990) is challenging because of the psychological costs associated with it, including "the loss of individual latitude to act on personal preferences – or to act on personal preference unexamined by and unaccountable to peers" (p. 521). Such examination comes with real risks: risks to one's feeling of job security, risks of taking on a greater workload, risks of exposing students to experiments that may actually hinder their learning rather than help it, as well as risks of exposing any incompetence or ignorance (Evans, 1996; Little, 1990). Thus, collaboration and reflection requires an environment where teachers are provided time and compensation for engaging in improvement work, where they will not be penalized for making mistakes or lacking knowledge, and can thus open up about their challenges and engage in the hard work of attempting to remedy them. For these reasons, trust is necessary for educators to embody the normative dispositions described by Bryk et al. Colleagues must trust that the motivation for engaging in the risky behavior of de-privatization is to reach a common objective of improvement. And they must trust that their collaborators have enough expertise to bring them towards their objective (Tschannen-Moran, 2014). Attending even more to the psychological sensitivities involved in teacher collaboration, Little (1982) explains how educators should engage in reciprocity, defined as:

> In part, reciprocity means an equality of effort by the parties involved. In part, reciprocity means equal humility in the face of the complexity of the task, and of the limits of one's own understanding. But crucially, reciprocity means deference, a manner of acting and speaking which demonstrates an understanding that an evaluation of one's practices is very near to an evaluation of one's competence, and which demonstrates great care in distinguishing the two and focusing on the first (p. 335).

In my sample, LPP worked to build trust among participants by helping them draw the distinction that Little describes, as well as by fostering an orientation toward continuous improvement. The program supported the development of trust and the dispositions necessary for improvement though its messages and activities, delivered through program materials and through the work of the LPP Facilitators. The program also capitalized on formal leadership roles that recognized and rewarded individuals and schools that *already* have these orientations toward improvement. At the school level, it did so through the Model and Master teacher positions, empowering teacher leaders committed to improving their schools to influence their colleagues. At the interschool network level, LPP also took this approach through its definition of the host school role. The program recognized entire schools that can demonstrate and advocate for improvement-oriented dispositions to the partner schools.

Asset-Based Approach

Embedded in the orientation toward continuous improvement is a belief that educators need to strive towards ongoing improvement, regardless of their current state, and that they *can* learn and improve. LPP presented this belief as it honored educators' expertise and viewed them as the key resource for improvement. The program mission statement says this clearly:

> LPP is designed to leverage the rich reservoir of expertise that resides in our school communities to improve outcomes for all students. By engaging school teams in structures and processes that facilitate teaming, interschool collaboration and inquiry, we build school capacity to lead school improvement efforts.

The mission was printed on top of the LPP Framework, a document shared with all LPP participants at a central orientation in the summer; LPP facilitators presented the Framework to school teams at their first biweekly meetings, and it was available to them through LPP's Google Docs resource page. In interviews, LPP participants expressed knowledge and appreciation of this view, especially during the first year of research, Carmen Fariña's first full year as

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Chancellor (2014-2015). Some described it as a welcome change from what they perceived to be mistrust in educators' expertise under the previous administration. For example, in response to the question of why a teacher was interested in being part of the program, one Model Teacher at a host school responded [P.S. 10 Model Teacher, May 2015]:

> There's a lot of teacher blame and a lot of, "Teachers are incompetent. How bad kids do on these tests, teachers aren't doing their job." And it's like very exhausting to hear constantly or to feel like you're defending yourself, and the tone from this administration being like, "There are experts here"…is more humanizing for the profession, I think, and I think it's also almost more restorative in that it doesn't feel as much like it was a push on us and, "You're doing this," and it's like, "Let's look and see what we have in place and what's working and build up from there." I think there's a lot of things in education where everybody feels such a panic to fix it that they wipe the slate clean and try and start over new and don't let things get in place long enough to actually see if they work before they try the next thing. So I do like that aspect. Let's take the time and breathe and see what's working and what we are doing well.

This quotation illustrates the connection between the program's perspective regarding schools' ability to improve and educators' willingness to work toward improvement. The idea of changing practice is more palatable if it is presented as "building up" from what currently exists. It associates improvement with schools' current work, as opposed to associating improvement with a move away from existing practice. It also makes the change process highly contextual, where improvements are not about simply adopting external ideas, but rather, adapting ideas to a schools' particular context and assessing if they are effective in that context.

Developmental Perspective

Yet even with such an asset-based approach to change, schools could have still been resistant, and there was a risk that host school staff, in particular, may have thought they had little to learn from partner schools. LPP attempted to mitigate this risk both by encouraging all schools, host and partner, to be open to improvement, and by selecting host schools that were likely to embody this disposition. Such positive attitudes did develop across networks for many

schools in my sample, with only some evidence of resistance to the notion of always "having room to grow," particularly when there were problematic host-partner dynamics.

The host school designation was meant for schools that not only have expertise in a particular focus area, but that are committed to improvement, collaboration, and have experience engaging in improvement efforts through collaboration. As described in the previous chapter, the host school application asked schools to provide examples of how they support ongoing improvement, attempting to identify schools that already have some of the dispositions towards continuous learning, as well as the skills involved.

Once schools were in the program, Facilitators consistently championed the orientation toward continuous improvement for all participants. One Facilitator explained [Larry, May 2015]:

> I'm replaying a host principal conversation like, "Sometimes you'll have the answers, sometimes I'll have the answers, sometimes people on your team are going to have the answers, and sometimes we'll be learning from the partner school as well." ...I mean I know that programmatically we knew that we were pretty clear that we wanted in that first [interschool site visit] to ensure that things got off to a good start in terms of relationship building and positivity. We wanted it to be clear that the host wasn't just the only one who, like, the partners don't know what they're doing and they're learning from host who has it all figured out. ...I think that's one of the biggest values of interschool collaboration [in] Learning Partners is just this idea that... I mean, the metaphor for me is, as you're clearing trails on a mountain, for example, the first person who goes up, they're the ones who discover that there's a big boulder that you didn't see from the bottom underneath this tree; and maybe we want to either remove that or go around it. And then the next person who goes up has that trail can start from that level and go up from there rather than having to cut down that tree, or [having to] move that boulder.

Through the metaphor of the mountain, this Facilitator is presenting the developmental perspective of LPP—that school improvement happens along a continuum, and schools are at different places on that continuum relative to different areas of focus. And it is by interacting with people and schools at different points along the continuum, similar to Vygotsky's zone of proximal development, that schools may be able to learn how to anticipate and address obstacles.

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Expressing challenges. This understanding of the school improvement process as it

related to the distinction between host and partner schools came up repeatedly and was

encouraged by explicit messages from Facilitators at interschool visits and at biweekly team

meetings. At many initial site visits, Facilitators helped school teams to prepare and present

"journey stories" that explained challenges they overcame to get to their current state, and often,

what they hoped to achieve in the future. For example, during a site visit, one host school team

presented a PowerPoint and described the development of leadership and social-emotional

learning practices in the school. The school team's remarks are paraphrased in the following

field notes [P.S. 13 Site Visit, October 2014]:

> 6 years ago the school used to have a top-down culture with little buy-in. Compliance
> was a motivator. Grade teams existed "on paper only." Team meetings were lists of
> items, all administrative. Meeting purposes were frequently questioned. Teachers planned
> in isolation (now teachers share information to ease work).... No school-wide curriculum
> existed initially, and the only focus was academic – "whipping kids into shape." Students
> rebelled and felt as if no one cared for them and confrontations between teachers and
> students occurred often…. The host AP for middle school recited a Mark Twain quote –
> "For a man who loves his hammer, his only solution to every problem is a nail."
> Students had no voice in their experience and there existed no support systems for
> conflict. Suspension rates were high. Advisory was planned and programmed, but not
> implemented… A major point of emphasis in the [social-emotional learning] SEL
> changes was the branding of the school as a "Safe place where students wanted to come
> every day."

Such honesty about the prior struggles of host schools was common. It was also common for

host schools to point out that they have room to learn. And across interviews with host school

principals, themes came up about how host schools viewed themselves as open to learning from

partner schools. One host school principal explained [P.S. 20 Principal, January 2015],

> I think we all have kind of this idea that the work is never done. So there's not really this
> sense that we're the host school, like, "We know it all." I think we can all learn from each
> other. So we happened to choose this Restorative Justice approach because we've been
> doing it a little bit longer, but we still have a lot of work to do on it to.

When partner principals were asked about their views of the host school role, they frequently stated how they felt comforted by the fact that host schools presented themselves as having room to grow, even if they were further along in a particular area. A partner principal stated [P.S. 14 Principal, March 2015]:

> My understanding was that [the host school] was a school that has been identified as having whatever it is that the focus is-- that they had both systems in place, and in a maybe more developed way than the partner schools... I dunno if I ever saw them as "the model school," from the beginning-- I didn't think that, I just was thinking, "Okay, they-- you know," especially as I got to know [the host principal] in [the host school], "they got some really good systems in place."
>
> What I like about [the host principal] is that he will say to me-- I'll give ya an example, like, we were talking about-- you know, there's issues with my teacher teams, and he's like... "Yeah, my first grade team, I'm having problems with them." Just to hear him say that is validating, because it-- you know, because he doesn't come across as somebody, like, "Okay, I have it all figured out and it's perfect."

As this partner principal points out, host school participants did not just discuss challenges in terms of what they experienced in the past; in fact, many demonstrated openness to learning from the partner schools to fix current problems. In another example, at a principals meeting that took place during an interschool site visit, a host principal explained how he found that classroom teams of special and general education teachers were not utilizing the two teachers in the classroom in a way that would maximize student learning. Further, he admitted that he was unsure of what to tell his teachers to do to improve it, which led to a discussion among the principals about how they have approached co-teaching in their schools. In an interview about a month later, a partner principal who was at this meeting reflected on what she heard [P.S. 8, February 2017]:

> It is insanely rare in the DOE to have people talk to each other about the things that are not going well. I'm sick of hearing best practices. Come on, your best practice is not going to make my school better. It's us talking about the things that aren't working well and the things that we've tried. ...It wasn't like I'm the expert, listen to me, I'm the teacher, you're the student. It's like we're in here, we're doing this together, and we can also learn from each other around this, even when I'm the host... It's comforting for me to

hear that [the host principal] in a school that has great graduation rates and students that are high achieving is having very similar challenges around special ed instruction.

P.S. 8's principal appreciated the openness of the host principal while also recognizing his expertise, acknowledging that he leads a school with "great graduation rates and students that are high achieving." Host school participants' openness about challenges did not undermine the legitimacy of the host designation, but actually enhanced it.

The "learning stance" norm. Beyond encouraging their expression of challenges, Facilitators also supported a developmental approach by asking all interschool groups and within-school LPP teams to establish norms for collaboration, which after the first year, became an explicit step in the Cycles of Learning (CoL), LPP's inquiry process. Norms often included being open to and providing critical feedback. At the end of site visits and weekly team meetings, Facilitators consistently asked the participants what was going well and how they could improve their collaboration, and these conversations often reflected the extent to which the group's norms were being met. These were also key opportunities to reinforce the dispositions central to LPP. It was not uncommon to hear comments from Facilitators like, "thank you for taking a 'learning stance.'" Program officials frequently used the phrase, "learning stance," which means an openness to learning and improving. It requires participants to be vulnerable as they both express challenges and expose their practice to critical scrutiny from the interschool network. It was introduced to many participants at a program orientation in the summer of 2014 where they read an excerpt from an interview with Alan Blankstein (2011) explaining the importance of the learning stance and were asked what steps they can take to maintain one. Even though this specific activity was not repeated in the following years, the learning stance idea was known by all program Facilitators, and over time, participants would also compliment each other using the phrase—strengthening a culture that valued vulnerability.

In interviews conducted with participants after they had been in the program for at least six months, they discussed the importance of having learning stances for successful participation in the program. And when describing obstacles to successful participation, they often brought up the absence of learning stances. In an interview, one host principal acknowledged how a learning stance can be challenging for principals in particular [P.S. 13 Principal, March 2015]:

> I think the biggest characteristic, the most important characteristic for a partner school is to take a learning stance. I say this both from my experience with my—with my triad as well as working with the other host principals at the [central PD] sessions we've had and the meetings we've had between. Where—I mean, you've heard—I've heard all kinds of things, partner schools who think they're ready to be host schools but they were forced to become partner schools, they don't have the experience. Egos getting in the way. People not spending enough time getting to know each other, just hierarchical relationship that somehow emerged…. I think that the most important thing is the learning stance. However, like I said, principals are very difficult people to work with. The world revolves around us. And it's very—you know—they all say they take a learning stance. We all say it. But very often we don't-- practice what we preach when we visit other people or we're visited by outsiders. It's just a noticing I've had. Not through LPP in particular, but—but over the years working with the district.

As this principal points out, as much as the program emphasized a learning orientation, and as much as everyone knew they were supposed to be open to feedback from others, there were some principals who were not viewed as actually acting according to a learning stance. This brings up one possible limitation of LPP's effort to communicate the importance of certain dispositions—such an emphasis on the learning stance may not give schools an opportunity to fully understand the underlying cause of resistance to feedback or change. It is possible that schools did not believe they were appropriately matched with other schools that could have helped them, or that they did not trust that the host school had the expertise they needed. Facilitators worked with schools to overcome these more specific obstacles, but when asked about challenges, principals tended to explain how learning stances were lacking, perhaps as shorthand for more complex challenges that they did not want to discuss or acknowledge.

Some host school principals actually expressed frustration with there being so much focus on the idea that all schools should be learning from each other and said that it cloaked the actual intended difference between host and partner schools. In the first year of LPP, one host principal said [P.S. 10 Principal, March 2015]:

> And we knew that we were a host school, so we assumed that we were going to be hosting people, showing them best practices, but we didn't know like how much a symbiotic relationship it was supposed to be. …I think the DOE just needs to figure out how it's going to be messaged out… I wish they messaged out differently. Like we *can* all learn from each other, but when it's messaged out like, "Everyone can learn from everyone all the time," I just don't think that's accurate. I think they have to be more specific about what that means. Like, 'cause again, like I think there's this perception by people not in this work, but on the outside that like both schools will learn just as much from visiting partner school classrooms. And again, I just don't—I think it's just different.

Another host principal of a plus cohort expressed a similar view when discussing the distinction between host and partner Model Teachers in the second year of the program [P.S. 26 Principal, May 2016]:

> The tricky part is what the role of the [host Model] Teacher is when someone else is hosting a visit. That is very ... I think that's problematic. What's the difference between a Model Teacher in a host school and Model Teacher in a partner school? That I feel like Learning Partners hasn't done a good enough job differentiating and acknowledging that probably there should be some difference. I know contractually it has to be the same, which is fine. I think it's funny…. We've really downplayed in our cohort like the whole idea that we're the host school in a lot of ways. It's clear. We've set it. We started everything. I think most understand that we were the host school, they were the partner school. One person in the reflection [form] wrote, "It seems like [the host school] had a different role." I said, "Yes, we did. That's true." I do think that somehow it's got to be more acknowledged that there is a difference.

Finding the right balance between encouraging all schools to learn from each other, and acknowledging that host schools are in a different position was a challenge, but one that came up less in my sample over the 3 years. It is possible the tension was resolved as the program responded to feedback related to roles and matching. Program officials provided more explicit explanations of the distinctions between roles in program literature, and they may have improved

their assignments to host and partner in the matching process over the years. Finally, LPP Facilitators continued to support schools in figuring out and navigating their roles.

In schools where the tension was not an issue, partners tended to view the host school as having valuable expertise to offer, acknowledging a true difference between the schools. And at the same time, host schools did genuinely seek ideas and support from the partner schools, just not to as a great an extent as the partners did from the hosts. Some interschool networks began their engagement with LPP with this dynamic, which seemed to relate to their incoming dispositions, the skillfulness of their Facilitator's messaging, and the alignment between their focus areas. Other interschool networks developed this symbiosis over time, and not surprisingly, a small number struggled through the issue of roles throughout the year, although usually just in regard to one partner-host school relationship; rarely were there tensions among all schools that lasted an entire year.

Dispositions embedded in model and master teacher roles. In addition to explicitly introducing and reinforcing the orientation toward continuous improvement through program messaging and activities, these dispositions were also embedded in program roles. The Model and Master teacher positions both formally recognized teachers who already had a commitment to improving their school and compensated them for engaging in activities that required this disposition, thus reinforcing their commitment. Further, by providing formal roles, the program created an association between leadership and these dispositions that was visible to school faculties, including members of the faculty that were not part of the LPP team, and thus had less direct contact with the program. Model Teachers were likely to have an orientation towards continuous improvement because the role was presented as a school-improving one. The application to be a Model Teacher stated expectations related to attitudes and priorities, in

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addition to qualifications related to teachers' experience and technical skill (teachers had to be

tenured and received a teacher evaluation rating of "highly effective," "effective," or

"satisfactory" the preceding year). An excerpt from the "Model Teacher Role Overview," a

document available on the district's webpage, states that "ideal" Model Teachers:

> Create a welcoming environment for teachers to reflect, grow, and continuously explore innovative instructional strategies. Model Teachers demonstrate great instructional expertise, a dedication to professional growth, and a strong understanding of their community's needs.

Of course, the written expectations for Model Teachers in LPP may not align with their

perspectives in practice. It would be possible for teachers to take the role of Model Teacher

without fully internalizing the expectations on the job description. Yet Model Teachers'

responses to interview questions about what defines the roles presented a fairly consistent

understanding that reflects the normative dispositions discussed above. All teachers interviewed

described their role within their schools as supporting the growth of other teachers and being

committed to learning and improvement. They described their role in interschool networks as

one that involved sharing practices and being open to learning about new practices and receiving

feedback from other schools. When asked about the qualities of an effective Model Teacher in

LPP, one teacher from a partner school in his second year of LPP responded, [P.S. 24 Model

Teacher, February 2016]:

> A successful Model Teacher would have an open door policy to the school that they are a part of. I think that they would be approachable. I think they would be willing to be observed and to go observe other teachers, willing to take tons of feedback from other people so that they can improve on their practice and also kind of share systems.

This teacher's conception of Model Teachers was as much about being open to others' input on

his teaching as it was about providing feedback and ideas to others. He understood that the role

was not just about being willing to teach his colleagues, but it was about being open to change

himself, and thus trusting the intentions of his colleagues who may provide feedback. Another

teacher from a high school that, prior to LPP, had very few systems for teacher collaboration,

went even further and mentioned how not only was it his job to be open to feedback and new

ideas, but he explicitly stated that he thought he should demonstrate this stance to other teachers

in the hopes of it spreading [P.S. 38 Model Teacher, March 2016]:

> I view my role as a Model Teacher as just someone who is willing just to sort of open up my classroom to my colleagues and other teachers at the school and also just sort of model working with other teachers. So whether that means through leading teams, just sort of like showing what we're trying to accomplish at the school in terms of increasing collaboration and getting teachers to work together more…. Again, I think I want to as we build a culture at this school I would want to get into that really following the Model Teacher description where like, okay, once teachers are visiting each other more…. How do you change it to be like, "I'm just trying something out if you want to check it out," as opposed to being like, "I'm a Model Teacher so you guys should watch, come in and learn something from me"?

The P.S. 38 Model Teacher emphasized how he viewed his role as contributing to a school

culture shift, where teachers were engaging in more collaborative practices, and specifically, in

peer observations. He aspired to have a school where teachers were working together to improve,

not just demonstrating strong practices to each other. He presented a clear goal in the rhetorical

question he posed about moving away from having other teachers observe him for the sake of

learning from him, and moving towards engaging with him on something new that he is trying

out—so that they could potentially provide him with feedback and be part of the innovation

process.

Principals presented similar understandings of the Model Teacher role, but they focused

more on how Model Teachers had developed their mindsets through their engagement in LPP,

particularly in relation to developing a commitment to school-wide improvement. One principal

reflected on a Model Teacher's growth after having participated in LPP for 3 years [P.S. 24

Principal, May 2016]:

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> Don't tell [Model Teacher] I said this, but holy God. He has totally grown in perspective. So the things that as a classroom teacher when you're in your own little island you say, 'Well, the teachers have to do this, and the teachers have to do that,' – when you open them up to seeing what they are doing, what others are doing, and having an understanding of how this impacts on a large [scale], you can see the growth that they have and how their mindset changes.

In a separate interview a year later, the teacher referred to in this quotation actually reflected on having gained more of a school-wide perspective and stated, "We have to take ownership…. If we're sitting in the room that makes these decisions… it better be a decision that I can stand by."

A host principal [P.S. 20 Principal, January 2015] expressed a similar view:

> But now seeing it as they have these ideas that they want to implement on a larger level, and how that works. They're getting that perspective which is hard when you're in the classroom all day. Even though we do a lot of teacher development, teacher leadership, or whatever. That tends to fall to us – how to get it to happen across the teams. But now they're kind of thinking of the ways that it's going to happen across the teams.

Through LPP, there was a process of focusing Model Teachers' work beyond their classrooms, and in doing so, providing them with a new set of criteria for decision-making, one that attended to the needs of the entire school. LPP team members may have generally started with an inclination to do this when they applied to be Model Teachers, but they gained actual practice in doing so throughout participation in the program.

Not every Model Teacher, and certainly not every LPP team member embodied all of the dispositions described above. This was particularly true in schools that entered LPP at lower capacity levels and where there were fewer teacher leaders interested in doing the school improvement work required by LPP. In one case, a school only had one Model Teacher on its LPP team because only one teacher in the subject area the triad was focusing on met the minimum requirements of the Model Teacher position. In situations like this, Facilitators tended to take a more active role in team meeting and site visit planning, and thus worked to develop the needed dispositions and trust. More typically, LPP teams had a mix of teachers who, to varying

degrees, were committed to improvement. The combination of giving teachers who already had these dispositions formal leadership roles, and explicitly encouraging these dispositions created learning-focused cultures in almost all of the LPP teams in my sample.

Exchanging Feedback

Critical feedback is another potential threat to trust and a commitment to improvement. Although educators may be comfortable stating what challenges *they think* they are facing and asking for help in a particular area, it is quite another situation when someone is told that they should be doing something in a different way, especially if that feedback is not solicited directly. This potential challenge was ever-present in LPP, as site visit activities often included feedback exchanges after lesson observations, and occasionally, school team meetings involved feedback regarding peer observations within a school. Numerous processes, mostly driven by Facilitators, preemptively avoided conflicts that could come from unwanted feedback, and when these conflicts did arise, Facilitators played a role in resolving them. The neutral, "outsider," status of the Facilitator was crucial this respect.

Although most feedback exchanges appeared comfortable and were done in the context of protocols that encouraged positive feedback to be shared first, occasionally tensions arose. In one case, a partner school team offered suggestions to members of a host school team that they did not think were well received. The partner principal explained her perspective [P.S. 15, March 2015]:

> So I felt like they're – whether partner school or host school, I think there's a place to learn and to give back, to provide feedback. One of the first visits to [the host school], they're evidently super-strong in teacher teams and their [social-emotional learning] SEL work, but some of my team noticed some disparities in student outcomes and instruction. When that was shared with the [host school] team, they took offense to it. And maybe it wasn't the right time to share it, because that wasn't the focus for my team, but I really do believe that we think that we're here to give, but to take as well, to share practices and to take practices. So I think that by setting up the schools as a host school and partner

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schools there might be this idea or belief that as a host school we have no place to grow maybe with some of the team members.

P.S. 15's principal mentions two reasons why the host school team may not have appreciated the feedback. She stated that "maybe it wasn't the right time to share," and that perhaps the host designation made the host less receptive. In response to these issues, and to prevent them more broadly, Facilitators supported school teams in keeping discussions narrow, and generally exchanged feedback related to particular areas that all participants were prepared to discuss. In addition, Facilitators and school teams introduced protocols to guide discussions after lesson observations or viewings of videos of instruction at interschool site visits. These protocols tended to encourage "low-inference" observations, where participants provided feedback based on evidence, preventing more judgmental inferences from entering discussions.

When tense exchanges like the one referenced above did occur, Facilitators explicitly worked to mend relationships. They reminded participants of established norms, and in a couple of cases, led an effort to rebuild trust by modifying protocols to emphasize positive feedback or by encouraging critical feedback to only be given in the form of "wonderings" or questions about what was seen. After the incident referenced by the principal in the quotation above, the Facilitator added more structure to a debrief discussion of classroom observations. The following field notes present the way the Facilitator guided the exchange of feedback in a subsequent interschool site visit:

- As we came back to our seats, everyone was asked to code the data they collected [during lesson observations] through the forms provided for notes. The group was also given a structured debrief protocol which had not been used in previous site visit debriefs. We were asked to identify trends through sharing what we saw on our tours. Categories for trends were SEL, Teacher Leadership, and Student Leadership (aligned with the triad's LFAs).
- The four tour groups were debriefing in small groups, tying their low-inference observations to trends they saw. During the process the Facilitator was walking around, subtly guiding groups if necessary, and keeping everyone on time.

- Conversation was very polite among all groups—examples for observations and trends were generally met with positive, affirmative, body language such as smiling and nodding.
- Following the small group discussions, everyone participated in a "gallery walk" to see what other teams observed. All participants were asked to share three clarifying questions, two observations, and one recommendation (based on the formal protocol) after they took their walk around the room to view other teams' observations. Each tour group then came together and wrote their "3-2-1" on another piece of chart paper.
- Everyone then came together for a larger group discussion and incorporated the protocol to help drive the discussion. One leader from each group read what their group had written as others listened. A teacher from the host school suggested we validate the work we saw before any comments or recommendations were offered.
- At this point [the Facilitator] stands up and asks someone from each school to validate the work that is happening in [partner school], done in the format of a "Vietnamese Wedding Table Toast." This was something she had planned before the [host school] teacher spoke, so it was a nice chance to use the activity as a segue into recommendations.

As these notes make clear, a significant amount of planning went into the structure of the feedback exchange. Protocols guided every aspect of it, which made the feedback expected and kept it closely related to the focus areas. Interestingly, a host school teacher suggested inserting more positive feedback, and the Facilitator was ready with another activity that was responsive to this request. Across triads, debrief discussions took on different structures based on the social dynamics and styles of the participants, but nearly all involved protocols that emphasized evidence-based, focused discussion.

Addressing School Differences

Yet another potential detractor from trust and an open exchange of ideas was a belief that schools cannot learn from each other because they have different contexts. Differences did arise, particularly differences related to student populations, school size and curricula, and they influenced the adaptations schools made while implementing ideas learned from other schools. But differences rarely persisted as a major inhibitor to collaboration, especially when schools

focused on what practices they could share with each other that were relevant regardless of context.

There were numerous examples in my sample of schools supporting each other that had significant differences. In one extreme example, a K-8 host school was matched with a new school serving grades K-2 and a middle school serving grades 6-8. The host principal described how they adjusted in response to the different grade spans [P.S. 16 Principal, March 2015]:

> From the initial triad visit we realized that it was too taxing on us to try and [support] both [partner schools] at the same time, that it really challenged our resources and also our space concerns because we're really a small school and all of our classrooms and spaces are used for instruction. And so setting aside a room for the LPP work was impacting the instruction that was happening during the school day. And then in addition since we were doing different focus[es] with each school we had to really separate the teams in order to – and then I felt like I wasn't getting the full experience of both groups because I was running from one group to the other. So after that initial, that first visit we decided and with [the Facilitator's] support, agreed that we would do separate visits moving forward so that we could really dedicate the energies to what those particular schools needed.

In this case, the program structure was flexible enough to allow for a host-partner, host-partner arrangement, as opposed to the traditional triad structure.

The topic of differences in student population was also discussed among a number of interschool groups, and occasionally led to expressions of strong emotion, but it rarely produced major changes in the way schools engaged with each other. For example, one triad included a host school that was in a new school building in Queens and served a more racially diverse population than the typical DOE school, in that it had sizable proportions of Asian and White students, as well as Black and Hispanic students, and just over 60% of students in poverty. One partner school in that triad was also in Queens serving students with similar demographics. The other partner school was in Brooklyn and served predominantly Black and Latino students with

over 80% of its students living in poverty. When asked about how the differences in population

led to challenges, the host principal responded [P.S. 10 Principal, March 2015]:

> It's one of those like hurdles that you have to get over if you're ever going to adopt like a
> learning stance, you know.… Getting their [first interschool] visit under their belt like
> really allowed them to kind of open up a little more and see, "Okay, there are these
> differences, like there are still instructional practices that we could be pulling from them
> to include it in our repertoire." So, you know, that—if you've been in any kind of public
> ed system and like you already know going in that's going to be it, it's going to be
> something that you'll have to kind of get over, you know, if you're going to get anything
> out of it.

As the P.S. 10 principal stated, once school teams actually visited each other's schools, they

could see that despite differences, there were commonalities in terms of instruction. Also,

schools made a point of explicitly discussing their context. In addition to the journey stories

described above, initial interschool visits often included school tours and question and answer

sessions that revealed information about the schools' history, student population, structures,

successes and challenges. Exploration of each school may have prevented some dissonance and

frustration that could occur if participants had spoke about school communities with assumptions

about the extent to which they were similar and different. It also gave them an opportunity to

find commonalities that they may not have known were there, and to openly acknowledge

differences.

For the partner school in Brooklyn with different demographics, P.S. 12, the school team

did initially express reservations about working with the other two schools in the triad. The

following excerpt is from field notes from this triad's second site visit at the other partner school

when principals were meeting over lunch [Site Visit at P.S. 11, November 2014] :

- [P.S. 12 (other partner school)'s] principal responded next and began to discuss the
  fact that her staff is struggling to see their own students represented in the other two
  schools. She explained that overall the students at the other schools are less disruptive
  and more compliant. She explained that she's seen the same percentage of disengaged
  students at all the schools, but that disengagement looks different for her students.

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She stated that her team wants to see a school that has worked through the specific challenges her teachers are experiencing. "We have to show them success with those kids."

- [The host] principal pushed back on this a little and said, "Instruction is universal, and good instruction is the same no matter where you are…. Even though the population might shift, what are those tools, what are those leverage pieces?"

Later in the day, when principals and teachers had an impromptu meeting about upcoming site visits, the field notes state:

[The partner principal] said she feels the need to protect her school and have her teachers feel safe getting feedback. She needs to create a trusting culture since the teachers are feeling bruised (and they have been absent a lot)…. The [teacher from the hosting school] says, "we can play whatever role you want us to play when we get to your school. We can come as cheerleaders."

After this initial expression of concern, the triad responded by postponing the site visit to P.S. 12 for another month, and instead, returned to the host school. Then, at the first site visit to P.S. 12, the visitors provided mostly positive feedback, and over time, helped the partner school identify instructional changes to make that were an extension of what the school was already doing.

About five months into the year with LPP, in an interview with P.S. 12's principal who raised the concerns regarding her teachers, she described how her team came to appreciate the host school team and to learn from them, even with the school differences, which she discussed less in terms of student population and more in terms of the "mental energy" afforded to faculty at the host school [P.S. 12 Principal, March 2015]:

[The host school] has had more time to develop and they've had – you know, it's – they have an easier population [than] us. There's no way to hide that. So they've had more mental energy to kind of cultivate their curriculum and teachers and so even though they're only couple years ahead of us, they're actually more than that because of the mental space that they've had to kind of tackle these types of things….[The principal is] cultivating something very specific among his team. It's not random. It's absolutely by design and it's a way of talking about work and staying focused on work but at the same time being open and supportive that my team needed to see. And honestly even the stuff with the different populations between the schools, I think that it was – it ended up in the end being – a positive learning experience because it really forced us to not look at student behavior at all, you know? Whereas if we had been in a school that was more like

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ours with a similar population I think our teachers would've been more fixated on looking at classroom management and, like, those types of things or what the dean was doing or these other external, student motivators, like if they had some kind of reward system, you know? And that gets very distracting from the real of work of teacher practice so it ended up being the right thing for us in the end. So I wouldn't change it.

Ultimately, the fact that the host school team had expertise that the partner school team viewed to be relevant helped them to get over initial hesitancies that stemmed from school differences. In addition, there was an emphasis on building trust and being sensitive to the way that feedback was exchanged to allow for more receptivity.

Relationship Building

In addition to anticipating and responding to the various aspects of collaboration that could make participants uncomfortable or closed to learning from each other, LPP also worked to proactively build positive relationships between participants across schools. Facilitators emphasized the importance of relationships, encouraged participants to get to know each other, guided networks through the development of norms that would foster collaborative relationships, and often addressed conflicts when they did arise.

The program clearly took the perspective that relationships matter for school improvement. In fact, during LPP orientations for schools, program officials reviewed the DOE's Framework for Great Schools and emphasized the large circle of trust that envelops all of the other elements in the Framework. When presenting remarks at one of these LPP orientations, Chancellor Fariña explained how, through LPP, schools should be experimenting in the field, and how this experimentation needs to happen in "safe spaces." Facilitators supported the creation of safe spaces by prioritizing the relationships among LPP participants. One Facilitator explained [Kimberly, October 2016]:

> One thing that I really appreciate about Learning Partners is how they teach you... [about] not being so concerned with the product but with the process. And they really talk a lot

about just relational currency. So for me that's super important and something that I don't think that I really value. I may have known about it but didn't really value it before coming here. And it's so on point because in terms of like really having this work happen in a safe space authentically where principals are completely transparent and honest about the help and support that they need, they need to feel as if you are concerned about them and their school community and really invested in it.

Facilitators began their work building positive relationships among participants from different schools, or "relational currency," as this Facilitator called it, by engaging them in extensive norm-creation processes that sent a message that the network members would attend to interpersonal dynamics from the outset of their collaboration. For example, in one triad's first meeting, the Facilitator asked the group to vote on a number of possible triad norms, which she had asked each school team to provisionally draft before the site visit. Participants discussed why they voted for various norms, expressing what they viewed as most important for productive collaboration. After the vote, the following norms were established:

- Time and Attendance: We will start on time, come prepared, and stay for the duration of the meeting – within the constraints of our school.
- Listening and Communicating: Team members agree…
  - To respect all opinions and ideas
  - To be active listeners
  - To stay on topic
  - That all voices will be heard
- Participation: Be an active participant and encourage everyone to participate.
- Expectations: We will take the work seriously by holding ourselves and each other accountable to the work.
- Decision-Making: All decisions grounded on what is best for students!
- Evaluation: Periodically revisit the norms to see if any should be revised. All group members are responsible for enforcing the norms.

Although triad norms varied across the sample, they tended to include common ideas presented in the example above, especially in regard to the more interpersonal norms about hearing and respecting all voices. And regardless of the actual content of the norms, the process of creating a common agreement provided networks with an early experience of joint work, and in the case above, of blending ideas from each school in the network.

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Facilitators also encouraged participants to get to know one another and to find connections between each other. They did this by organizing social events—Facilitators were encouraged to take principals out for a meal at the beginning of the year and would occasionally organize additional gatherings away from school buildings—and by ensuring that site visits were planned to encourage friendly communication across schools. At most site visits, LPP funds went towards modest breakfasts and lunches, where participants talked informally. To encourage mixing between schools, Facilitators often assigned seats during various activities, which forced participants from different schools to sit with each other. And most directly, site visits tended to begin with team-building activities and to end with reflection activities that reiterated and reinforced the interschool groups' interpersonal norms. At the beginning of the year, Facilitators often led these activities, and then later in the year, schools hosting school visits would plan these. The team building activities served multiple purposes, including sharing about each others' backgrounds, providing opportunities for participants to connect and find commonalities, developing common understandings and vocabulary to guide the work, and allowing for emotional aspects of the work to be expressed and acknowledged (i.e. many activities asked participants to communicate what they were feeling about the changes they were making, as well as their feelings about the challenges they were encountering). For example, field notes from a triad's site visit that took place early in the school year describe how school mixing, relationship building, and a review of norms played out [Site Visit at P.S. 14, October 2014]:

> Two partner school members led the teambuilding exercise. Everyone to break into schools, and then number off (1-6). All go to an area of the room designated to their new group's number, and all will find a commonality with their other group members.
> - During the exercise, lots of laughter within smaller groups. Visibly, many were smiling and affirming the suggestions of others.
> - Every group found four commonalities – instead of three. The final group has five! Everyone laughs.

- We then start revisiting norms from last full triad visit. The Facilitator reiterates the process and the norms the group agreed upon. She asks for three volunteers - "balcony observers" - to be sure the three tour groups are following the norms throughout the day.
  - The Facilitator again explains exactly how the triad came to norms [through discussion and voting], for the two members of the group who were not present during that prior visit.
  - She asks for volunteers: [School] Assistant Principal for group one, [School] Teacher for group two, [School] Assistant Principal for group three.
- Facilitator asks everyone to view the guidelines for our classroom visits, and one volunteer reads the guidelines aloud for the group. No questions about the guidelines.

While not every single site visit included such extensive team building activities and discussions of norms, all had these to varying degrees. Even if principals were not naturally the type to engage in such activities, Facilitators encouraged them to incorporate relationship-building activities into their site visit planning.

Pacing issues. Despite such an emphasis on building relationships and establishing trust, some principals explained how it takes time to build relationships, and questioned whether LPP was rushing the process. This concern was often raised in the context of the requirements for engaging in LPP's inquiry process, which asked schools to collect data to test whether the changes they were making were leading to improvements. There was no expectation for a specific amount of growth, as schools were encouraged to "learn from failure;" although just the fact of there being an expectation that specific changes were to be identified, implemented, and monitored caused frustration among some participants. At least two principals saw this as being in conflict with developing trust. One host principal said [P.S. 34 Principal, April 2016]:

> I hope people don't lose sight of the intent of this work because we are so obsessed with the deliverables and the outcome. We will forget it that the whole purpose around Carmen [Fariña's] vision is collaboration. When you say collaboration, nobody talks about goals and nobody talks about SMART goals. It's about collaboration. "Hey, you are visiting my school. Well, hey I am visiting your school." That's collaboration. Now all of a sudden, we are talking about all of these deliverables, all these things, and we lose sight of the ultimate goal. That's to create communities and environments where people are

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eager to share. That is lost when you are so obsessed with, "What are you showing me? How are you proving to me that you are delivering this item?"

Most principals and school teams in the sample did not necessarily see collaboration and inquiry as being in conflict to the extent that the principal at P.S. 34 did, but his words do highlight a change in emphasis in LPP to which returning participants had to adjust. In the second year of the program, when the CoL was introduced, and when Facilitators' caseloads increased, participants' processes were guided by the stages presented in the CoL, and less so by hands-on coaching of Facilitators, especially for returning schools. The first stage of the CoL asks participants to establish norms, find common understandings and conduct needs assessments to narrow their focuses, which was a change from the more personal journey stories that Facilitators recommended in the first year. Some schools certainly still created journey stories and focused on relationship building, but some principals clearly felt that a focus on progress monitoring was not compatible with collaborative relationships. This may be because they viewed data collection and reporting as way to show results to DOE central, even though the timing of the CoL was flexible and there were no external consequences for producing positive or negative results. Talbert & McLaughlin (2010) discussed how accountability can "squelch" collaboration, and it is likely that in addition to feeling that relationships take more time than they thought the CoL allowed, the CoL was also a process that put some constraints on schools' discretion, and thus could have automatically been viewed as an accountability mechanism.

Summary and Conclusion

LPP is ambitious in its recognition of the complex set of conditions needed for knowledge creation and in its attempt to create and enhance these conditions for a large variety of schools. In particular, the program provided the structure, time and compensation needed for educators to engage in new arrangements through the LPP team, interschool site visits, and

program-specific roles. Within these structures, there was an intentional and pre-planned focus on the social dynamics and attitudes encouraged by the program. In particular, LPP broke down some of the traditional hierarchies that existed in schools, allowing for configurations that could produce new learning opportunities, as well as transfer some authority from principals to teachers. It also created a common orientation toward learning and improvement among its participants. However, the emphasis on having a "learning stance," which encouraged participants to view all of their interactions with each other as opportunities to learn and improve, may have led to misinterpretations of the obstacles to collaborative learning. What could have been perceived as not having a learning orientation could have actually been a different issue, such as a disbelief in the legitimacy of the host and partner roles, and a mistrust that real learning could occur between specific schools.

Such challenges were alleviated over time through adjustments to the matching process and more explicit guidance, especially in regards to roles, provided by written materials. Throughout the years in LPP, Facilitators were crucial in anticipating and responding to the contextual needs of schools, providing more or less support and guidance as needed, while maintaining some level of uniformity in implementation. In this sense, Facilitators served to synchronize aspects of the LPP experience across schools while also producing individualized experiences. For all schools, they emphasized the learning stance, introduced common protocols and routines for exchanging feedback, for learning about school contexts, and for building relationships. But they also helped schools navigate the considerable flexibility, particularly regarding how host and partner school roles manifested and in the way each interschool group responded to issues of school difference and tensions that arose between participants.

In the following chapter, I will discuss the more technical learning processes in which schools' engaged, and how the program's CoL inquiry process was enacted at both the school and interschool levels. The chapter will also describe how the combination of inquiry and the conditions presented in this chapter contributed to changes in educators' thinking as well as to changes in school and classroom practice.

Chapter 6 Knowledge-Creation and Dissemination Processes in LPP

The previous chapter discussed how LPP developed professional capacity so that educators engaged in school and interschool settings that were conducive to learning. It focused on how LPP contributed to the structural, cultural, and social conditions needed for knowledge creation, including, new collaborative structures, orientations towards improvement, distributed leadership, and trust. As schools established these conditions, LPP participants were acculturated to the ideas of exposing their practice, hearing feedback, and trying new innovations. This chapter will discuss how the *content* of such feedback and innovation was actually produced in LPP, what sources of knowledge existed, how LPP participants accessed that knowledge, acted on it, and disseminated it. Put another way, this chapter explores the processes behind the program's tagline, "The Answer is in the Room," and describes what the parameters of "the Room" really are. I begin with a review of some key ideas from the knowledge-creation literature, and then describe the major mechanisms for engaging in knowledge creation through LPP.

Knowledge-Creation Theory

A common refrain among education scholars is that educators face new demands now that we live in a "knowledge society," where our most vital resources have shifted away from labor, capital, and land, and towards knowledge (Drucker, 1993). This understanding calls on educators to prepare the next generations of students for uncertain working conditions that preference problem-solving and critical thinking skills over the memorization of facts and algorithms (McLaughlin & Talbert, 2006; Seashore Louis, 2006). The desired shift in instruction is apparent in the focus on "21st Century Skills," the expectations of the Common Core State Standards, definitions of "college and career readiness," and teacher evaluation tools like the

Charlotte Danielson rubric, which emphasize student-driven learning. These changes, in combination with increasing economic and achievement gaps, require educators to teach in ways that run counter to the traditional organization of teacher-centered classrooms and pacing guides that do not account for different rates in student learning. One way to meet these new challenges is for schools to become knowledge-creating institutions that can respond to the uncertainties regarding the needs of their students. In fact, the notion of a "strong school" is not just one that produces strong outcomes, but one that is essentially a learning organization, capable of adapting to change, to addressing problems as they arise, and innovating in the midst of uncertainty (Hatch, 2009; Liebman & Sabel, 2003).

As discussed in Chapter 2, theories about how schools can become such knowledge-creating institutions borrow ideas from other sectors. Nonaka & Takeuchi (1995) describe how organizations can create knowledge and disseminate it across all members by engaging in systematic "concept creation" to solve problems. As teams discuss possible solutions, they engage in reflective dialogue that allows them to express their tacit understandings, leading to more concrete ideas about new innovations to try. Through this process, key ideas become explicit and transferable. These explicit understandings are then applied through action and internalized to become part of an organization's working systems.

An important distinction between schools and the settings in Nonaka and Takeuchi's case studies is that jobs in business production are more often organized around reflecting and problem solving. However, in the education context, as Hargreaves and Fullan (2012) state, reflective practice is "not an act of will… you have to build it into the day" (p. 99). In addition, it must be something that educators view as necessary and important, which happens when it is focused on particular goals or on solving particular problems that require the contribution of

multiple people and that is coherent with educators' beliefs and the school's policy context (Desimone, 2009). When defining "joint work" Little (1990) wrote that teachers are "motivated to participate with one another to the degree that they require each other's contributions in order to succeed in their own work." So, in order to bring reflective practice and knowledge production to the education context, schools need an impetus and process for identifying common problems and then sustaining engagement in problem solving.

Below I describe how LPP provided the motivation for joint work through its focus area identification processes for the schools in the analytic sample. I then describe how schools developed knowledge through their collaboration with other schools. The interschool collaboration provided access to external knowledge from the interschool network, and it also often fostered the transformation of tacit knowledge to explicit knowledge as it asked LPP members to communicate ideas across schools. Finally, I discuss how these sources of knowledge were integrated into schools' individual inquiry processes and ultimately combined to make changes to school and classroom practice.

Focus Area and Problem Identification

During a summer orientation for LPP before the start of the second year of the program (2015-2016), the Program Director addressed the incoming cohort and said, "The processes are what will bind us together, not the actual work, because you will be deciding the work." With this, she informed participants of one of LPP's key tenets, that the content of schools' collaborative activities and school improvement work would be determined internally, while they would be guided through an externally determined process. As described in Chapter 4, this process became more and more defined, and slightly more outcome-driven, as the program developed between 2014 and 2017, but the notion of schools' identifying their own focus areas

was consistent through the years. It was central to ensuring that LPP was a coherent part of schools' broad improvement goals, and therefore worthy of sustained commitment to joint work. In practice, coherence was strongest when schools engaged in a deliberate process of focus area development that began during the program application phase, that continued as school teams had their first meetings, and importantly, was refined through interschool collaboration. In addition, through program messaging, schools were encouraged to select and refine focus areas based on the DOE's Framework for Great Schools, existing district accountability measures, and other school data. So, as much as schools were given the discretion to determine the areas in which they were interested in working, the program provided a process of problem identification that considered performance accountability.

Needs Assessments

In LPP, the process of assessing school needs and selecting focus areas begins with the program application, where prospective partner schools are asked to describe what they would like to improve through LPP, and where prospective host schools are asked about areas of strength they would like to demonstrate to partner schools. The program then matches schools so that interschool networks could identify a unified learning focus area (LFA). Once in the program, all schools in my sample began an iterative process of refining the LFA, as well as defining each school's focus within the LFA, both for the sake of finding alignment among schools, and to develop a common understanding among participants.

As much as focus area identification in LPP could provide an opportunity for schools to take control of their learning, it could also present a challenge, especially for schools that have many areas in which they think they need to improve, and even more so for the schools with limited experience in self-assessment. As Hargreaves (1998) writes, it is hard to "know what you

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don't know." To support school teams through this potential difficulty, LPP Facilitators and

program materials guided teams through various needs assessments. The specifics of the

refinement process varied by year of the program, for new and returning schools, based on the

styles and preferences of both program Facilitators and principals, and based on schools'

perceived need for more or less investigation into their possible focus areas.

During the first year of LPP, school teams refined their focuses through journey stories,

which involved engaging in discussions about what processes led them to their current state and

what could lead them to their desired future state. Specifically, at a 2014 orientation, Facilitators

met with school teams and led them through a "visioning" activity that involved completing a

template that asked participants to fill in columns with the following headings and prompts:

- Our LFA past state: Identify a starting point from the past (last year, five years ago, ten years ago, etc.) Where did we start? What did it look like and sound like?
- How did we get to our current state? What steps have been recently taken? (i.e. last year)
- Our current LFA state: Where are we now? What does our data tell us? Are there open questions about where we are now? What additional information do we need?
- Our LFA Vision: What do we want to accomplish through our participation in the Learning Partners Program? What does success look like and sound like in our school and as a result of this work? What is our timeframe (this year, the next 2 years, etc.)?

During these discussions, and when reflecting on how they came up with focus areas in

interviews and in documentation of their work, school team members often referenced school

accountability measures to describe what their past and current states were, and to identify the

areas for improvement. These descriptions would include Quality Review (QR) ratings, Principal

Practice Observation (PPO) feedback, Comprehensive Education Plan (CEP) goals, which are set

by School Leadership Teams, state tests scores, and teacher evaluation rating trends. In the

second year of the program, one Facilitator reflected on the role of these school accountability

measures, as well as the notion of a "Problem of Practice" in focus area development [Kristina,

October 2015]:

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The admin usually chooses [the LFA] but we also are very serious in terms of alignment to the CEP goals. So like if your CEP goals should have been set based on the PPO recommendations, based on QR recommendations…. And so we're really looking for like triangulation to a degree, like does this match, the QR match the PPO. Also, the great thing about the LFA, the Learning Focus Area, is that we push for refinement. So if you – it's almost like Lee Teitel's Problem of Practice – I'm sure you guys have heard about – so like some of the problem in terms of rolling out that work is that the problem of practice is not always accurate, right? But we've really been striving for them to refine it. So like as we look through all of the recommendations we received and had conversations with them like, "Is this an accurate depiction of where you really think that you'll see the most growth this year. And how do you know that? So like looking like what would be the evidence of that work? How would you know that that would really be the best way to leverage this work?"

As this Facilitator makes clear, the focus area refinement process had multiple goals: it was intended to align to the various measures of school quality, for there to be "triangulation;" and it was meant to be "accurate," so that it reflected an area in which the school needed to develop. For this Facilitator, accuracy stemmed from evidence about what the true problems are. The Facilitator's emphasis on aligning to external accountability measures illustrates how, although focus areas were self-selected, schools did not have complete freedom to select any area they liked. They were encouraged to work on an area that aligned with what had been identified externally through evidence of school performance, as well as based on self-selected goals for the CEP. In other words, while the focus on alignment to various accountability measures was intended to produce a coherent experience in LPP, it also imposed a limit on schools' discretion. This may have been an appropriate limit, as it could keep LPP work focused on student learning, which DOE accountability tools strive to assess. On the other hand, even though LPP intentionally worked to produce coherence through such alignment, if school leaders did not view accountability measures, such as the QR, as valid, or if they did not view the areas highlighted for improvement as lining up with what they believed to be the particular next steps

for their schools, then there would have been a risk that LPP was not a coherent part of their work.

In my sample of LPP schools, this potential conflict did not arise. The broad categories identified for improvement in the various accountability tools allowed schools to select sub-areas that they viewed as most relevant to their schools' needs, preventing them from making symbolic changes and, instead, using the program to make changes they deemed necessary. In addition, most principals discussed the results of the accountability tools, and the QR, especially, as fitting their views about their schools' challenges and strengths. And finally, the notion of using these data sources to make decisions was familiar to principals, which is not surprising given the emphasis on data use and outcomes during Mayor Bloomberg's administrations. Principals, and many teachers, were well aware of where they stood with respect to all measures of school quality. In sum, the nudge toward alignment imposed some limits on schools' choices, but this was an appropriate constraint that most schools seemed to already impose on themselves.

Focus Area Coordination Across Schools

Schools' focus area selection was made more complex, but in some cases was also enhanced, by the fact that it was not only based on individual schools' needs, but based on alignment to other schools' needs and strengths in their interschool network. Program officials accomplished some alignment through the application and matching processes. But as much as the program attempted to match schools with similar focus areas, there were cases where schools had disparate goals, and expectedly, the common interschool network LFA was broader than what schools could feasibly work on, and so they had to engage in a collaborative process of refinement. During initial interschool site visits, some school teams had the opportunity to see what their "future states" could look like based on what they saw in other schools, particularly in

host schools, and from there, narrow in on a practice or set of practices they wanted to try to adapt and implement. When schools received visits, they used feedback from the other schools to help identify what they could work on, deepening their knowledge of "what they don't know." This process took different forms based on the extent to which school teams began the program with more or less clarity about what they wanted to work on, but in all cases, initial site visits provided a fine-tuning process.

On one extreme, where focus areas were fairly clear at the outset, all schools in a triad had expressed in their application that they wanted to work on restorative justice (RJ) practices, an especially defined focus area since RJ is an established approach for which there is explicit information and training. Nonetheless, at initial site visits, schools explored what aspects of RJ they wanted to develop and based their decisions, in part, on what they observed in the other schools. After observing "circles" (a discussion format where students and teachers sit in a circle) led by students at the host school, one partner school decided to focus on establishing student-led circles, while the other partner school decided to focus on setting up the initial infrastructure needed to train a small group of teachers in circles after hearing about the host school's multi-year roll-out of RJ.

On the other extreme, for a triad of schools that were grouped together under the broad umbrella of "School Culture," both partner schools refined their focuses after the first site visit to the host school. At the end of the site visit, both partner school teams engaged in a structured discussion where they reflected on what they had seen throughout the day, how it related to what they were hoping to achieve in their schools, and what practices they may consider adapting for their contexts. Through this discussion, one of the two schools actually completely changed its

initial focus. The following is excerpted from field notes taken during that meeting at the site

visit [Field Notes from Site Visit at P.S. 10, October 2014]:

- Participants sat in their school teams and the host school principal and two host school teachers joined each group to answer questions and provide ideas as needed.
- The partner school principal led the discussion and began by asking her teachers to "unpack" what they noticed through the day.
- Teachers explained that they noted how there was little teacher talk and a lot of student work; that there were few digressions, and that students were highly engaged in the lessons they saw.
- The principal said that she noticed how teachers did not necessarily have intricately planned openings/connections in the lessons, but they did have incredibly thought-through questions that presented learning points that grew more sophisticated throughout the lessons. She also explained how she was impressed with the teachers' thoughtfulness about lesson planning and how a major action item for her school was around teacher planning and giving teachers more ownership over planning.
- The principal asks a host teacher to explain how he approaches planning for questioning.

The team focused on students' engagement and the partner principal connected this to teachers'

extensive planning at P.S. 10, which is something the host school team had talked about

throughout the day. This initial discussion soon turned into a focus area about establishing

consistent teacher practices at the partner school, P.S. 12, as opposed to working on the more

community-building aspects of school culture. The partner principal explained the shift in her

school's focus area in an interview a few months later [P.S. 12 Principal, March 2015]:

> We decided to work on school culture. And originally we were really looking at it through the lens of, "What's going on with the kids and what do we need to change?" and we talked about all kinds of stuff from, like, "Well, maybe we need to do more assemblies. Maybe we need to do all of these, like, fun things for kids, maybe that'll get them invested in the work." But then after we visited… [P.S. 10], we realized that it wasn't about that at all. It was about consistent teacher practices and quality of instruction and that's what we really needed—you know we can put all the bells and whistles and have pep rallies and do all this stuff but if the quality of instruction wasn't where it needed to be and the kids didn't feel like the seat time was valuable then they weren't going to buy into the school. And we felt that that was the lever that we wanted to change, and all of the data—as we progressed through the school year—aligned 100 percent with that assessment. So our QR, you know, every visit, it was always like, "The kids are lovely, everybody here is happy and they wanna be here and we hardly have any incidents, it's a very safe school," you know? We were totally looking at the wrong thing

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and so that was really—that first visit to our host school was really valuable in that…. I think it's the collaborative attitude of teachers towards constantly making instruction better that has made [P.S. 10's] culture strong and so once we dissected that we thought there was a lot that we can learn about how they approach instruction that could help us kinda tease out key practices that we would roll out throughout the year.

Visiting the host school helped P.S. 12 change its focus to one that was more in-line with its current needs. The school team knew they wanted to improve culture, but they had not yet figured out what aspects of school culture to work on or what the processes of improving school culture would be. After seeing the consistency across classrooms in the host school and learning about the extensive collaborative planning done by host school teachers, they realized that instead of focusing on community building activities, they would work on consistency in instruction among faculty. The experience with the host school helped the partner school better align its focus to what the QR was pointing it towards as well—stronger and more consistent instructional practice, a component of school culture, but not the component the school had originally envisioned.

In another example of how interschool collaboration, combined with needs assessments, produced coherence between LPP work and schools' broad needs, one District 75 partner principal described how her team knew it wanted to work on developing community across building sites (District 75 schools have sites in multiple buildings) and on Positive Behavior Intervention Supports (PBIS). The school's QR results pointed in these directions and the team thought the other District 75 schools in the triad may have expertise in these areas [P.S. 24 Principal, February 2016]:

We looked at our QR to see what we thought we were deficient in. And one of the areas that we thought we needed to work on was better communication… And some of that had to do with the fact that we were District 75, and we were multi-sited. So we had asked if there were other people [in the interschool network] that would be able to show how they built one community in several buildings and in addition to that, how I could take a PBIS system that I had built or started to build for the standardized population and turn it over

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so that it would be something that could be used across for the alternate assessment [population], as well. And we figured schools with similar populations would be able to help us do that. That's how we picked [the focus areas] the first year.

This principal reflected further on focus area development 1 year later. At the final interschool site visit for this school's triad, each school team presented what they had learned through LPP. Before P.S. 24's LPP team gave its presentation, the principal said the following [Field Notes, May 2017 Site Visit]:

> As a new principal, I had so much learning to do. What do you do with a multi-site organization? How do you deal with 150 kids? If I just knew what the question was, I could get the answer. The first year, what you do, you go into it with a lens of, "What does this school do well, and what can I tweak to make it work [at my school]?"

In some respects, P.S. 24's principal viewed the interschool collaboration process at the end of her 3-year experience with LPP similarly to how she did in the midst of her second year. She continued to view the approach as consisting of seeing what other schools do well and adapting those practices for her school. But, she acknowledged more uncertainty at the start of her time of LPP than she did in the previous interview when she said, "If I just knew what the question was, I could get the answer." As much as she knew that she wanted to develop community across her sites, she did not know, at the outset, what this would involve. Only by observing other schools could she begin to drill down on specific questions she had to answer and specific goals she would need to achieve. Ultimately, her school developed data systems that were common across all sites, IEP planning and evaluation processes common across all sites, and new approaches to teacher professional development (PD) planning. In other words, smaller-sized questions like, "How do I make data collection and data use more consistent?" and "How do I make IEP goal use more consistent?" are what this school team ultimately asked and answered. But before engaging with the other schools, the focus was quite general, and for a relatively new principal, quite overwhelming. The interschool network, while adding another set of considerations to

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focus area selection, also provided a community that could help guide schools towards more manageable problem areas.

Inhibitors to focus area coordination. As much as the alignment and refinement process was an inevitable and fruitful part of focus area development, it was more difficult when schools in interschool networks had quite different focus areas. There were cases where partner schools simply had dissimilar needs, and therefore site visits at each partner school focused primarily on the hosting school's interests. In these cases the interschool work took the form of Little's "aid and assistance" or "sharing," where participants presented what they viewed to be a strong practice that they thought would support another school's focus, or they asked for feedback on a practice they were working to develop. In these cases, visiting schools may pick up an occasional practice that would influence their school's own inquiry work on an ad hoc basis, but it did not involve the joint work or collaborative problem solving that would take place when schools were all aiming towards similar goals.

Barriers to aligning goals included imperfections in the matching process, as well as the fact that schools' focus areas changed once they were in the program and conducted more needs assessments. In order to improve matching, program officials asked more specific questions about focus areas over the years. Yet this did not address another obstacle to alignment across schools, which was the very fact that they were encouraged to make their work in LPP so coherent with their school efforts already underway. For some schools, this took precedence over the notion of collaborative problem solving across schools. This challenge came to the fore in the second year, when the Cycles of Learning (CoL) was introduced and schools received more pressure to engage in this format of inquiry, which focused on implementing changes related to schools' individual goals. Each school was asked to document their CoL separately. And while

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the Documentation Tool asked for the "common triad/cohort LFA," it also asked for school-level year-long goals, school-level year-long problems, and for each cycle (schools were encouraged to complete at least two cycles each year), a specific "change idea" and goal for that change idea. In addition, Facilitators based their support to schools on the CoL, in part, on their training in improvement science, which focused mostly on gathering and using practical data to make decisions. It did not focus as much on how to incorporate interschool learning into inquiry, or how to help schools find alignment between their respective CoLs. This led to some questions about how schools should prepare for interschool collaboration, especially when each schools' inquiry focus was not aligned.

In the third year, in response to feedback regarding some of the dissonance between individual school's inquiry and interschool collaboration, the program encouraged schools to consider their focuses in terms of what they would be doing in their interschool network, and gently encouraged inquiry to happen at an interschool level. LPP teams were asked to develop goals that explicitly considered the connections between individual schools' inquiry and the interschool network. Schools were asked the following questions related to focus area development on the CoL Documentation Tool:

- How will the host school **support partner schools** in their Cycles of Learning?
- How does our triad or cohort's **common LFA** relate to our school community or subgroup?
- What is our school's or subgroup's **year-long goal**, connected to our triad's/cohort's **LFA**?
- What is the **problem**, related to our year-long goal, that our school or subgroup is trying to solve?
- How did our school team or subgroup decide on the **year-long goal** and **problem** we're trying to solve? What process/data was used?

These questions provided more encouragement for alignment across schools. And in the current year (2017-2018), the program is going even further in this direction. The program handbook

states, "A successful cycles of learning process threads the work of the school team with the work of the triad," and, "Problems of practice for all school teams in the triad/quad are the same or similar within a common focus area… interschool visits are designed to enhance the cycles of learning of all schools and all schools communicate their current cycle goals at those visits." As the program has evolved, it has attempted to support joint work across schools more and more.

Focus Areas for Host Schools

Focus area development was slightly different for host schools than for partner schools. In the first 2 years, the program was flexible about whether host schools primarily support partner schools or whether they would need to work on an internal goal as well. Given this flexibility, there were cases where host schools' work was primarily concerned with supporting partners, and when asked what they achieved through LPP, they described the leadership development of their school team members, the ability to better articulate what they do well, and the learning of an occasional new idea from partner schools. There were also cases where host school LPP teams worked to implement new practices in their schools in more coordinated ways, and sometimes these aligned with the work of the partner schools and sometimes they did not. In the third year of the program, as part of the push to get schools to integrate interschool collaboration into their inquiry processes, the program asked that all schools, including hosts, conduct inquiry around a school goal. Given this, host schools engaged in a similar refinement process as partner schools did in the third year, often strengthening an area of practice that the partner schools were working on as well.

<p style="text-align:center;">Knowledge Sources and Knowledge Dissemination</p>

As interschool networks refined their LFAs, and as schools identified goals and problems, they also began the process of determining what changes to implement, or what

change ideas to test. As much as the program's tagline makes the source of these change ideas seem straightforward and as though they stem from educators' existing knowledge—they are "in the room"—schools accessed multiple sources of ideas and went through a variety of processes that led to the articulation of and engagement with these ideas. Sources of knowledge included educators on school teams, the interschool network, Program Facilitators, and published resources such as texts, curricula, standards, rubrics, and instructional programs. Participants surfaced ideas through problem-solving activities, other types of structured, reflective discussions, peer observations, simulations, data analysis and reading. And most frequently, changes stemmed from a combination of sources and processes.

Of course, it was the people in the room, LPP teams of teachers and principals, who made the ultimate decisions about how to combine ideas and translate them into action steps, who, according to Nonaka & Takeuchi's definition, "created knowledge." On the other hand, the notion that there were correct answers that aligned with some external standards of practice was also a key aspect of LPP. The fact that the program elevated host schools that exhibited "strong practices" in a particular area underscores the program's perspective that partner schools could learn from these schools that are more advanced in a particular area. Notably, in all program literature, host schools have "strong" practices, not "best" practices. "Strong" indicates that there are many practices from which to choose, while "best" indicates there is one right one to adopt. The choice to use "strong" points to the middle ground that LPP was striving to achieve between internal knowledge and external expertise—schools should take into account what has worked elsewhere, but the ultimate choices for what changes to implement lie squarely within schools. Also, in LPP, "elsewhere," or the interschool network, feels less external than, say, staff developers from an educational consulting company, or officials from a district central office.

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The external source was made up of other teachers and principals with whom a school was sustaining collaboration and, as discussed in the previous chapter, building trust over many months, and in some cases, over a number of years.

By providing partner schools with access to the expertise across the interschool networks, and especially in the host schools, LPP departed from other "bottom-up" reforms that ask schools to define and solve their problems entirely on their own. The program provides external sources of expertise, as well as guidance on processes to unearth internal expertise. Karen Seashore Louis (2006) explains how, to create new knowledge, educators must integrate three knowledge sources: (1) individuals within the school community, (2) external sources (experts, externally produced standards, and other schools), and (3) knowledge created by members of school communities as they aim to solve problems and answer questions (p. 96). LPP aimed to provide access to these three types of knowledge, and worked to explicitly encourage their integration. For many schools, individual knowledge and knowledge developed through problem solving were both accessed through school-level inquiry, and in the midst of inquiry, ideas were brought in from individual school team members as well as the interschool network. In addition, as participants prepared for and participated in interschool activities, they were forced to articulate their tacit knowledge so that it could be shared with the rest of the network.

By supporting the integration of internal and external sources of knowledge, inquiry in LPP departed from the DOE's earlier Collaborative Teacher Inquiry Team initiative that began under the Klein administration in 2007. That version of inquiry primarily relied on the power of data analysis to help teachers determine instructional changes. Educators were supposed to examine student work and test results, identify skill gaps, and then fill those gaps by teaching the identified missing skills (Talbert, 2011; Panero & Talbert, 2013). Panero & Talbert describe

those skills as the "low-hanging fruit," or the obstacles to student learning that, once identified, are easily solved. They asserted that student learning can increase substantially through this approach, as there is a considerable amount of low-hanging fruit. They do also state that when problems are more challenging, inquiry teams may need to access external sources of knowledge. However, the Collaborative Teacher Inquiry model did not provide a specific process or resources for doing so. So when larger and more complex impediments to student learning are identified, such as, for example, overall student motivation, teachers' lack of understanding of conceptual math, or even something on the level of inadequate systems for teacher communication, teams may flounder.

Below I describe the more specific processes in which LPP schools engaged to access internal sources of knowledge and combine it with external sources. I consider internal knowledge to be any knowledge that exists among individuals within a school, including tacit and explicit knowledge. External knowledge is knowledge that is brought into a school from other organizations, including other schools in the LPP interschool networks, information from published resources and from outside organizations such as Community Based Organizations (CBOs).

Accessing Internal Knowledge by Preparing for Interschool Visits

As much as learning new ideas from other schools was part of knowledge creation in LPP, an even more powerful way of accessing ideas came through when schools reflected on their current practice in order to prepare for interschool collaboration. School teams drew on their explicit knowledge of curriculum and pedagogical systems for which they already had an established vocabulary, but they also drew on tacit knowledge, which, as discussed earlier, is a key resource in schools because educators know how to do many things that they may not

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regularly communicate to others. In order to turn tacit knowledge into explicit knowledge that could be disseminated, educators need to engage in reflective dialogue about practice (Nonaka & Takeuchi, 1995). In LPP, reflective dialogue occurred within the context of both biweekly team meetings and interschool site visits. In both settings, participants engaged in discussions and activities that gave them an opportunity to articulate what about their practice seemed more and less effective, and this reflected on lessons they were learning throughout the LPP process.

When communicating ideas across schools, the transformation of tacit knowledge to articulable, explicit knowledge was unavoidable because educators from different schools are not steeped in the same cultures as each other and do not have the common understandings and short-hand ways of communicating that develop from being part of the same school community. So, whenever a school hosted a site visit and provided information about the school generally, and about their school's approach in regard to the LFA in particular, the LPP team preparing for the visit had to not only reflect on their practice, but they had to figure out how to communicate aspects of their practice to the interschool network.

One Model Teacher from a host school, who was working with a partner school on ways to differentiate instruction in a dual language context, explained how she gained a better understanding of what made her practice effective as she worked to communicate to participants from the other schools. She explained, [P.S. 16 Model Teacher, February 2017]:

> *Model Teacher*: The opportunity to reflect multiple times and to get feedback on a lot of work I'm doing has been great. And the fact that I have to articulate it for other people really makes me understand better the process that I'm- my own thought process. Sometimes you do things in class and you're not conscious of it until you have to tell somebody else about it.

> *Interviewer*: Can you give us an example of something you became more conscious of through this articulation?

Model Teacher: The last two presentations I've given about my process in my classrooms, so the slavery unit and then last year I did one on the Vietnam unit, having to talk about why I made certain choices made it really clear to me certain things that I tend to take for granted, as far as like the building of vocabulary over units. When I had to go back and look at a student's work and see how that has progressed, I kind of have in mind what I want to have happen, but it's good to see what's actually happening, and then have to think about what did I do in order to have this play out in the particular way.

Interviewer: Great. And then you also mentioned that through that process you got some feedback on it. What kind of feedback did you get?

Model Teacher: Generally it's positive feedback, people are excited to see certain things. But they focus on things I'm not necessarily expecting them to focus on. So getting feedback about certain graphic organizers I'd used, or this sequence of lessons. Sometimes when they ask questions about how a certain student has access to the information, then I get a better sense of like, "Oh, this is how somebody else sees it. This might be another way that I can adjust it a little bit."

Interviewer: Who's the source of the feedback?

Model Teacher: I guess other teachers, I think its other partner schools teachers… just commenting on what they found useful. I think that's quite helpful.

Interviewer: So does this feedback influence what you work on for your own growing practice?

Model Teacher: I think so. With the bilingual progressions, I've realized there are certain things that I don't put in place that I probably could. Having to go back and think about it, there's vocabulary work that I would like to do, looking at what is expected for different levels, thinking about, "Oh, I could add a word bank here, I should do this." Or make certain adjustments. I think it's been helpful in that sense, to make me think a little bit more about my own work.

By preparing for an interschool site visit, the P.S. 16 Model Teacher reflected on her practice in ways she might not have otherwise. When thinking about how she could teach the partner schools about planning for differentiation, she had to think about "why I made certain choices," and in particular, how she incorporated the explicit teaching of vocabulary over the course of the unit. She also examined student work in order to grasp, "What did I do in order to have this play out in the particular way?" Then, at the interschool site visit, feedback and questions from the partner school teachers encouraged her to reflect further and acknowledge the role of graphic

organizers and the sequence of her lessons. With the charge of having to communicate about her

practice in the context of an interschool site visit, she gained a deeper understanding of how she

differentiated her lessons, and also gained some ideas for how she could have differentiated

further with "word banks" and other adjustments.

Partner school teams went through a similar process in their preparation for site visits,

even though the emphasis for them was more frequently on receiving feedback from the rest of

the interschool network, and less on sharing strong practices for the sake of the other schools.

For example, when preparing for an upcoming site visit it would be hosting, one partner school

team that was in the midst of implementing student-led circles engaged in the following

exchange during a school team meeting [P.S. 21, March 2016]:

- *Assistant Principal*: "I'm hoping that we can do circles on 4/6 for the site visit – maybe even a few student-led circles."
…
- Team discusses the process of observations, whether observing teachers should stay for the entire class or go in and out. *9/10th grade Model Teacher*: "We could allow visiting teachers to come/leave when we're moving from one activity to the next. Or maybe even when students are writing down responses."
- *Facilitator*: "So given these ideas, what would the learning of this site visit be? What would be the guiding question to root the work that you all do?"
- *12th grade Model Teacher*: "Maybe it's 'How effectively are we giving students a chance to express themselves?' We should have a guiding question that is not just about *more* student voice but about whether it's effective student voice."
- *Facilitator*: So something along the lines of, "How are structures promoting effective student voice?"
- *12th grade Model Teacher*: "Right. Encouraging or promoting student voice. Also, 'How to codify this process?' I don't want to use the word "standardize" but it'd be nice to have a question that pushes us to align on certain practices and create a real culture of student leadership… I don't want to say, "systemize" either. We want to create a culture. And part of culture creation is repetition."
- *Facilitator*: "Right. In what ways are these things happening? And what are the next steps to promote this alignment?"
- *9/10th grade Model Teacher*: "We have students trained in these circles and that is connected to when we talked about how circles are connected by content, to [College and Career Life Skills (CCLS)], etc. When you said 'systemized,' it could be just repeating when opportunities arise."

- *Facilitator*: "What I like about you guys is that you are very deliberative in word choice. So maybe you guys can talk about how you want to refer to these things? 'Structure,' 'system,' 'norm'?"
- *Assistant Principal*: "Based on our discussion, this is what I have so far. 'What structures, if any, promote student voice? Is the student voice effective in building and sustaining community, creating CCLS, etc.? What other ways can we codify structures to create student voice?' I included that first question as a sort of baseline. So as visitors, no matter what they see – either during classroom observations or not, either inside classrooms or not – they are pushed to focus on student voice. And maybe, by providing that focus, they'll be able to pick up on certain matters that we missed…. So visitors could arrive at noon and eat lunch. Around 12.30, we can provide an overview of the observation schedule and figure out where each teacher goes."
- *Facilitator*: "And then we can debrief at 3.00pm?"
- Assistant Principal: "Sounds perfect."
  ...
- *Assistant Principal*: "Also, talk to student circle keepers to make sure that observations work for them as well. And if these circles don't go well, that experience is just as valuable. We'll be able to talk to the students afterwards, figure out what happened, think about it, and learn from it."

Through the course of this exchange, the teachers and assistant principal clarified the purpose of student-led circles in promoting student voice, as well as the rationale behind standard practices across classrooms. As they talked, they came to a more common understanding about their practice related to student-led circles, and prepared themselves for communicating this common understanding in the upcoming interschool site visit. Notably, the Facilitator supported these revelations. The conversation shifted from being about the logistics of the site visit to focusing on what could be accomplished in the site visit when he asked questions that encouraged the group to be specific about what they hoped to achieve. In addition, he reminded the team that they needed to develop a "guiding question" for the visit. This was a standard aspect of LPP site visit structure, and since the second year of the program, was included in program literature about how to structure site visits. By asking schools to develop a guiding question or lens, the program encouraged reflective conversations that got educators to determine specific aspects of

their practice they would like to improve, and thus, the key aspects of practice that needed to change.

When the P.S. 21 team held the interschool site visit, they continued to develop common understandings, but this time with the interschool network. They began the day with a framing discussion led by the LPP team. The discussion covered the following points, which were listed on the site visit agenda as follows:

Framing –
- Explanation of what student voice means to us.
- How do you incorporate it in your schools?
- What you will see in classroom visits.
- As you visit classrooms, please think about
  - What structures, if any, promote student voice?
  - Is the student voice effective in building and sustaining community and teaching college, career, and life skills?
  - Do you have any suggestions for increasing/improving student voice?

The team also provided a "notecatcher" that stated the following at the top: "As you visit classrooms, please think about the questions below. We would love to collect these to use as data." And then it included the questions listed above in a table with room for notes. The following field notes were taken during the "framing" discussion of student voice, in which students from a visiting partner school participated [P.S. 21, April 2016]:

- *P.S. 21 12th grade Model Teacher*: To me, student voice is getting to know all the different backgrounds, beliefs, cultures, and styles of learning and all the amazing things that our students come with—not just as individuals but as a group—and making sure that's incorporated into curriculum, whether it's through daily assignments or group projects….
- *P.S. 21 9th/10th grade Model Teacher*: I agree with everything [12th grade teacher] said. I only want to add that student voice means that students also have the opportunity to hear each other's voices. We have so many different backgrounds and experiences in our classroom and students should really be able to learn from each other.
- *P.S. 22 (other partner school in triad) Student 1*: Student voice is important because it helps students to be more confident and to feel that they belong to a certain community. If they know that their opinions are appreciated by others, they will learn more and be more willing to help each other out.

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- *P.S. 22 Student 2*: It's important because, just like students can learn from teachers, teachers can also learn from us. We have opinions and perspectives to share too.
…
- *P.S. 22 Model Teacher*: I am so impressed by my students' responses. Student voice allows teachers to really feel where our students are coming from.

This discussion further deepened common understandings not just across the LPP team, but also across the interschool network and even among students at one of the partner schools. For this group, "student voice" captured the notion of recognizing students' backgrounds, which is different than a view of student voice that, say, focuses on giving students choices in the direction of instructional activities. So, while individual teachers and students may have had overlapping, tacit understandings about how they promoted student voice, after preparing for and executing a site visit, there was more clarity about what it looked like at this school, and, after receiving feedback from the interschool network later in the day, P.S. 21 was able to develop next steps for promoting it consistently across classrooms.

The P.S. 16 and P.S. 21 examples above involve school teams that were focusing on changes to classroom practice (differentiation in dual language instruction and restorative circles). When school teams focused on making changes to school systems and collegial structures, discussions about upcoming site visits were quite different. Rather than reflecting on instructional practice, these discussions tended to focus on scaling changes across the school, and on ways to influence the behavior of non-LPP teachers. For example, when planning for an upcoming site visit, one team that was focusing on developing teacher collaboration and leadership reflected on impediments to collegiality at their school and how they might be addressed. The LPP team had recently led a PD day on discussion and differentiation strategies for all faculty at the school as part of their effort to encourage collaboration. They were also considering ways to encourage peer lesson observations that would support implementation of

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those strategies, and wanted to have non-LPP teachers be part of the lesson observations in the

upcoming site visit. The following is an excerpt from field notes of a school team meeting

shortly before the site visit [P.S. 38, School Team Meeting, March 2016]:

- Model Teacher recaps last LPP team discussion: talked last time about getting other teachers involved in classroom visits; talked about getting teachers that are a little more resistant to intervisitations to be more involved…
- Model Teacher asks, "Who would make sense to visit? What are we looking for?"
  - Explains how host Model Teachers had suggested observing anyone trying to implement changes from the 2/1 PD because that will show the degree to which teachers are implementing the things that the LPP team has been talking about.
  - On Monday grade team leaders should ask if anyone is focusing on student discussion/differentiation strategies.
  - Should also gauge interest from members of departments.
- …
- Model Teacher asks again how do we frame these intervisitations to get teachers to say, "That sounds great, I want people to come to my classroom?" – notes that they fear a debrief after.
  - "Want to frame the LPP visit in the content teams on Monday? – this includes potentially showing the [debriefing] protocol to the teams."
  - Another teacher suggests that they need to be wary of time so that teachers do not feel like they are missing a ton of time in the classroom for a debrief.
  - Another team member says that they can toggle with the debrief questions to make them less sensitive (e.g., "What went well?").
- In terms of structure, Model Teacher suggests a morning observation for a full period, followed by a debrief with the teachers, and then a re-debrief without the teachers later on…
- Who should be included in feedback?
- Decided that P.S. 38 staff will be involved in the debrief sessions of the lessons during 4th period.
  - [Host school] and [other partner school] will silently observe
  - Little bit of discomfort at the last site visit with respect to people receiving feedback from people they don't know. "We're still building culture here. To bring in 10 different people would be a step back."
  - In 5th period, [host school] and [partner school] will join and P.S. 38 will decide what specifically they want feedback on.
- Who do we want to invite to join in observations? We want to get more people in the mix, so they can see it from start to end.
- We should look for interest first, but want to expose more people (e.g., not going to invite any of the teachers who have been to the host school twice).
- Suggestion to send out a memo or email.
- On Monday, they will determine who is interested in visiting classrooms.

In this case, the LPP team engaged in reflective dialogue on school-level issues related to peer observation, and articulated a number of difficulties, as well as potential solutions, for getting more teachers in the school to open up their classrooms. In particular, the team discussed how debriefing after peer observations takes up precious time that teachers may not want to sacrifice, especially because they are not given the extra release time that LPP teachers receive; they discussed how the debrief questions are "sensitive" and proposed adjusting these so they are more positive, as well as sharing the protocol ahead of time. They also discussed the need to go slow, and involve teachers who demonstrate some interest in peer observations. Of course, some of their considerations were related to the specifics of the interschool visit, and how they can go about planning a day of peer observations that involved outsiders from another school, but in considering this, they delved deeper into some of the obstacles related to encouraging peer observations throughout their school and inched ahead in their understanding of how they could influence their peers. Many of the ideas they raised, especially the idea of using protocols and attending to vulnerabilities regarding exposing practice, are at LPP's core, indicating that the P.S. 38 teachers were bringing what they learned from LPP's culture into their consideration of the specific difficulties in their context.

Accessing External Knowledge

Knowledge from published resources. As the teachers described above uncovered aspects of their own and their schools' practice, they also discussed information that stemmed from a number of external sources. The host Model Teacher who was presenting on differentiation in the dual language context mentioned explicitly teaching vocabulary in content areas, which is a part of the "sheltered instruction" approach to dual language that this school used. They used the SIOP Model, a research-based approach to dual language about which there

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are guides, training, and institutes (Echevarria, Vogt, & Short, 2008). Although the Model

Teacher did not mention SIOP in the interview, the host school team discussed it with the partner

school teams at interschool site visits, and used it, along with another external source, the

Guiding Principles of Dual Language (Howard, Sugarman, Christian, Lindholm-Leary & Rogers,

2007), to develop criteria for assessing the progress of each partner school. In the case of the

school focusing on student-led circles, the circle structure was based on an intensive training

provided by a CBO, the Morningside Center for Teaching Social Responsibility (Morningside

Center website, n.d.), that the assistant principal and some of the Model Teachers had attended.

Morningside also provided training to the student "circle-keepers," and a Morningside

representative actually attended the interschool site visit referenced above. For the high school

working on increasing teacher collaboration and collegiality, the team ultimately used a lesson

observation debriefing protocol provided by a district "Teacher Effectiveness Coach" that the

school was working with to help them implement the DOE's teacher evaluation system.

These are just three examples, but in nearly every discussion among school teams, both at

biweekly school team meetings and at interschool site visits, outside sources such as programs,

information remembered from pre-service teacher preparation, texts, and standards were either

directly referenced or clearly alluded to. One Facilitator even said, in relation to the dual

language triad, [Larry, May 2015], "There's going to be professional common language that

we're using to discuss this. We're going to look at things through like a specific framework."

In other words, the information discussed stemmed both from what educators were tacitly

"learning by doing," as well as from key concepts found in outside, "professional" sources,

which would add up to common language for a LPP team, and in many cases, for an interschool

network. In fact, it is possible that the need to communicate across schools encouraged not only

the articulation of internal knowledge, but the use of external frameworks, as these would

provide parameters and bring a built-in set of vocabulary that the interschool network could use.

Another salient example of bringing in outside sources of knowledge took place at P.S.

12, the school that decided to focus on implementing consistent instructional practices across

classrooms after observing such consistency as a key aspect of the host school's culture. The

principal explained how her school's LPP team gathered ideas for common practices to

implement in the first 15 minutes of all classes from various sources [P.S. 12 Principal, March

2015]:

> We're seeing massive amounts of time being waste[d] [during instruction] so we looked
> at practices of *Teach like a Champion*. ….[And] the "Gradual Release of Responsibility"
> was something that actually [the Facilitator] brought to the table. He was like, "This
> might be a good construct" because we were basically talking about [improving the use
> of instructional time] without having a tool or a reference point. It's like you know—you
> know it was—the old-school workshop model, which I was trained under, and [the
> Facilitator] brought it to the table. He said well at his [old] school, they had been using
> this and they had done this book study…. This was really early on and I was, like, "Great,
> this will give us something concrete that we can refer to," and so we brought that to the
> table.
>
> When it came to the first 15 minutes of class and the practices [we would try] for that,
> that we did do collaboratively, so we did a whole group-learning activity where basically
> [the Facilitator] said, "What are the best practices that we [know] already know work?"
> And everybody came up with the same 10. He said, "So well then these are the 10
> practices that [laughs] we need to make sure are consistently in the class so let's talk
> about it, let's talk about what it looks like, let's talk about when you do each and why,"
> and then we made that into an observation tool that was actually used on the first visit
> when people came here.

In this example, the close proximity, and perhaps even false dichotomy, between the

knowledge that teachers learn on the job and the explicit knowledge they have from formal,

professional sources becomes clear. Two texts, which are based on theory as well as empirical

research about strong instruction, are referenced, including Doug Lemov's (2010) *Teach Like a*

Champion (2010) and Douglas Fisher and Nancy Frey's (2013) *Better Learning Through*

Structured Teaching: A Framework for the Gradual Release of Responsibility. The latter is

something that the principal had studied previously ("I was trained under") and the Facilitator

used in his old school where he was an assistant principal. A common professional knowledge

base, grounded in texts, was being referenced here. This knowledge base was then combined

with the LPP team's reflective discussion and self-assessment, guided by the Facilitator.

Although it is not presented explicitly in this quotation, the principal references how the group

had reflected on the fact that instructional time was being lost. The principal also referenced a

deliberate activity in which the team brainstormed the ten practices that they wanted to

implement consistently across the school. After brainstorming, the group engaged in a discussion

about what these practices entail, when they are used, and why. Through such discourse, all team

members aligned on their understanding of what the ten practices were, as well as what makes

them strong. This understanding was then documented on the observation tool that the principal

referenced, which the team asked the rest of the triad members to complete as they observed

classrooms, inviting the expertise of the interschool network to enter their work. So, as much as

reflective dialogue unearthed tacit understandings, it also gave educators an opportunity to

connect tacit understandings to formal bodies of professional knowledge.

Knowledge from interschool network. As schools presented at site visits, and thus

deepened their understanding of their own practice, they were providing external knowledge to

other school teams in their network. In other words, one school's process of articulating internal

knowledge was simultaneously another school's means for accessing external knowledge. As the

host school team in the dual language triad presented on differentiation strategies, the partner

school team members observed and then incorporated strategies into their own practice, or into

possible "change ideas" that they could test as part of their school-level inquiry. As the partner

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school presented its student-led circles as a mechanism for fostering student voice, the other

partner school and host school considered adopting some of the structures presented. In fact, at

that site visit, the visiting partner school team members asked many questions about how student

circle-keepers were trained, and began planning a peer circle-keeper training series at their

school.

There were instances when the hosting school's presentation was less relevant to the

visiting schools' goals; although, with Facilitator support and with guidance from program

documents, schools developed practices to help make each interschool visit at least somewhat

relevant to all schools' work. For example, note-taking templates used during observations of

practice often included space to write not only feedback for the hosting school, but also space for

ideas to bring back to the visiting schools. During debriefing sessions, there was often time to not

only provide feedback, but for visitors to get clarification on the processes that led to a particular

practice just observed, so visiting schools could better implement those practices, or adaptations

of those practices, at their own school. And perhaps most importantly, site visits often included

"school team time" where participants discussed how they could apply what they observed

during the visit to their own schools. In fact, when discussing the issue of relevancy for all

schools, one assistant principal explained, [P.S. 21 Assistant Principal, February 2016]:

> If a teacher is going to leave their school for an entire day and do that 11 times a year—or
> whatever it is, you know, it has to be worth it. And so I think the challenge is—like when
> we go to [the other partner school] or when we go to [the host school], how is that going
> to improve our own practice? And I think that what we've built into those—to sort of
> answer my own question, what we've built in is this time at the end of each visit to sort of
> think what are we taking back. So whether you've seen a good practice or a practice you
> don't want to do, there's always something that you can say, okay, I'm not going to judge
> that person's practice, but what did I see today, and how does that affect my own teaching
> or my own school. And I think that's what makes it worth it to leave the building and take
> the time to work with others.

This triad came to recognize the value of having planning time at the end of site visits on their own, although this was also a practice that many Facilitators encouraged and that was recommended in program literature.

Importantly, as the P.S. 21 assistant principal points out, external knowledge provided at interschool site visits came not only in the form of observing another school's practice that could be adapted for a visiting school, but in the form of practices that a visiting school did *not* view as strong. In some cases, seeing practices that a school did not want to adopt actually clarified that school's priorities, as it helped educators think about why they were approaching their goals in a way that did not align with another school's approach. Exposure to different practices through interschool collaboration provided a point of comparison that helped schools better assess what they were doing in their own school. In the triad made up of three District 75 schools all working on increasing the consistency of instructional practice across their classrooms, the schools had different approaches to teaching students with autism, where the host school primarily used Adaptive Behavior Analysis (ABA), while a partner school used a continuum of approaches. An instructional coach from the partner school reflected [P.S. 24, March 2017]:

> Seeing what [the host school] did and seeing that, in I think an excellent form, like their ABA, their explicit discreet teaching as they call it, it's also good to see that as a model. To say, "Well, is this something we want to do? Is this something we don't want to do? And how does it align to our mission statement and to our belief about children?" Because right? It's great ... we might ... we would go down the rabbit hole and say let's set up our whole school like this, and we don't have to! They did it. We can look at it, we can dissect it, we can see the value or the non-value in it, and then we can debate what helps, what works, what doesn't work…. I guess I think that it goes to the school's mission statement and our learning stance and philosophy, in a sense. I mean, you would be hard pressed to disagree with ABA as a strategy for students with autism. You would just be ill-informed if you thought that that was not something that worked. So I think that that's why seeing something with that... as excellent as that working so well, makes you feel good.

> The thing is that, I think the philosophy that [my principal] has because she does come from a non-special ed background to begin with, is that, "no we gotta push these kids.

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We've got to give them whole-group instruction, we have to get them access to the curriculum. We have to do that"….Once we got into LPP, once we started examining other systems, I think it forced us to kind of have to define what we were and what was important… It made me think, personally, you know ... cause when you're seeing other schools, and like, they're good schools, you're like, "Well huh. What if we just ran it like this. Why is this not okay for me, or why do I not agree with this, or why did I end up here, and do I want to work over there?" You know, it really made me question those sorts of things. And then, you know, what I arrived at was I really like it here, I think that we haven't figured it out, but when we keep those kids' independence in mind, I think it's ... the journey is very rewarding, if not really arduous.

For this coach, who had actually been part of his school's LPP team for 3 years, seeing schools' practices that he did not think would be good for his students helped him not only better define his school's mission, but it helped him better clarify his personal beliefs about how to approach teaching. He came to his realizations through an "arduous" process of "dissecting" and "debating" about the practices seen at other schools that led to his school team defining what his school did and why. This happened not only through preparation for interschool collaboration, but in the midst of collaboration and reflection, as schools decided what external ideas may or may not be relevant to them.

Knowledge from interschool network's feedback. During interschool site visits, visiting school teams were not the only ones exposed to external knowledge from the interschool network. Schools hosting the visits were given access to other schools' knowledge as hosting teams received feedback on whatever practices they were presenting to the rest of the interschool network. When done well, feedback discussions served multiple purposes, including, helping visitors scrutinize what they observed, crystalizing ideas to bring back to home schools, and providing the hosting school with ideas for how to refine practice. When host schools were hosting visits, the former purpose was more evident, and when partner schools hosted, the latter was prominent. Sometimes, feedback was exchanged through an open discussion of what seemed effective and what could be changed. These discussions often involved many compliments and

occasionally led to concrete suggestions for the hosting school. In order to make feedback more critical and useful, many networks used protocols that constrained the discussion to the lens or focus of the visit. When feedback exchanges were most productive, leading to changes hosting schools actually planned to implement, hosting school teams provided visiting schools with specific criteria they wanted to be judged against, and then used the feedback as "data" to be analyzed in subsequent school team meetings and to inform next steps.

For example, in the District 75 triad where all schools were working on changing specific instructional practices across all classrooms, the teams had a common routine during all of their site visits where the hosting school would state its current goal, explain where the school was in moving towards its goal in terms of what change they recently implemented and how they implemented it, and explained the criteria that should guide feedback from the network. Almost always, these criteria aligned with some external standard of practice, such as Danielson competencies, or a different framework for teaching. For example, at the beginning of one of the site visits hosted by P.S. 24, the instructional coach described "explicit instruction practices," which the LPP team had been working on with non-LPP teachers. These practices were written on a note-taking template that he passed out and asked visitors to complete. The template asked observers to check whether specific practices such as, "Instructor(s) are explicitly teaching an objective," were observed or not observed during the observation. After completing the observations, the group transferred the "data" to color-coded post-its that were placed on separate charts for "grows" and "glows." The hosting principal then reflected on the feedback, as presented in the excerpted field notes [P.S. 24, February 2017]:

- P.S. 24 Principal goes over the patterns from observations while reading post-its and gesturing to charts:
  - [Teachers] are differentiating, posting objectives and using groups – they have the foundation and structure

- There's only one post it about teachers taking data; glows are mostly teacher behavior, little about student; very little about student behavior – decides that's not a focus area
- Assistant principal continues with the grows
  - Patterns: training staff and working with staff, engagement with students, very teacher driven
  - Questioning, think alouds [verbally narrating the thinking expected of students]
- Principal says she's happy with the structures, the teachers want to do the things they learned, still struggling with what makes sense for the students, missing the "I have to do it in order to get you to see how to do it"; she sees the impact of the PD from the feedback they received, but still working on how to use the data to make these student groups more effective; "what do you think our next steps are?"
- P.S. 45 (other partner school) AP – teachers need to talk less so students could talk more, peer to peer
- P.S. 23 (host) Principal – that's part of lesson planning, asking questions that would make students engage
- P.S. 24 Principal: reiterates that she should do - more think alouds, putting questions into lesson plans
  …
- Wraps up conversation by reiterating next steps – using data to plan lessons for group instruction, PD for paras and for teachers using paras, think alouds, questions in the lesson plan

For this school, the feedback provided some confirmation that the change idea (providing PD in explicit instruction) had some impact on instruction across the school, and it also helped the P.S. 24 team think through next steps for PD. As was typical during feedback discussions across schools, many ideas were raised, and it was not until the subsequent team meeting where decisions on how to implement those next steps would be made. These decisions were made in the context of the CoL, and often included additional reflection on whatever other evidence, beyond site visits, individual school teams collected as they implemented change ideas. In other words, while planning for and engaging in interschool site visits produced a bank of knowledge from which school teams could get ideas for possible changes, the actual selection of change ideas and planning for implementation tended to occur at the school team meetings between site visits. In the next section, I discuss the school-level change idea generation and implementation process in more detail.

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Accessing Internal and External Knowledge through Inquiry

Above, I described how schools developed knowledge in preparation for interschool site visits and during site visits by both articulating tacit understandings and gaining exposure to new ideas through collaboration. For most partner schools, in addition to planning for interschool site visits, the majority of school-level meeting time was devoted to the CoL inquiry process which organized much of what they were learning through LPP. At team meetings, participants discussed what changes they might implement, how they would go about implementation, what evidence they could gather about the impact of those changes, reflections on this evidence, refinements to change ideas, and plans for disseminating new practices to the rest of their schools. Some schools also documented their inquiry work on the CoL Documentation Tool. As schools engaged in these discussions and documented their thinking, they articulated the mental models that guided their practice, unearthed discrepancies between each other's understandings as well as between their understandings and the evidence they collected, and developed new understandings that would eventually become change ideas or refinements to change ideas.

Change idea generation. Unlike the knowledge creation described in the previous sections, change ideas are what teams actually decided to implement as part of their CoL inquiry process. In some cases, the specific change came directly from another school, most typically the host school, and in other cases, team members introduced ideas from readings or tools they thought were relevant to their problem and goal. No matter the combination of sources, as teams discussed the changes they wanted to make, they reflected on their own practice, their colleagues' practice, and, often, practices they observed in other schools.

For example, one LPP team at a transfer high school came to one of its change ideas, to have students rate themselves on a rubric that assessed the quality of their collaboration with

other students, after numerous discussions that raised questions about their own understanding of what collaboration should look like in their classrooms. This school served high school students who were held back at least twice in elementary or middle school and who transferred from other schools. The LPP team described student-to-student interactions as being highly negative and so, early in the school year, decided to work on getting students to collaborate during instruction. In their first cycle of learning, the team collaboratively planned a lesson that included opportunities for students to give each other feedback on the ways they solved a math problem. During a discussion after observing this lesson, the team talked about how collaboration in the form of feedback, in particular, may have been stressful for some students, and dug deeper into what they called the "psychological problems," which prevented many students at their school from being willing to collaborate with each other. In a second lesson study, the team planned a lesson where students collaboratively created dialogue to perform. As the team reflected on this lesson, they re-evaluated their goal for student collaboration, and unearthed key practices that they thought might get them closer to that goal. The following field notes are excerpted from a school team meeting [P.S. 8, March 2, 2017]:

- *ELA Model Teacher (who taught the observed lesson, MT 1)*: Two students collaborated well together; there was a built-in opportunity for collaboration and a reason for it; what did not work – for other partnerships, barriers to sharing with someone; some students didn't want to talk to each other; questions were repetitive.
  …
- *Math Model Teacher (MT 2)*: Some students "unable to" collaborate. Content or coping skills may come before and students can't collaborate when these barriers exist. Suggests making collaboration part of the grade and make an activity that makes it impossible for them not to collaborate. Recall in teacher team during [interschool] site visit "the feedback they were giving us…. swung back to our year-long goal." Explains how the feedback from the site visit brought them back to their definition of collaboration)– and it made him wonder if they need to better define collaboration.... Collaborating could be listening.
- Assistant Principal: "Lesson showed how many other obstacles" are in the way. Notes "easy distractibility." Talking about one student taking the "path of least resistance" without making any effort to read his partner's work…

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- *MT 2*: "I feel like a lot of what we're talking about is classroom community."
- *MT 3*: "We keep going back and forth … I think we're mixing the two. I keep getting frustrated because I get confused about what we're doing… There's the community piece and the other thing I keep running up against is that we're doing it in one day and the goal is humongous, and how to look at it in one lesson when there's 30 other things they're doing at one time. And the other thing is how do we show growth in it?**"**
- *MT 1*: Completed Hamilton unit today. "It felt like for two of those three classes where it really did feel like a community." "I think if someone had watched that looking for collaboration or working together solving problems you'd see that without us teaching it."
- *Assistant Principal*: Describes how community is formed through accomplishing things together… "If there's community and there's collaboration, but one of the ways you can teach community … when students accomplish things you build community…."
- MT 3: "I still don't know how to do this well in my classroom or what would be the starting point, or what good collaboration looks like versus amazing collaboration looks like. …"
- MT 2: Agrees and gives example of how she didn't plan collaboration, but it happened in the moment… Describes two students collaborating, but don't feel like it was because of a worksheet,… how do we plan for unscripted moments… and shout that out when it happens (hits head for not doing that when it happened). "[I] Should have said, 'I like how you were working together.' The recognition of when we say you're working together, this is what it feels like."
…
- AP: "It was authentic… I like the idea of reflecting afterwards…"
- MT 1: "Maybe we should be doing research about team building."
- MT 2: "There's something about the content that makes (students) shrink. … They shrink even more when they have to share."
…
- MT 3: "I hate to keep saying this, but that makes me think about the rubric…. Put it into the rubric. Something about where students are rating themselves constantly against the rubric. Maybe providing each day or once a week where they were doing good collaboration, and where they could improve. The student that helped could think this is good collaboration.
…
- AP: "…I'd like us to come up with a list of where we are right now. …It feels like we've been going in circles, but we have been learning things along the way and I want us to incorporate as we move along….
- Team goes over list note-taker was writing:
  o Should be authentic – what does that mean?
  o Teacher should model; student modeling
  o There should be reflection
  o Shouldn't be new material when activity is one student helping another
  o The goal of collaboration should not be shared with an academic goal
  o Take classroom dynamics into consideration

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- o Celebrate positive examples
- o Make sure students know how to start
- o How to respond in the moment when students don't collaborate?
- o How do we react when student can complete the task and activity does not necessitate collaboration – how does a student rate themselves on rubric?

Through this discussion, which came after observing two team members' lessons that attempted to include collaboration, and after engaging in a problem of practice consultancy protocol with the visiting schools in the interschool network, the team identified a number of obstacles to student collaboration. As they talked, they also reflected on their own practice, and explained how the lesson may not have necessitated collaboration, and one teacher admitted that he did not know how to teach collaboration. Then, teachers thought of examples where collaboration did happen without them planning it, and thought about what led to these "authentic" moments, thus developing more generalized ideas for promoting collaboration. From their list of ideas, the team ultimately focused on the rubric, which provided a common language for the expectations for collaboration in the school. By analyzing what happened in both examples and non-examples of collaboration from the observed lesson, the team got closer to defining its change idea. This did not happen easily—one teacher expressed frustration, and by the end of this meeting, the next steps were not fully concrete. Yet, it was only after a teacher expressed frustration and confusion that the rest of the team considered examples that got them closer to defining practices they might try out next. The frustration and messiness of this conversation was a necessary step in developing a common understanding for what changes they might make.

Identifying measures, reflecting and refining. Critical dialogue also came in discussions related to measuring the efficacy of change ideas, a next step in the CoL inquiry process. When defining measures, teams often grappled with the ultimate purpose of the changes they were making and how it related to their ultimate goals. And then, when reflecting on

evidence they collected, some teams became aware of undesired outcomes and thus deepened their understanding of current problems and potential solutions. For example, P.S. 38, the high school in its third year of LPP implementing teacher-led PD workshops, discussed various measures they could use to assess progress toward the dual goals of increasing teacher collaboration and leadership, as well as increasing student engagement. LPP teachers and non-LPP teachers led a series of workshops on topics related to student engagement. The team decided to measure attendance at workshops, noting that teachers' willingness to show up was a sign of their openness to collaboration. To understand the efficacy of the workshops, they decided to survey teachers and ask them about the extent to which they were using techniques presented in the workshops in their classrooms. They also organized an informal reflection discussion among the entire faculty at a school-wide PD day. They discussed asking their principal for ratings on formal classroom observations with the Danielson rubric, particularly in the planning and student engagement competencies. Finally, they decided to administer a student survey asking about engagement. By brainstorming these possible measures and measurement tools, the team solidified their theory of action: Changes to teacher collegiality in the form of teacher-led workshops would improve instructional practices, which in turn, would lead to more engaging lessons and higher engagement for students. As they identified measures for each one of these stages in the theory of action, their understanding of their theory became more concrete.

Reflecting on the implementation of the workshops and drawing on the data they collected as they reflected helped them to understand their own progress towards their goal, as well as what else they might try to reach that goal. When reviewing survey results from one workshop, a member of the team noted that "Ninety-six percent of staff used a strategy that they learned and more than a quarter do it daily, 50% do it once/week," and another said, "That's

pretty good, a quarter of the staff do what they learned every day." With this, the team received confirmation that the workshops were moving in the right direction. When reflecting on the school-wide PD, where teachers from across the school discussed their experiences with the workshops, the team came up with concrete ideas for next steps. This was a common theme throughout the sample; looking at hard data such as survey results, test results etc., gave a general picture, but it was by reflecting on observations of practice that teachers gathered specific ideas on what changes to make.

The following exchange took place during the LPP school team meeting right after the school-wide PD, when the team was focusing on what they learned about a teacher-led workshop on incorporating student discussion techniques into lessons [P.S. 38 School Team Meeting, February 2017]:

- *ELA Model Teacher*: One teacher said she didn't implement the strategy because it didn't fit the lesson, but I don't think that's case… she definitely didn't feel comfortable with the strategies, and how do we build that comfort… I know we met after with them to see if they needed help, but maybe they need more?
- *Science Model Teacher*: Maybe they needed more of a lesson planning workshop…
- *ELA Model Teacher*: We could utilize ELA department to help – divide us up, they [non-ELA teachers] could discuss content…
- *Science Model Teacher*: We could use some of content team time to help teachers figure out how to implement workshop strategies… it would also be a good way to educate everyone about all workshops.
- *ELA Model Teacher*: We didn't know that one teacher was struggling with the discussion [techniques]… so how can we create that space where we notice and help her? Bringing it back to content teams could help… so since people weren't implementing, the follow up conversations weren't helpful.

Through this conversation, the team discussed how teachers may need additional support for implementing strategies, and came up with another change idea—reinforcing ideas from the workshops in content teams—further developing their theory of action for how to ultimately improve practice and student engagement.

Documentation. Beyond clarifying understandings through discussions, LPP team members that used the CoL Documentation Tool made their understandings even more explicit when they documented what they were learning. The documentation process also had the added benefit of memorializing the new knowledge created by teams, which could support them in disseminating their understandings across the school. For example, after further discussion of the workshops, the P.S. 38 team wrote the following in response to a question on the Tool that asked about what modifications they would make in their next cycle:

- Get ideas from every teacher about workshops that they would lead so that we can diversify the teachers who lead the workshops.
- Use intervisitations as a way for teachers to see new practices in action and expose teachers to what is happening in the various workshops.
- Create a intervisitation calendar for teachers to invite in teachers and let teachers know when they are invited into their classrooms.
- Figure out ways to incorporate the work shared in PDs into the grade and content teams more fluidly.

When documenting, the team came up with even more ideas to respond to the problem they had identified regarding teachers not knowing how to implement strategies from workshops. When given multiple opportunities to articulate what they were learning and the next steps they would take, teams often built on their ideas, getting closer and closer to what might be the complete solution to whatever problem they were trying to solve.

When asked about their impressions of the Documentation Tool, some participants explained how it felt "compliancy," but they also expressed how it, and the CoL process as a whole, kept the work "focused" on their ultimate goals and kept the work "moving." One host principal said, "It's something that you feel like you have to get done, but I see why it exists. I see the fact that it is helping us to be a little bit more focused and move a little more quickly on things." And one Model Teacher from P.S. 38 said, "It definitely helps me organize and think about what we need to do next, and what we should do next." The notion of the CoL

documentation forcing program participants to "stop and think" came up across nearly all interviews. It slowed decision-making, so that decisions only came after team members paused and considered whether what they were doing was working or not, whether it was achieving their goals, and whether the goals they set out to achieve were still the right ones given the current problems they were facing. In this sense, the process forced justification for continuing on or tweaking the changes they were implementing—justification that came in the form of reflection on practice as well as whatever evidence the teams collected.

Dissemination. The final stage of the CoL is "Shared Lessons Learned," where LPP participants are asked to "share data, learning, impact and next steps with our school and the triad/cohort." In my sample, dissemination across the interschool network tended to happen on an ongoing basis, with schools sharing their progress in inquiry at monthly interschool site visits, and then, at the final site visit, providing a more comprehensive presentation about what they accomplished and learned throughout the year. Dissemination of change ideas across individual schools tended to take one of two forms. For schools like P.S. 38, dissemination was an ongoing process, given that they were working on creating school-wide changes to collegial structures at the outset of their inquiry work. For them, dissemination was part of each change idea, and refinements to change ideas were primarily about modifications towards their support of other teachers in the school. This type of ongoing dissemination was typical in schools where the LPP team acted as a school leadership team, where they were less focused on each of their own individual instructional practices, and more focused on coordinating instructional practice across the school. In contrast, for schools like P.S. 8 (working on the student collaboration rubric), dissemination happened as more of a discrete step that took place after the LPP team had piloted and refined an instructional practice themselves. These schools would often present the results of

their inquiry and plans for implementing change ideas in school-wide PD sessions, through

newsletters, and in grade or content team meetings. Regardless of the form of dissemination, it

tended to involve determining a final version of whatever innovations were going to be

implemented school-wide and codifying it in writing, thus taking the knowledge created and

making it explicit, formalized, and transferable.

Summary and Conclusion

LPP team members developed solutions to their problems of practice through a process

that drew on a combination of sources, including the interschool network, external standards, and

most importantly, reflections on their own practice. The seemingly obvious sources of new

ideas—observations at other schools and feedback from other schools—certainly played a role in

the development of change ideas, but these were not necessarily the most important mechanisms

for changing practice. As Nonaka & Takeuchi (1995) state:

> When organizations innovate, they do not simply process information, from the outside
> in, in order to solve existing problems and adapt to a changing environment. They
> actually create new knowledge and information, from the inside out, in order to redefine
> both problems and solutions and, in the process, to re-create their environment (p. 56).

Indeed, LPP schools benefitted most from interschool collaboration in the ways it forced them to

reflect deeply on their own practice. As schools prepared to articulate their practice to others, and

as schools considered their own practice in terms of what they were seeing in other schools, they

clarified what made their work weaker or stronger, what about it led to intended or unintended

results, and what was in-line or not in-line with frameworks they trusted. As they gained this

self-knowledge, the solutions to their problem became clearer. This process was most effective

when schools had aligned focus areas, so that whether a school was hosting or visiting, the work

of the interschool network related to their individual inquiry. Schools in my sample found

alignment to varying degrees, an issue the program has been addressing over time.

And as much as the work was "inside out," it was heavily supported by program inputs. The routines of monthly interschool site visits and biweekly team meetings, as well as the structure of the CoL, which was reinforced by program Facilitators, provided accountability to work towards goals in a sustained way. These structures also fostered the creation of places to store new knowledge, as participants documented what they learned in most visits and meetings, either on the CoL Documentation Tool or in other formats. So while schools certainly had the autonomy to select the content of their work, they were not left alone to solve their problems. They had the pressures and support of the interschool network, the Facilitator, and as the Program Director said, of the "processes that bound them together."

Chapter 7 Conclusion

This study contributes to the literature on capacity building in schools, particularly the research on job-embedded professional learning, on interschool networks, and on organizational learning. It confirms key aspects of existing frameworks for capacity building, but deepens them by illuminating the processes that could develop the conditions necessary for schools to create new knowledge in service of school improvement. With my description of how program inputs supported the development of essential conditions and processes in many LPP schools, this dissertation also presents design principles that policymakers can use as they implement interschool collaboration programs, as well as school improvement programs more generally. In particular, the experiences of LPP participants documented here helps to answer questions about how to find an appropriate balance between flexibility and structure and between internal and external expertise. Below I provide a summary of findings and contributions to the existing research, offer a model based on my findings for how school improvement can be achieved through LPP or programs like it, provide policy implications, and discuss limitations to this study and suggestions for future research.

Summary of Findings and Contributions

Confirming previous research on interschool collaboration, key conditions fostered coordinated changes to LPP schools' practice, including those identified by Atkinson's (2007) review and Katz and Earl's (2010) study on England's Networked Learning Communities (NLC) initiative. In particular, the development of collaborative structures, positive, trusting relationships across schools, dispositions that emphasized continuous learning and improvement, guidance from program Facilitators, and distributed leadership across interschool networks and within school teams, were all viewed by interviewees as critical to productive participation in the

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program. Observations of interschool visits and school team meetings demonstrated that schools and networks with trusting relationships and normative dispositions engaged in open discussions of challenges and provided critical feedback, which led to concrete ideas for changes to practice. Developing these conditions was also crucial for overcoming issues related to discomfort with the host and partner role designations. Finally, distributed leadership and teaming structures allowed for the dissemination of ideas across faculties, as schools capitalized on peer relationships to spark change, as well as on overlapping team structures that could deliver information from LPP teams to grade or department teams.

In addition, as Katz and Earl found (2010), inquiry processes where educators engaged in joint work were critical for schools that would ultimately make changes to practice. And as Chapman (2008) and Glatter (2003) reported, finding alignment across schools' focus areas was both challenging and critical to collaborative problem solving where educators "learned on behalf of colleagues" within and across schools (Jackson & Temperely, 2007). As was true in these earlier studies, LPP program Facilitators were crucial in helping schools to find common aims and to move through a collaborative inquiry process. Overall, the structure of the CoL's evidence-based approach supported schools' continued focus, as well as the integration of internal and external knowledge to develop and refine changes to practice.

In LPP, CoL goals were not always content-specific, as some school teams worked on focus areas related to instructional practices that cut across content areas, and some teams worked on school systems, such as teacher teams or systems for PD (see Appendix C for information on the content of schools' inquiry work). This aspect of the program deviates from what the professional learning literature states is crucial for effective program design (Darling-Hammond, Hyler, & Gardner, 2017), but is more in-line with "systems thinking" behind theories

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of organizational learning (Senge, 1990). It is worth noting that most studies of professional learning that found impacts on student learning measured outcomes based on content-specific achievement tests, so it is not surprising that content-specific focuses would emerge as a crucial feature. If the efficacy of professional learning were to be measured using tools that align to schools' specific focus areas, whatever they are, the content-specific feature may prove to be less essential.

Although this study confirms the importance of most of the key capacity building conditions and processes from prior literature, it goes beyond identification of factors, and describes processes in which schools engage to create them. In this way, this dissertation responds to Little's (2005) call for more process-orientated research in studies of interschool networks, which she made after visiting the NLC networks in England:

> At its best, the research helps identify the conditions conducive to professional learning and to strong network effects on school-level improvements. However, there's relatively little research that delves deeply into the nature of network activity and into the question of precisely how such activity achieves its effect on thinking and practice beyond the network itself (how it leaves "footprints on practice").

This research gap exists, partly, because of the reliance on interviews, focus groups and surveys, which provide a wealth of information about program participants' perspectives of interschool collaboration (Bullock & Muschamp, 2004; Chapman, 2008), and about which enablers correlate with changes in educators' thinking and practice at one moment in time (Katz & Earl, 2010), but shed little light on the processes. I had the liberty to investigate actual processes because I witnessed the program in practice over 3 years and across schools with different states of entering capacity—across schools that initially possessed the enabling conditions to varying degrees. I was able to describe the specific activities that led to the development or enhancement of these conditions because my research included observation of network activities, and
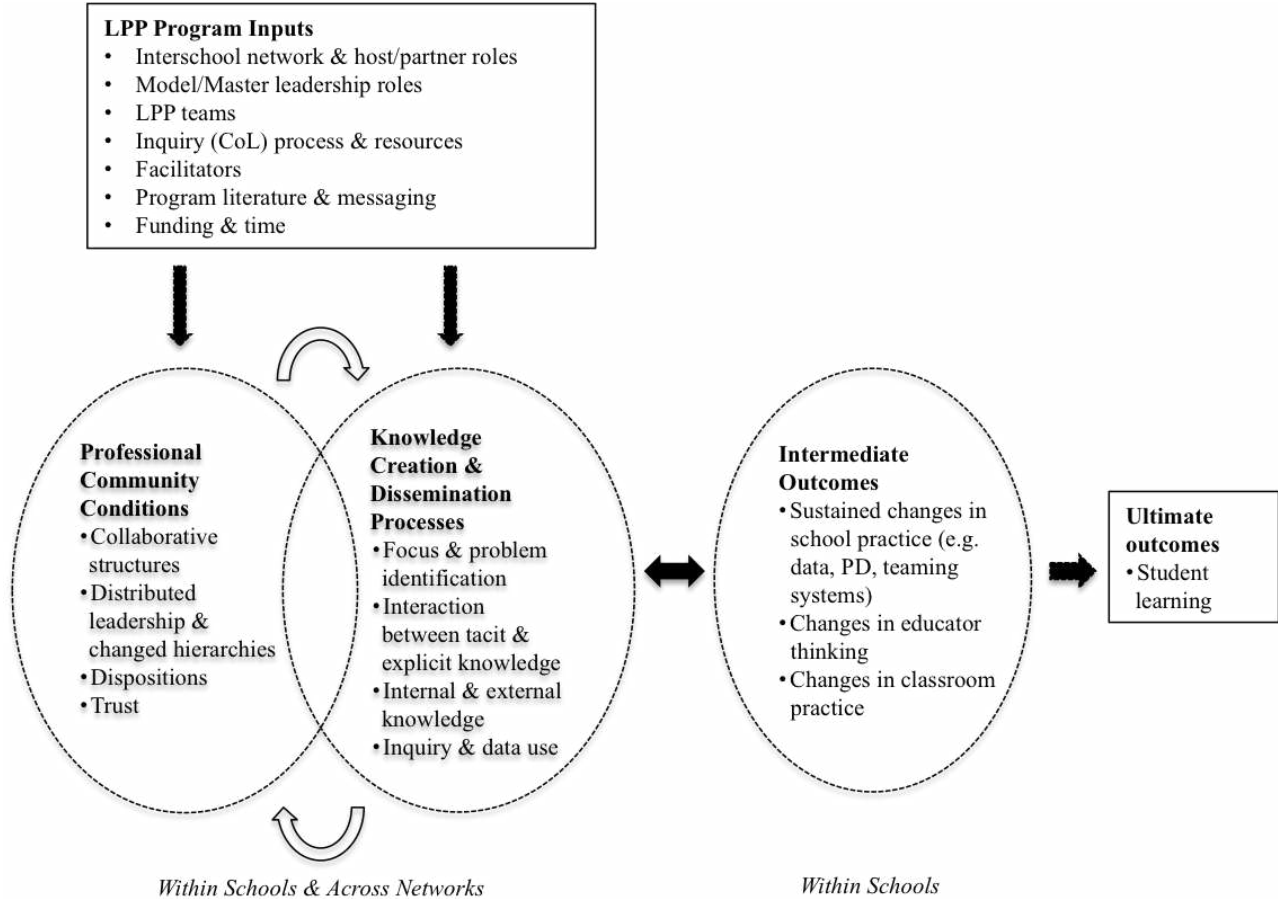
crucially, of the follow-up conversations that occurred in school team meetings where individual school teams digested what they learned through interschool collaboration and made key decisions regarding next steps for practice.

In addition, this study contributes to the literature by explaining how specific program inputs served as the key ingredients for school improvement, as they set the processes in motion to create the conditions and processes needed for school improvement. In particular, I highlight the significance of the program's construction of interschool networks with aligned focus areas that would allow for joint work across schools; the designation of host, partner, Model, and Master Teacher roles, which broke down traditional hierarchies, facilitated peer influence, and encouraged teachers to have school-wide perspectives; the flexible role of Facilitators, which allowed for tailoring the program to schools with differing entering capacity levels while attending to relational and process needs as they arose; and the explicit stages in the Cycles of Learning (CoL) process, which provided accountability for following through on implementation of changes and for systematic reflection.

Model for School Improvement

All together, my research builds on previous theoretical models that explain how student learning can increase as a result of educators' professional learning experiences by not just stating essential features and mediating contextual factors, but by presenting a change process for how contextual factors supportive of the educator learning process are actually created. I summarize the processes in the diagram on the following page, which presents program inputs leading to key conditions and processes needed for knowledge development, which can ultimately lead to changes in educators' thinking and practice and to improved student learning.

Figure 3. Model for School Improvement in LPP

LPP Program Inputs
- Interschool network & host/partner roles
- Model/Master leadership roles
- LPP teams
- Inquiry (CoL) process & resources
- Facilitators
- Program literature & messaging
- Funding & time

Professional Community Conditions
- Collaborative structures
- Distributed leadership & changed hierarchies
- Dispositions
- Trust

Knowledge Creation & Dissemination Processes
- Focus & problem identification
- Interaction between tacit & explicit knowledge
- Internal & external knowledge
- Inquiry & data use

Intermediate Outcomes
- Sustained changes in school practice (e.g. data, PD, teaming systems)
- Changes in educator thinking
- Changes in classroom practice

Ultimate outcomes
- Student learning

Within Schools & Across Networks   *Within Schools*

The overall structure of this model pulls from the theory for professional learning described by Desimone (2009), which explains how improvements in student outcomes derive from changes in teacher practice and thinking, which stem from knowledge creation. It also includes similar essential features considered necessary for professional learning. In particular, it draws on Bryk et al.'s (2010) definition of professional community as including new work arrangements (collaborative structures), norms and dispositions, distributed leadership and trust, and Nonaka and Takeuchi's (1995) theory of knowledge creation, which involves accessing internal knowledge through the transformation of tacit to explicit understandings. However, this model differs from other models of professional learning in three key ways. First, as discussed above, it begins with program inputs that support the development of the key conditions and

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features. Second, it draws a distinction between professional community conditions and the processes of knowledge creation and spreading. These categories certainly overlap—a school with a strong professional community is one that engages in knowledge-creating activities—but, in LPP's messaging, structures, and attention to social ties, the program uniquely worked to create structural, social, and dispositional conditions that facilitated knowledge creation, as well as to develop the actual processes and procedures that produce knowledge. It did not, like many other programs, focus solely on a technical process of inquiry, while allowing for extreme variation in implementation based on contextual features. Thus, it is important to clearly emphasize the explicit, intentional development of professional community, even though the boundary line between this category and knowledge-creation processes is diffuse.

Finally, related to the discussion of schools' non-content-specific focuses above, this model presents a broader range of intermediate outcomes than much of the literature on professional learning, which focuses on changes to classroom practices and less so on what I call "school practice." As discussed in Chapter 6, many schools in my sample, especially those that entered with lower social capacity, worked on implementing school-wide structural changes, often in service of changing the culture in their schools to one that was more collaborative and fostered more consistent practices across classrooms. For example, schools implemented systems of teacher teams that distributed leadership and allowed for the distribution of practices learned from LPP. Schools also set up systems of professional development (PD) that were based on school-wide needs identified in the course of interschool visits. Other schools set up data systems that allowed for more systematic monitoring across classrooms and, again, for more consistent instructional practice. Schools that focused on systems saw these changes as the needed first steps towards changes in classroom practice that would eventually lead to changes in student

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outcomes. While in schools that entered the program with higher social capacity, that already had strong teaming structures, established data systems, and comprehensive PD plans, teams focused more on changes to classroom practices, adopting a "seed-to-scale" approach, where LPP team members would develop and test innovations in their classrooms, which would eventually be refined and scaled across a school. LPP provided the flexibility for these various entry-points to school change, with some schools deciding to begin at a systems level, while others were able to utilize existing systems to scale instructional changes across classrooms after experimenting through the LPP team. In this sense, LPP allowed for a broader understanding of appropriate goals for professional learning compared to what is traditionally associated with PD, thus providing considerable flexibility given schools' varied entering states.

Challenges

The challenges experienced by LPP schools also confirm previous research about interschool collaboration, and my findings reveal how individual schools addressed some of these challenges, as well as how the central office program team responded to them by engaging in a continuous learning process itself—making mid-stream changes to the program as it evolved over time. In line with previous research (Atkinson, 2007; Duffy & Gallagher, 2014; 2016; Hutchings et al., 2012; Stevenson, 2007), LPP participants expressed how it was sometimes difficult to make time for interschool visits and biweekly team meetings, and that it was challenging for principals to leave their buildings. The program mitigated these issues through the Model and Master teacher roles, which came with release time, as well as by providing funding for substitutes. In some schools, assistant principals and principals traded off attending site visits. Overall, LPP provided significant financial support to allow time for LPP activities, and established clear expectations for participation in regular meetings before schools began

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participating. Of course, schools that found alignment between their overall school improvement goals and the work of the program were more likely to sustain focus on LPP. Conversely, schools that did not see the value in program activities had more inconsistent participation at site visits and school team meetings. The research team did not focus on the latter group, and so more research on schools that struggled to find this alignment would be worthwhile.

As with some of the interschool collaboration programs in the UK that included hierarchical relationships between schools like the Specialist Schools, Beacon Schools, and the Leading Edge Programme (Atkinson, 2007; Entswistle & Downe; Glatter, 2013; Penney, 2004; Stevenson, 2007), LPP partner schools did not always trust the legitimacy of the host designation, particularly when partner schools had applied to be hosts and were assigned to be partners or when partner schools thought the host lacked relevant expertise. Some host school participants also struggled with the role, feeling hesitant to present themselves as knowing more, and in some cases, struggling to understand what their role really was given the emphasis on a "learning stance" for all LPP participants. As discussed in Chapter 5, the program provided more clarity about host and partner distinctions over time, and Facilitators worked to help schools adopt a developmental perspective that supported the learning of all schools while acknowledging that host schools may be further along in the process of improvement for a particular area.

The challenges raised by the hierarchical roles may indicate that interschool networks would have greater success if all schools had an equal role, as is the case in another iteration of the LPP program, the District-Charter Collaborative (DCC). However, my findings also presented advantages to the uneven roles, where host schools provided a crucial source of ideas for partners' "change ideas," and where host school Model Teachers and principals provided

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direct coaching to partner school teams. These supportive relationships tended to develop in triads where partner schools viewed the hosts as being substantially more advanced in particular areas, as well as where positive relationships formed early on. This indicates that in some scenarios, particularly where there is a larger gap between host and partner readiness, some distinction is helpful. An optimal program design may therefore differentiate the use of hierarchical roles depending on the types of schools brought together in networks.

Another key challenge arose when schools struggled to find alignment between their individual inquiry work and the work of the interschool network, an issue mentioned in previous studies of interschool collaboration as well (Atkinson, 2007; Glatter, 2003). As discussed in Chapter 6, this stemmed from both schools having dissimilar focus areas as well as from the inquiry process, the CoL, initially presented as a school-level endeavor. To resolve this challenge, the central office program team refined the application to create stronger matches by focus area, and clarified its presentation of the program so that inquiry and interschool collaboration were presented as interweaving elements that support each other.

Policy Implications

Even though New York City is unique in its scale and resources, many lessons learned from the implementation of LPP can apply to other contexts. In particular, the findings demonstrate how a central authority can impact the nature of school and teacher practice while simultaneously communicating respect for educators and for the local, unique contexts of individual schools. This balance is achieved through a combination of structure and flexibility. LPP's flexibility was apparent as school teams selected focus areas and identified problems of practice they would like to solve, conducted their own research and engaged in problem solving to identify potential solutions, developed implementation plans, and identified evidence with

which to monitor results. They also determined the pacing and scale of their work, with some schools engaging in multiple cycles, others in just one or two, and with some engaging the whole school, and others primarily engaging the LPP team.

Providing this flexibility serves a number of purposes. It honors educators' expertise by implicitly communicating that they are the ones best suited to identify needed changes. It also allows for decision making to be based on schools' specific contexts, thus increasing the appropriateness of the changes, as well as their perceived legitimacy. And since this flexibility requires that educators go through a process of self-discovery and problem solving, it develops capacity to engage in inquiry, or more generally, to continually improve. If, rather than through inquiry, "best practices" were imposed on schools, educators would have missed out on the opportunities for reflective dialogue, articulation of practice, and collaborative deliberation that can develop self-knowledge, facilitative leadership skills, as well as investment in school-wide functioning. Indeed, an inquiry approach similar to that used in LPP could be applied in other contexts, even if the specific problems that need to be addressed are drastically different, since the process is meant to build capacity for improvement, rather than to implement specific improvements.

Of course, with so much flexibility and self-direction, there is a risk that school teams may not select the most optimal problem to solve, or implement the best change idea, or collect the "right" data to measure the impact of their changes. One could argue, for instance, that imposing a research-based strategy that has been vetted by an external institution could lead to faster and stronger results. However, aside from such an approach bypassing the capacity building described above, we know that all so-called "best practices" have variable results based on context, and thus matching a best practice to a school is neither easy nor straightforward. In

fact, going through an inquiry process, which, in LPP, involves gathering information from various external sources, may be the way to optimize the process of matching strong practices to schools, especially if that process is highly supported and structured. To go back to Elmore & Burney (2002) describing District 2, the "ideal state" was not about enacting specific innovations, but rather about creating a culture of continuous improvement:

> District 2 staff don't say exactly what they regard as the ideal end state of systemic instructional improvement, but presumably it is not a stable condition in which everyone is doing some version of "best practice" in every content area in every classroom. Rather, the goal is probably something like a process of continuous improvement in every school, eventually reaching every classroom, in which principals and teachers routinely open up parts of their practice to observation by experts and colleagues, in which they see change in practice as a routine event, and where colleagues participate routinely in various forms of collaboration with other practitioners to examine and develop their practice. This is clearly not an end state in any static sense, but rather a process of continuous instructional improvement unfolding indefinitely over time (p. 11).

In many schools in my sample, such a state was achieved, as collaborative activities occurred within schools on a weekly basis and between schools on a monthly basis—practice was constantly being exposed, thus increasing the likelihood that educators would move it towards what was "best" for their contexts.

Beyond the inquiry process, which was intended to get schools closer to identifying optimal changes, a series of checks and balances provided additional structure and worked to ensure that schools were developing changes based on sound theories of action with appropriate problems and strong solutions. Most obviously, the interschool networks served as both a support and an accountability mechanism. Individual schools were not selecting change ideas in a vacuum; they were gathering ideas based on what they observed in the interschool network, based on feedback from LPP participants in other schools, and based on numerous external resources brought in by participants. Many networks in my sample actually structured their work around frameworks that aligned to external standards, whether they were the SIOP principles in

the triad working on dual language, the Danielson Framework for a plus group working on student engagement, or the Gradual Release of Responsibility model for the triad working on instructional consistency. In some cases, host schools were highly involved in the needs assessment process for partner schools, bringing internal and external perspectives into the problem identification phase. Beyond providing additional ideas and perspectives, the interschool networks provided accountability for schools to stay focused on their inquiry goals. This was especially the case for networks where schools provided updates on progress toward their goals at interschool visits and asked for feedback on the latest changes they implemented. Such practice has recently been incorporated into program guidance.

Another check on schools' discretion came from program Facilitators, a role that could inform other localities' development or use of intermediary roles that intend to support schools or networks through processes of self-improvement. Although Facilitators rarely told participants to go in a specific direction in terms of implementing a specific change, they guided the LPP process, asking questions about how participants knew that they wanted to take a certain step, encouraging meta-cognition and slowing down decision making so participants could course-correct as they engaged in the program. Facilitators also played a major role in encouraging alignment between focus areas and district accountability tools such as the Quality Review and Principal Performance Observations, ensuring that school teams' work was in-line with what external evaluators found important. Facilitators also supported schools in going through the CoL stages, often asking questions like, "How will you know that change worked?" "What can you use to measure the impact?" "Are these the results you expected?" "What happened during implementation that produced this result?" Finally, the requirement that schools document their work provided more accountability, as it forced further reflection and articulation, more

opportunities for schools to answer self-reflection questions and to deliberate over what worked and what refinements could be made.

Aside from providing schools with flexibility related to the content of their inquiry work, program roles were also pliable, allowing for differences based on the entering capacity of different schools. The role of the Facilitator was intentionally flexible to provide differentiated support based on networks' and schools' needs. For schools returning to the program for a second or third year, and for schools well versed in inquiry processes, Facilitators primarily served a coordination and logistical support role, helping schools to schedule their interschool site visits and set up shared electronic tools. For schools with less experience, Facilitators guided teams through the Cycles of Learning (CoL) inquiry process and interschool collaboration processes by co-constructing meeting and site visit agendas and occasionally leading agenda items related to the CoL. And in some cases, when principals requested more support, Facilitators helped to identify resources for change ideas and worked with school teams to develop and implement next steps. Across these different levels of support, Facilitators also adapted their roles based on schools' development through the course of a year in the program, releasing more and more responsibility over time. And finally, Facilitators flexibly reacted to specific challenges that arose in interschool networks, particularly when disagreements came up between schools, as they could act as a neutral party.

Host and partner roles, the relationships between schools, Model and Master teacher roles, and the composition of LPP teams, were also designed with room for variation across networks. At its best, this flexibility allowed schools to use the program structure in ways that best suited their needs and that would conform to schools' entering capacity levels, the level of focus area alignment across schools, as well as the level of expertise residing in the host school

as compared to the partner schools. For example, in a triad where the two partner schools were just setting up new systems that the host school had been honing for years, the host school team members acted as coaches and teachers to the partner school participants. But in a quad where all schools worked on quite different ways to increase student engagement, schools collaborated as more of a "critical friends" network where they exchanged ideas through problems of practice protocols and other activities, but without an assumption that one school would provide ideas for another school.

At its worst, this flexibility led to dissonance and frustration. As discussed above and in Chapter 5, some school teams questioned the legitimacy and value of host and partner roles, and explained how the focus on everyone having a learning stance obscured the differences between the roles. Host participants, in particular, explained how they struggled to exert influence on partner school participants given no formal authority in that school's decision-making. These issues arose most in my sample during the first year of research, and in each subsequent year, the central office program team provided more written guidance on both roles and interschool collaboration activities. As much as these issues may have improved, creating a useful interschool hierarchy is a delicate balancing act, and may benefit from transparent explanations behind designations as well as clear parameters for how these roles could be enacted.

The LPP program team's experimentation with flexibility and structure, as well as its responses to challenges that arose throughout the first three full years of the program's implementation can provide lessons to other districts as they grapple with similar issues. In particular, the program learned the importance of maintaining flexibility in regards to schools' pacing, entry points, and interpretation of program roles, but they provided more structure regarding the CoL inquiry process and the need for alignment across schools in a network. Many

of these lessons came about because the central office team engaged in an organizational learning approach itself, focusing on continuous improvement through systematic reflection informed by data collected during implementation.

Limitations and Directions for Future Research

Much of what is most promising about LPP's program design—its integration of numerous school improvement approaches and its intentional flexibility across schools and networks—is what makes it particularly challenging to research. Given how inquiry, interschool collaboration, teaming, and leadership roles work simultaneously and interact with each other, drawing causal links between individual program inputs and specific outcomes is difficult. In addition, given the intended flexibility, anticipated variation, and locally defined outcomes for success in specific schools, measuring program results is also problematic. Thus, my aim was to describe how specific processes led to new knowledge creation in schools that were implementing, or on their way to implementing, coordinated changes in practice.

Even given my limited objectives, selection issues threaten both the internal and external validity of the findings. First, schools opt into LPP and then are admitted to the program by the central office team, limiting the sample to schools that demonstrated both an interest in and some potential capacity for interschool collaboration and inquiry. It is therefore unclear how the processes described might unfold among less motivated participants compelled to engage in a program like LPP. In addition, my particular sample was biased towards schools that were implementing the program with fidelity, as the qualitative component of the program evaluation was primarily intended to inform program design based on the processes of schools engaging in fruitful collaboration. In addition, when selecting focal schools for which the research team observed school team meetings as well as interschool site visits, and where we conducted the

majority of interviews, we selected schools that were beginning to develop or implement coordinated changes in practice.

For the sake of better understanding the obstacles to developing the conditions needed for knowledge creation, more qualitative study of schools that struggle under such capacity-building efforts is needed, either by analyzing survey results of all LPP schools or by collecting qualitative data on a more diverse sample of schools. In addition, a larger and more diverse sample could also allow for more systematic comparisons between schools with different characteristics, and in particular between schools of different sizes, serving different grade levels, and serving different student populations. My results produced no meaningful differences between these different school types, but that could be due to the small sample size of each type. A larger sample could answer questions about how inquiry and interschool collaboration may require different supports in an elementary versus high school context, or in small versus large schools.

The fact that this research took place in the nation's largest school system may limit applications to other localities. For one, New York City has access to a larger pool of resources that may not be available in other sites. At the same time, given that LPP was only implemented in about 200 schools means similar programs could be applied to mid-sized districts, and perhaps in a more controlled way with even more individualized support in even smaller districts. Certainly, the teacher and principal leadership roles, the Facilitator role, the CoL inquiry process, and the methods used to foster specific dispositions and trust within schools and across interschool networks, could all be applied to other contexts.

I intentionally limited the scope of this investigation to the knowledge-creation processes in LPP through a cross-sectional analysis of focal schools. My data also provides opportunities to

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explore other themes not discussed in detail here. In particular, one of the intended program outcomes, leadership development, is worthy of additional study. Model Teachers and partner and host principals spoke frequently about their developing facilitative leadership skills, and many teachers spoke about how they appreciated the opportunity for career advancement while remaining in the classroom. LPP has the potential to influence leadership development, job satisfaction, and retention, and it would be worthwhile to track the perspectives of participants in terms of these outcomes over time. Additionally, while I took a cross-sectional approach, much could be learned from the schools in my sample for which I have multiple years of data. Closer examination of individual networks or schools that explores how they disseminated practices over time, how non-LPP participants responded to changes presented by LPP participants, and how the school responded to changes in program design over the years could provide even more insight into the processes behind knowledge creation.

Finally, given LPP's intention of ultimately improving student learning, more research is needed to understand the program's impact on school and student outcomes. Schools' CoL documentation could offer local data that would indicate whether they made progress on measures they select, although this would be self-reported and would not provide a common measure for all schools. Analysis of common measures of school quality, including the Quality Review, the Learning Environment survey, and state test results using quasi-experimental frameworks could also provide an indication of the impact of LPP, especially now that the program has had schools participating for 3 years.

Final Thoughts

Overall, this dissertation contributes to theoretical frameworks for capacity building and provides information about program inputs that other districts could consider employing in their

own school improvement efforts. It also uncovers the processes behind a multifaceted program that goes beyond a technical process of interschool inquiry, and that works to establish the conditions necessary for educators' to be willing to expose their practice to others and to see the value in doing so. It thus provides lessons about incrementally changing the nature of the teaching profession itself, so that teachers are not solely defined by the work done in their classrooms, but by the school improvement work they do across their school, and even across a network of schools, in a community of collaborative, reflective practitioners.

References

Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and student achievement in the Chicago public high schools. *Journal of Labor Economics*, 25(1), 95-135.

Achinstein, B. (2002). Conflict amid community: The micropolitics of teacher collaboration. *Teachers College Record*, 104(3), 421-455.

Agranoff, R., & Radin, B. A. (1991). The comparative case study approach in public administration. *Research in Public Administration*, 1(1).

Argyris, C., & Schon, D. (1978). Organizational learning: A theory of action approach. *Reading, MA: Addision Wesley*.

Atkinson, M., Springate, I., Johnson, F., & Halsey, K. (2007) Inter-school collaboration: a literature review. Slough: NFER.

Ball, D. L., Ben-Peretz, M., & Cohen, R. B. (2014). Records of practice and the development of collective professional knowledge. *British Journal of Educational Studies*, 62(3), 317-335.

Barber, M., & Mourshed, M. (2007). *How the world's best-performing schools systems come out on top*. McKinsey & Company.

Blank, R. K., De las Alas, N., & Smith, C. (2008). Does teacher professional development have effects on teaching and learning?: Analysis of evaluation findings from programs for mathematics and science teachers in 14 states. Council of Chief State School Officers.

Bolman, L. G., & Deal, T. E. (1991). *Reframing organizations*. San Francisco, CA: Jossey-Bass Publishers.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.

Boyd, D., Goldhaber, D., Lankford, H., & Wyckoff, J. (2007). The effect of certification and

    preparation on teacher quality. *The Future of Children*, 45-68.

Bray, J. N., Lee, J., Smith, L. L., & Yorks, L. (2000). Collaborative inquiry into practice: Action,

    reflection and meaning making.

Bryk, A. S., Gomez, L. M., & Grunow, A. (2010). Getting ideas into action: building networked

    improvement communiites in education. Retrieved from

    http://www.carnegiefoundation.org/spotlight/

    webinar-bryk-gomez-building-netowrked-imporvement-commu

    nities-in-education

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How

    America's schools can get better at getting better.* Cambridge, MA: Harvard University

    Press.

Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing

    schools for improvement: Lessons from Chicago*. University of Chicago Press.

Bryk, A. S., Sebring, P. B., Kerbow, D., Rollow, S., & Easton, J. Q. (1998). *Charting Chicago

    school reform: Democratic localism as a lever for change.* Westview Press, 5500 Central

    Avenue, Boulder, CO 80301-2877.

Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New

    York, NY: Russell Sage Foundation.

Buchmann, M., & Floden, R. E. (1993). *Detachment and concern conversations in the

    philosophy of teaching and teacher education*. London: Cassell.

Carnegie Foundation for the Advancement of Teaching. (2017). *How a Networked Improvement Community Improved Success Rates for Struggling College Math Students*. Stanford, CA: Author.

Center for the Study of Teaching and Policy, Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2001). *Teacher preparation research: current knowledge, gaps, and recommendations: a research report prepared for the US Department of Education and the Office for Educational Research and Improvement*. Chicago: Center for the Study of Teaching and Policy

Chapman, C. (2008). Towards a framework for school-to-school networking in challenging circumstances. *Educational Research*, *50*(4), 403-420.

Chapman, C. & Muijs, D (2014) Does school-to-school collaboration promote school improvement? A study of the impact of school federations on student outcomes, School Effectiveness and School Improvement, 25:3, 351-393, DOI: 10.1080/09243453.2013.840319

Church, M., Bitel, M., Armstrong, K., Fernando, P., Gould, H., Joss, S., ... & Vouhé, C. (2002). *Participation, relationships and dynamic change: new thinking on evaluating the work of international networks*. University college London (UCL).

Clotfelter, C., Ladd, H. F., Vigdor, J., & Wheeler, J. (2006). High-poverty schools and the distribution of teachers and principals. *NCL Rev.*, *85*, 1345.

Clune, W. H., & White, P. A. (1988). *School-based management: Institutional variation, implementation, and issues for further research*. Center for Policy Research in Education.

Cohen, D. K. (1990). A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis*, 12(3), 311-329.

Cohen, D. K. & Ball, D.L. (1999). Instruction, capacity, and improvement. Philadelphia, PA:

    Consortium for Policy Research in Education, University of Pennsylvania.

Cohen, D. K., & Bhatt, M. P. (2012). The importance of infrastructure development to high-

    quality literacy instruction. *The Future of Children*, 22(2), 117-138.

Cohen, D. K., & Moffitt, S. L. (2010). *The ordeal of equality: Did federal regulation fix the*

    schools? Harvard University Press.

Cohen, S. A. (1987). Instructional alignment. Searching for a magic bullet. *Educational*

    Researcher 1, 6, 16-20.

Conway, J. A. (1984). The myth, mystery, and mastery of participative decision making in

    education. *Educational Administration Quarterly*, 20(3), 11-40.

Corcoran, T. B. (1995). Helping teachers teach well: transforming professional development.

    Consortium on Policy Research in Education Policy Briefs.

Corcoran, T. B., & Goertz, M. (1995). Instructional capacity and high performance schools.

    Educational Researcher, 24(9), 27-31.

Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms*, 1890-

    1990. New York, NY: Teachers College Press.

Daly, A. J., Moolenaar, N. M., Bolivar, J. M., & Burke, P. (2010). Relationships in reform: The

    role of teachers' social networks. *Journal of Educational Administration, 48*(3), 359-391.

Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work. The*

    Jossey-Bass education series. San Francisco: Jossey-Bass.

Darling-Hammond, L. (2008). Teacher learning that supports student learning. *Teaching for*

    Intelligence, 2, 91-100.

Darling-Hammond, L., & Richardson, N. (2009). Research review on teacher learning: What matters. *Educational leadership*, *66*(5), 46-53.

Darling-Hammond, L., & Wise, A. E. (1985). Beyond standardization: State standards and school improvement. *The Elementary School Journal*, *85*(3), 315-336.

Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does Teacher Preparation Matter? Evidence about Teacher Certification, Teach for America, and Teacher Effectiveness. *Education Policy Analysis Archives*, 13(42).

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective Teacher Professional Development.* Palo Alto, CA: Learning Policy Institute.

Darling-Hammond, L., Chung Wei, R., Andree, A., Richardson, N., & Orphanos, S. "Professional learning in the learning profession." *Washington, DC: National Staff Development Council* (2009).

Darling-Hammond, L ., & Wise, A. E. (1985). Beyond standardization: State standards and school improvement. Elementary School Journal, 85, 315-335.

David, J. L., & Talbert, J. E. (2012). Turning around a high-poverty school district: Learning from Sanger Unified's success. SH Cowell Foundation.

Decker, P.T., Mayer, D.P., & Glazerman, S. (2004). *The effects of Teach for America on students: Findings from a national evaluation*. Princeton, NJ: Mathematica Policy Research, Inc.

Dee, T. S., & Jacob, B. (2011). The impact of No Child Left Behind on student achievement. *Journal of Policy Analysis and management*, *30*(3), 418-446.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181-199.

Dewey, J. (1938). Experience and Education New York. *Touchstone, 18*.

Drew, S. V. (2012). Open Up the Ceiling on the Common Core State Standards: Preparing

    Students for 21st-Century Literacy—Now. *Journal of Adolescent & Adult*

    Literacy, *56*(4), 321-330.

Drucker, P. F. (1993). The rise of the knowledge society. *Wilson Quarterly*, *17*(2), 52-71.

Duffy, G., & Gallagher, A. (2016). Shared Education in contested spaces: How collaborative

    networks improve communities and schools. *Journal of Educational Change*. DOI:

    10.1007/s10833-016-9279-3

Duffy, G., & Gallagher, T. (2014). Sustaining school partnerships: the context of cross-sectoral

    collaboration between schools in a separate education system in Northern Ireland. *Review*

    of Education, *2*(2), 189-210.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2016). *Learning by doing*. Bloomington, IN:

    Solution Tree Press.

Earl, L., & Katz, S. (2007). Leadership in networked learning communities: Defining the

    terrain. *School Leadership and Management*, *27*(3), 239-258.

Echevarria, J., Vogt, M., & Short, D. (2008). Making content comprehensible for English

    learners: The SIOP model.

Elmore, R F. (2006, November). The problem of capacity in the (re) design of educational

    accountability systems. In a symposium on NCLB and it's alternatives. Campaign for

    Educational Equity, New York, NY.

Elmore, R. F. (1995). Structural reform and educational practice. *Educational Researcher*, 24(9),

    23-26.

Elmore, R. F. (2000). Building a new structure for school leadership. Albert Shanker Institute.

Elmore, R. F. (2002). Bridging the gap between standards and achievement: The imperative for professional development in education. *Secondary lenses on learning participant book: Team leadership for mathematics in middle and high schools, 313À344.*

Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance.* Harvard Educational Pub Group.

Elmore, R. F., & Burney, D. (1997). Investing in teacher learning: Staff development and instructional improvement in Community School District #2, New York City. National Commission on Teaching & America's Future, Teachers College, Columbia University, New York, NY.

Elmore, R. F., & Burney, D. (2002). Continuous improvement in community district #2, New York City. Inter-American Development Bank.

Englebart, D. C. (2003, September). Improving our ability to improve: A call for investment in a new future. In *IBM Co-Evolution Symposium.*

Evans, R. (1996). *The human side of school change: Reform, resistance, and the real-life problems of innovation.* The Jossey-Bass Education Series. San Francisco, CA: Jossey-Bass Inc.

Fariña, C., & Kotch, L. (2014). *A school leader's guide to excellence: Collaborating our way to better schools.* Portsmouth, NH: Heinemann.

Fielding, N., Fielding, J. (1986). *Linking data.* Beverly Hills, CA: Sage.

Fisher, D., & Frey, N. (2013). *Better learning through structured teaching: A framework for the gradual release of responsibility.* ASCD.

Fowler, R. C. (2003). Massachusetts signing bonus program for new teachers. *Education Policy Analysis Archives, 11*, 13.

Fryer, R. G. (2013). Teacher incentives and student achievement: Evidence from New York City public schools. *Journal of Labor Economics*, *31*(2), 373-407.

Fuhrman, S., & Elmore, R. F. (Eds.). (2004). *Redesigning accountability systems for education* (Vol. 38). New York, NY: Teachers College Press.

Fullan, M. (1994). Coordinating top-down and bottom-up strategies for educational reform. In Elmore & Fuhrman (Eds.), *The governance of curriculum* (pp. 186-202). Alexandria, VA: Association for Supervision and Curriculum Development.

Fullan, M. (1995). The school as a learning organization: Distant dreams. *Theory into practice*, *34*(4), 230-235.

Fullan, M. (1997). *The challenge of school change: a collection of articles.* Arlington, Heights, IL: IRI/Skylight Training and Publishing.

Fullan, M. (2007). *The new meaning of educational change*. Routledge.

Gephart, M. A., & Marsick, V. J. (2016). Strategic Leverage Through Learning©. In *Strategic Organizational Learning* (pp. 7-17). Springer Berlin Heidelberg.

Glatter, R. (2003). Collaboration, collaboration, collaboration: the origins and implications of a policy. *Management in Education*, *17*(5), 16-20.

Glazerman, S., Dolfin, S., Bleeker, M., Johnson, A., Isenberg, E., Lugo-Gil, J., ... & Ali, M. (2008). Impacts of Comprehensive Teacher Induction: Results from the First Year of a Randomized Controlled Study. NCEE 2009-4034. National Center for Education Evaluation and Regional Assistance.

Goldsworthy, H., Supovitz, J., & Riggan, M. (2013). The lived experience of Common Core implementation in New York City. Philadelphia, PA. Consortium for Policy Research in Education.

Graham, P. (2007). Improving teacher effectiveness through structured collaboration: A case study of a professional learning community. RMLE Online, 31(1), 1-17.

Greene, J. C. (2007). *Mixed methods in social inquiry* (Vol. 9). John Wiley & Sons.

Guba, E.G. & Lincoln, Y.S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381-391.

Hanushek, E. A. (2009). Teacher deselection. In *Creating a new teaching profession*, ed. Dan Goldhaber and Jane Hannaway.

Hanushek, E. A. & Margaret E. R. Does school accountability lead to improved student performance? *Journal of Policy Analysis and Management* 24.2 (2005): 297-327.

Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York, NY: Teachers College Press.

Hargreaves, D. H. (1998). *Creative professionalism: The role of teachers in the knowledge society* (Vol. 22). Demos.

Harris, A. (2008). Distributed leadership: According to the evidence. Journal of educational administration, 46(2), 172-188.

Hatch, T. (2013). Innovation at the core. *Phi Delta Kappan.* 95.3: 34-38.

Hatch, T. (2015). *Managing to change: How schools can survive (and sometimes thrive) in turbulent times.* New York, NY: Teachers College Press.

Heilig, J. V., & Jez, S. J. (2010). Teach For America: A review of the evidence. *Education Policy Research Unit*.

Hess, F. M. (2006). *Tough love for schools: Essays on competition, accountability, and excellence.* Washington, DC: American Enterprise Institute for Public Policy Research.

Hess, F. M. (2011). *Spinning wheels: The politics of urban school reform*. Brookings Institution
    Press.

Hess, F. M. (2015). *Common sense school reform*. New York, NY: Macmillan.

Higgins, L. (2015, April 25). Who wants to teach? Prep program numbers declining. Detroit Free
    Press.

Hill, H. C., Beisiegel, M., & Jacob, R. (2013). Professional development research: Consensus,
    crossroads, and challenges. *Educational Researcher*, *42*(9), 476-487.

Honig, M. I. (2013). Beyond the policy memo: Designing to strengthen the practice of district
    central office leadership for instructional improvement at scale. *Yearbook of the National
    Society for the Study of Education*, 112(2), 256-273.

Honig, M. I., & Coburn, C. (2007). Evidence-based decision making in school district central
    offices: Toward a policy and research agenda. *Educational Policy*. 22(4), 578-608.

Howard, E. R., Sugarman, J., Christian, D., Lindholm-Leary, K. J., & Rogers, D. (2007).
    Guiding principles for dual language education (2nd ed.). Washington, DC: Center for
    Applied Linguistics.

Hursh, D. (2005). The growth of high-stakes testing in the USA: accountability, markets and the
    decline in educational equality. British Educational Research Journal, 31(5), 605-622.

Hutchings, M., Greenwood, C., Hollingworth, S., Mansaray, A., Rose, A., Minty, S., & Glass, K.
    (2012). Evaluation of the City Challenge Programme. Department for Education (DfE),
    Research Report DFE-RR215.

Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational
    leadership*, *60*(8), 30-33.

Jackson, D., & Temperley, J. (2007). From professional learning community to networked

      learning community. *Professional learning communities: Divergence, depth and*

      dilemmas, 45-62.

Jensen, B., & Farmer, J. (2013). School Turnaround in Shanghai: The Empowered-Management

      Program Approach to Improving School Performance. *Center for American Progress*.

Kane, T. J., & Staiger, D. O. (2008). Estimating teacher impacts on student achievement: An

      experimental evaluation (No. w14607). *National Bureau of Economic Research.*

Katz, S., & Earl, L. (2010). Learning about networked learning communities. *School*

      effectiveness and school improvement, *21*(1), 27-51.

Earl, L., & Katz, S. (2007). Leadership in networked learning communities: Defining the

      terrain. *School Leadership and Management*, *27*(3), 239-258.

Kelchtermans, G. (2006). Teacher collaboration and collegiality as workplace conditions. A

      review. *52*(2), 220-237.

Kerr, D., Aiston, S., White, K., Holland, M., & Grayson, H. (2003, October). Networked

      learning communities. In *National Foundation for Educational Research (NFER)*

      Council of Members Meeting. Retrieved February (Vol. 5, p. 2009).

Kindel M., Mary K. McCullough, Victoria L. Grad, Magaly Lavadenz, Yvette KigBerg (2015).

      Convening in Contested Spaces: The Education Success Project.

King, M. B., & Newmann, F. M. (2001). Building school capacity through professional

      development: Conceptual and empirical considerations. *International Journal of*

      Educational Management, 15(2), 86-94.

Klein, J. (2014). *Lessons of hope: How to fix our schools*. New York: Harper Collins.

Kober, N., & Rentner, D. S. (2012). Year Two of Implementing the Common Core State

Standards: States' Progress and Challenges. *Center on Education Policy*.

Labaree, D. (1992). Power, knowledge, and the rationalization of teaching: A genealogy of the

movement to professionalize teaching. *Harvard Educational Review*, 62(2), 123-155.

Langley, G. J., Moen, R., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009).

The improvement guide: a practical approach to enhancing organizational performance.

San Francisco, CA: John Wiley & Sons.

Leana, C. R. (2011). The missing link in school reform. *Stanford Social Innovation Review*, *9*(4),

30-35.

Leaning Forward (2017). The state of teacher professional learning. Oxford, OH: Leaning

Forward.

Lee, V. E., & Loeb, S. (2000). School size in Chicago elementary schools: Effects on teachers'

attitudes and students' achievement. *American Educational Research Journal*, *37*(1), 3-

31.

Leithwood, K., & Menzies, T. (1998). A review of research concerning the implementation of

site-based management. *School Effectiveness and School Improvement*, 9(3), 233-285.

Leithwood, K., Leonard, L., & Sharratt, L. (1998). Conditions fostering organizational learning

in schools. *Educational Administration Quarterly*, *34*(2), 243-276.

Leithwood, K., Mascall, B., & Strauss, T. (Eds.). (2009). *Distributed leadership according to the

evidence*. New York: Routledge.

Lemov, D. (2010). *Teach like a champion: 49 techniques that put students on the path to college

(K-12)*. San Francisco, CA: John Wiley & Sons.

Lewis, C. (2015). What is improvement science? Do we need it in education? *Educational Researcher*, *44*(1), 54-61.

Lieberman, A. (1995). Practices that support teacher development. *Phi Delta Kappan*, 76(8), 591.

Liebman, J. S., & Sabel, C. F. (2003). Public laboratory Dewey barely imagined: The emerging model of school governance and legal reform. *NYU Rev. L. & Soc. Change*, 28, 183.

Light, R. J., Singer, J. D., & Willett, J. B. (1990). *By design*. Cambridge, MA: Harvard University.

Lindeman, E. C. (1926). Andragogik: The method of teaching adults. *Workers' Education*, *4*(3), 8.

Lipsky, M. (1980). *Street level bureaucrats*. New York: Russell Sage Foundation.

Little, J. W. (1989). District policy choices and teacher's professional development opportunities. *Educational Evaluation and Policy Analysis*, *11*(2), 165-179.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American educational research journal*, *19*(3), 325-340.

Little, J. W. (2005). Nodes and nets: Investigating resources for professional learning in schools and networks. *Unpublished paper for NCSL*.

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

Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129-151.

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

Louis, K. S. (1994). Beyond 'managed change': Rethinking how schools improve 1. *School effectiveness and school improvement*, *5*(1), 2-24.

Louis, K. S. (2006). *Organizing for school change*. New York: Routledge.

Louis, K. S. (2007). Trust and improvement in schools. *Journal of educational change*, *8*(1), 1-24.

Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33(4), 757-798.

Lumpe, A. T. (2007). School-based professional development: Teachers engaged in professional learning communities. *Journal of science teacher education*, *18*(1), 125-128.

Lumpe, A., Vaughn, A., Henrikson, R., & Bishop, D. (2014). Teacher professional development and self-efficacy beliefs. In *The Role of Science Teachers' Beliefs in International Classrooms* (pp. 49-63). SensePublishers.

Malen, B., Ogawa, R. T., & Kranz, J. (1990). What do we know about school-based management? A case study of the literature—A call for research. *Choice and Control in American Education*, 2, 289-342.

Malloy, K. (1998). Building a learning community: The story of New York City community school district #2. Learning and Research Development Center, University of Pittsburgh.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*, *2*(1), 71-87.

March, J. G., & Olsen, J. P. (1976). *Ambiguity and choice in organisations*. Bergen: *Universitets for laget*, 37.

Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, 19, 245–275.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach.* Thousand Oaks, CA: Sage.

McCannon, C. J., & Perla, R. J. (2009). Learning networks for sustainable, large-scale improvement. *Joint Commission Journal on Quality and Patient Safety*, *35*(5), 286-291.

McDonald, J. P., & Cities and Schools Research Group. (2014). *American school reform: What works, what fails, and why*. Chicago: University of Chicago Press.

McDonald, J. P., & Klein, E. J. (2003). Networking for teacher learning: Toward a theory of effective design. *Teachers College Record*, *105*(8), 1606-1621.

McDonald, J. P., Mohr, N., Dichter, A., & McDonald, E. C. (2007). *The power of protocols: An educator's guide to better practice*. NY: Teachers College Press.

McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement* (Vol. 45). Teachers College Press.

McLaughlin, M.W. Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis* 9.2 (1987): 171-178.

Mead, S., Rotherham, A., & Brown, R. (2012). The Hangover: Thinking about the unintended consequences of the nation's teacher evaluation binge. *Teacher Quality 2.0*. Special Report 2. American Enterprise Institute for Public Policy Research.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 340-363.

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.

Miller, R. J., & Rowan, B. (2006). Effects of organic management on student achievement. *American Educational Research Journal*, 43(2), 219-253.

Morningside Center for Teaching Responsibility. (n.d.) Retrieved from http://www.morningsidecenter.org

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform : a report to the Nation and the Secretary of Education, United States Department of Educatio*n. Washington, D.C.: The Commission.

National School Reform Faculty (n.d.). Retrieved from https://www.nsrfharmony.org/.

New York City Department of Education, Career Opportunities for School Leaders (n.d.). Retrieved from http://schools.nyc.gov/Careers/SchoolLeaderCareerLadder.htm.

New York City Department of Education, Interschool Collaboration. (n.d.). Retrieved from http://schools.nyc.gov/Academics/InterschoolCollaboration/default.htm.

New York City Department of Education, Teacher Career Pathways (n.d.). Retrieved from http://schools.nyc.gov/Employees/Teachers/Career/Leadership/default.htm.

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

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.

Norman, J (2017). *Pathways post-participation outcomes*. Stanford, CA: Author.

Novak, J. D. (2010). *Learning, creating, and using knowledge: Concept maps as facilitative tools in schools and corporations*. New York. Routledge.

Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26(3), 237-257.

O'Day, J. A., Bitter, C. S., & Gomez, L. M. (2011). *Education reform in New York City: ambitious change in the nation's most complex school system.* Cambridge, MA: Harvard Education Press.

O'Day, J.A. & Smith, M.S. (1999) Systemic reform and educational opportunity. In Furhman, S. (ed.). *Designing coherent education policy: Improving the system*: 250-312.

O'Day, J. A., & Smith, M. S. (2016). Quality and equality in American education: Systemic problems, systemic solutions. In *The dynamics of opportunity in america* (pp. 297-358). Springer International Publishing.

O'neil, J., & Marsick, V. J. (2007). Understanding action learning. AMACOM Div American Mgmt Assn.

Panero, N. S., & Talbert, J. E. (2013). *Strategic inquiry: Starting small for big results in education*. Cambridge, MA: Harvard Education Press.

Payes, S. (2015). Shared education across the wall: An education collaboration in the city of Ramla, Israel. Paper presented at the AERA 2015 annual meeting in a symposium session entitled: Collaboration as an antidote to contested spaces in education: The cases of Northern Ireland, Israel, and Los Angeles. AERA annual conference. Chicago.

Payne, C. M. (2008). *So much reform, so little change: The persistence of failure in urban schools*. Harvard Education Press. Cambridge, MA 02138.

Penney, D. (2004). Policy tensions being played out in practice. The Specialist Schools initiative

    in England. *Journal for Critical Education Policy Studies*, *2*(1), 227-246.

Penuel, W. R., Riel, M., Krause, A., & Frank, K. A. (2009). Analyzing teachers' professional

    interactions in a school as social capital: A social network approach. *Teachers college*

    record, *111*(1), 124-163.

Perlstein, L. (2007). *Tested*: One American school struggles to make the grade. New York, NY:

    Macmillan.

Peurach, D. J. (2016). Innovating at the Nexus of Impact and Improvement Leading Educational

    Improvement Networks. *Educational Researcher*,45(7),421-429

Polanyi, M. (2009). *The tacit dimension*. Chicago: University of Chicago Press.

Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common core standards: The new US

    intended curriculum. *Educational Researcher*, *40*(3), 103-116.

Rapoport, R. N. (1970). Three dilemmas in action research: with special reference to the

    Tavistock experience. *Human relations*, *23*(6), 499-513.

Renyi, J. (1996). Teachers take charge of their learning. Transforming professional development

    for student success [and] executive summary. National Foundation for the Improvement

    of Education, Washington, DC.

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 student achievement: Evidence from

    panel data. *The American Economic Review*, 94(2), 247-252.

Rosenholtz, S. J. (1987). Education reform strategies: Will they increase teacher commitment?

    American Journal of Education, 534-562.

Rowan, B. (1990). Commitment and control: Alternative strategies for the organizational design of schools. *Review of Research in Education*, 16, 353-389.

Rudd, P., Rickinson, M., Blenkinsop, S., McMeeking, S., Taylor, M., & Phillips, N. (2002). *Long-Term External Evaluation of the Beacon Schools Initiative 2001-2002*. National Foundation for Educational Research.

Scott, W. R., & Davis, G. F. (2015). *Organizations and organizing: Rational, natural and open systems perspectives*. New York, NY: Routledge.

Senge, P. (1990). The fifth discipline: The art and science of the learning organization. *New York: Currency Doubleday*.

Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2012). *Schools that learn (updated and revised): A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. Crown Business.

Shulman, L. S. (1983). Autonomy and obligation: The remote control of teaching. *Handbook of Teaching and Policy*, 484-504.

Smith, J., & Thier, M. (2017). Challenges to Common Core State Standards Implementation: Views From Six States. *NASSP Bulletin*, *101*(3), 169-187.

Smylie, M. A., Lazarus, V., & Brownlee-Conyers, J. (1996). Instructional outcomes of school-based participative decision making. *Educational Evaluation and Policy Analysis*, 18, 181–198.

Spillane, J. P., Hallett, T., & Diamond, J. B. (2003). Forms of capital and the construction of leadership: Instructional leadership in urban elementary schools. *Sociology of Education*, 1-17.

Springer, M. G., & Gardner, C. D. (2010). Teacher pay for performance: Context, status, and direction. *Phi Delta Kappan*, *91*(8), 8-15.

Staiger, D. O., & Rockoff, J. E. (2010). Searching for effective teachers with imperfect information. *The Journal of Economic Perspectives*, 24(3), 97-117.

Stake, R. E (2005). Qualitative case studies. In Denzin, N K. (Ed); Lincoln, Y. S. (Ed). (2005). *The Sage handbook of qualitative research*, 3rd ed., , (pp. 443-466). Thousand Oaks, CA: Sage Publications Ltd.

Stein, M. K., Hubbard, L., & Mehan, H. (2004). Reform ideas that travel far afield: The two cultures of reform in New York City's District #2 and San Diego. *Journal of Educational Change*, 5(2), 161-197.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. Journal of educational change, 7(4), 221-258.

Supovitz, J. A. (2006). *The case for district-based reform: Leading, building and sustaining school improvemen*t. Cambridge, MA: Harvard Education Press.

Talbert, J. (2011). Collaborative inquiry to expand student success in New York City schools. In O'Day, Bitter, & Gomez (Eds.). *Education reform in New York City: Ambitious change in the nation's most complex school system*, 131-156.

Talbert, J. E., & McLaughlin, M. W. (1994). Teacher professionalism in local school contexts. *American Journal of Education*, 123-153.

Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Sage handbook of mixed methods in social & behavioral research*. Sage.

Togneri, W., & Anderson, S. E. (2003). Beyond islands of excellence: What districts can do to

    improve instruction and achievement in all schools. A project of the Learning First

    Alliance [and] A Leadership Brief.

Tyack, D. B. (1974). *The one best system: A history of American urban education* (Vol. 95).

    Cambridge, MA: Harvard University Press.

Tyack, D. B., & Cuban, L. (1995). *Tinkering toward utopia*. Cambridge, MA: Harvard

    University Press.

U.S. Department of Education, Office of Postsecondary Education. Higher Education Act Title II

    Reporting System (2015).

VanTassel-Baska, J. (2015). Arguments for and against the common core state standards. *Gifted

    Child Today*. 38(1), 60-62.

Viega, C. (2017). Carmen Fariña wants to help New York City teachers get better at teaching.

    But some of her own reforms are getting in the way. *Chalkbeat*. Retrieved from:

    https://www.chalkbeat.org/posts/ny/2017/06/22

Weiss, R. S. (1994). *Learning from strangers. The art and method of qualitative interview

    studies*. New York, NY: Free Press.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge

    University Press.

Wohlstetter, P., Malloy, C. L., Chau, D., & Polhemus, J. L. (2003). Improving schools through

    networks: A new approach to urban school reform. *Educational Policy*, *17*(4), 399-430.

Yeager, D., Bryk, A., Muhich, J., Hausman, H., & Morales, L. (2013). Improvement research

    carried out through networked communities: Accelerating learning about practices that

    support more productive student mindsets. Paper presented at the White House Meeting

on Excellence in Education: The Importance of Academic Mindsets, Washington, DC.

Retrieved from http://cdn.carnegiefoundation.org/wp-content/

uploads/2014/09/improvement_research_NICs_bryk-yeager.pdf

Yin, R. (1994). *Case study research: Design and methods*. Beverly Hills, CA: Sage.

Yin, R. K. (2011). *Applications of case study research*. Los Angeles, CA: Sage.

Youngs, P. (2001). District and state policy influences on professional development and school

capacity. *Educational Policy*, 15(2), 278-301.

Appendix A: Selected Interview Protocols

I. Year 1 – Facilitator

1. We are very interested in better understanding the Facilitators' roles in the Learning Partners Program, so we will ask you a series of questions about your role at different points in the LPP; but first, could you describe your overall role as you see it?

2. Now let's discuss your role and responsibilities at different times. Can you give us a brief description of the steps you took once you were aware of the schools in your triad? (Probe for reviewing applications, communicating with principals and LPP team, communicating particular information).
   a. What did you hope to get out of this initial contact?
   b. What did you prioritize during the first visits? (i.e. relationship building, developing LFA, etc.) And did priorities differ by school?
   c. What were the most valuable parts of the initial meetings with the individual schools?
   d. Were there any challenges during this initial planning process? If so, what were they?
   e. Did you interact differently with the different schools at this initial phase?
   f. Would you have done anything differently during this initial phase of LPP if you could do it over?

3. Think about all the site visits your triad has taken part in. What has been your role during these site visits?
   a. How involved were you in planning of the site visits?
   b. Did this differ by school?
   c. What did you see as the goals for the site visits?
   d. How did you help your triad achieve these goals?
   e. What has been your role in developing relationships during site visits?
   f. Which site visit would you characterize as a particularly successful one? How did you contribute to that success?
   g. What types of conversations and activities seem to most drive change or move practice? Who is driving these and what is your role?
   h. From a Facilitator's perspective, what has been challenging about site visits?
   i. How has your role during site visits changed over time?

4. Let's turn now to individual school team meetings. What is your role during these meetings?
   a. How does this differ from the role of principals during these meetings?
   b. How does what you do during these meetings differ for each school within the triad? *(Probe for difference between partner schools and host school.)*

5. We know that school team meetings consist of planning for site visits and developing action research plans. By action research, we mean the process by which schools decide

on a goal, select what practices should be targeted, receive feedback or data on how these practices are going, and refine practices as necessary.

    a. Thinking specifically of action research, would you discuss how this process was structured by the DOE?

    b. How did schools decide what to focus on and which new practices to implement? *(Customize to ask about specific schools, as needed.)*

    c. How do the schools differ in their approaches to action research? Has that impacted how far along they are in actually implementing and refining practices?

    d. What has worked well in getting schools to develop action research plans successfully?

    e. In what areas do schools need the most support regarding action research?

    f. In what areas do they need the least support?

    g. How would you characterize the host school's approach to learning through action planning or action research? Does it differ from the partner schools' approach?

    h. Do you think any of the schools are engaging or could engage in action research cycles outside the context of LPP? Do they have plans to use this process as a decision-making and school improvement tool in the future?

6. Shifting gears a bit, we would like to know about collaboration within the triad as a whole now,

    a. How would you characterize the collaboration in your triad?

    b. What factors contributed to the current state of the triad's collaborative relationships?

    c. How would you characterize the role of the host school? How would you characterize the role of each partner school?

7. Now that we have talked through the entire LPP process, I am interested to know more of your general reflections.

    d. In what ways was your support needed most?

    e. What were schools able to do independently of you?

    f. How did you approach the "gradual release of responsibility"?

    g. What do you think makes a good Facilitator?

    h. What were some of the most successful strategies you have used as a Facilitator?

    i. What were some of your biggest contributions to your triad?

    j. What are some obstacles to good facilitation?

    k. In hindsight, were there ways to avoid or overcome some challenges you experienced in facilitating action research in your triad?

8. Is there anything else you think it would be important for us to know?

II. Year 1 – Host Principal

1. Let's begin by talking about the early stages of LPP. What prompted you and your school to apply for Learning Partners?
   a. How did you select the LFA you put on the application?
   b. How did you select staff members to be on your LPP team?

2. Tell me about your work once the LPP program began.
   a. What were the most valuable parts of the initial meetings with your Facilitator and other principals in your triad?
   b. What did you hope to get out of these initial meetings?
   c. What steps were taken to determine the LFA for your triad?
   d. What aspects of that process were most successful? What was less so?
   e. How did your school's needs play into the discussions around the LFA?
   f. Did you make specific plans for *how* you would collaborate with the other schools? If so, what were they?
   g. How did you plan for the first site visits?
   h. Were there any challenges during this initial planning process? If so, what were they?

3. Let's shift to speaking about what happened once the site visits began.
   a. What was the purpose of the initial site visits?
   b. How did you achieve the goals you had for the initial visits?
   c. How did your triad develop relationships?
   d. What were the most effective activities or conversations that built relationships?
   e. Did the LFA change? If so, what led to changes?

4. After the first site visits, we know you developed an action plan and started identifying specific practices to explore and implement as a triad. Would you describe the process of developing your action plan?
   a. How was the process structured?
   b. What sources of knowledge did you tap into?
   c. How does your triad go about learning these new practices?
   d. What approaches have been most helpful in achieving items on your action plan?
   e. Which ones have been less so?
   f. Is your action plan for the entire year or will you go through this process again?

5. We are interested to know more about the various roles that different people play in LPP. Let's start with the Facilitator. Could you describe [Facilitator's] role?
   a. What was his/her role in defining and revising the LFA?
   b. What was his/her role in planning site visits?
   c. What is his/her role on site visits?
   d. When do you rely most on [Facilitator]? What were the most useful facilitator strategies or activities or roles?

e. If the Facilitator's role has changed over time, how so?

f. Are there aspects of the work that are now done with more or less Facilitator support than before? How so?

6. Could you describe your role as the host school principal?
   a. What are your main responsibilities?
   b. Has your role changed over the course of the year? If so, how?
   c. As a host school, what have you learned through LPP?
   d. How have you learned [stated learnings]?
   e. What do you think characterizes a successful host school?

7. Could you describe the roles of the other two schools in your triad?
   a. What role has each partner school played in your LPP experience?
   b. What role has each partner principal played?
   c. Have there been differences in how each partner school has participated in the program?
   d. How does your school interact with the partner schools?
   e. How do you interact with the partner school principals?
   f. What do you think characterizes a successful partner school?

8. Do model teachers play a special role? If so, what is it?

9. What do you see as the results of LPP so far?
   a. Have you changed any of your school's practices as a result of LPP? If so, which practices?
   b. Have you shared information learned with your broader school community? If so, how is this going?
   c. In what ways does LPP connect to other work happening at your school?
   d. What do you consider to be the greatest success of LPP?

10. We're interested to learn more about the *process* of collaborating with other schools to implement new or improved practices.
    a. Has your school ever gone through an "action research," or inquiry research, process before? In what capacity?
    b. Have you or your staff learned any lessons about doing this sort of action research work? What are they?
    c. Do you think you might continue any of [these processes] next year?
    d. Do you plan to collaborate with other schools in your triad next year?
    e. Do you think your triad has a successful dynamic? What factors contributed to the current state of the triad's relationship?

11. Could you describe some of the challenges faced by your school during LPP?
    a. How do you address time constraints?
    b. Have you had to adjust your (your team's) learning stance? If so, how?

12. How are you and your team addressing challenges when they arise?
    a. Reflecting back, could these challenges have been avoided? How so?

13. Is there anything else you think it would be important for us to know?

III. Year 2 – Partner Principal

HOPES FOR LPP

1. Let's begin by talking about your initial involvement in LPP. What prompted you to apply for Learning Partners?
2. What did you hope to get out of LPP?

PLANNING FOR LPP

3. How did you select the focus area you put on the application?
4. How did you form your school's LPP team?

ROLES

5. We would like to know a bit more about your role. Could you describe your role in LPP?
    a. What are your primary responsibilities?
    b. What do you believe characterizes a successful partner school principal?
    c. Do you help prepare for interschool site visits? If so, how?
    d. What do you do in relation to LPP between site visits?
    e. Did you attend any partner principal trainings or PDs? If so, what did you learn from them?
    f. Is there anything you wish you had known about your role at the beginning of the year?
    g. What would you change about the role of the partner school principal in LPP, if anything?
    h. For *RETURNING* only: How is your role different this year compared to last year? (*Prioritize for Plus)*

6. We are also interested in the roles other people play in LPP. What role do Model Teachers at your school play?
    a. What are their LPP responsibilities?
    b. Do they hold responsibilities aside from LPP? If so, what are they?
    c. Do they receive professional development or other kinds of support?
    d. How do the [school name] Model Teachers collaborate with the [host school name] Model Teachers?

7. On the topic of collaboration, we would also like to know more about how you work with the host school in the triad/cohort. Would you describe how you collaborate with the host school?
    a. In what ways do you interact with the host principal in your triad/cohort?
    b. If anything, what would you change about the relationship between partner schools and host schools?

8. Returning to the topic of roles, can you talk about how you interact with your school's Facilitator?
    a. In what ways does your Facilitator support your school or your Model Teachers?
    b. Do you think that your team could perform LPP duties without the support of a Facilitator? What resources would you need to do so?

CYCLES OF LEARNING

9. We would like to know more about what kind of changes your school may be making in LPP. What is your school's current LPP goal?
    a. Is this a goal just for the LPP team, or for your entire school?
    b. What led your school to decide on this goal?
    c. Who at your school was involved in deciding on this goal?
    d. Is this goal connected to the focus of the entire triad/cohort? If so, how? *[For Plus, adjust to ask about connection to subgroup focuses, and refer to specific subgroups]*

10. Given your school's current LPP goal, what steps has your school taken towards accomplishing this goal?
    a. Is your school working to measure progress towards this goal? If so, what types of data or evidence are you collecting?
    b. Do you discuss the data with your LPP team? If so, when? What are these conversations like?
    c. Has the data influenced your decision-making? If so, in what ways? Would you provide an example?
    d. Have you experienced any challenges in collecting/using data? What were they? How might you or the DOE address these issues?

11. Are site visits connected to your school's LPP goal? How are they connected?
    a. What has been accomplished through site visits?
    b. What has been most effective during site visits?
    c. What has been most challenging?

12. We are interested in your school's engagement with the Cycles of Learning.
    a. What is your overall impression of the process?
    b. Was there anything about the Cycles of Learning that have made them challenging to implement so far?

    c. What is your Facilitator's role in your school's Cycles of Learning? *[Skip if answered in* Roles *section]*

    d. What supports or tools might be helpful for your engagement in the Cycles of Learning?

    e. Do you use the Cycles of Learning documentation tool at your school? *[Show tool]*

        i. When does your school use it?

        ii. How does your school use it?

    f. Do you feel confident that you and your other partner schools will be able to complete the Cycles of Learning this year? Why or why not?

    g. So far, if you could change anything about the Cycles of Learning, what would it be?

        i. Based on your experience in LPP so far, do you think that there should be any overall changes to the LPP structure in coming years? *[Prioritize this question for Plus]*

RESULTS

13. What do you see as the results of LPP so far?

    a. What, if anything, have you learned as result of being part of LPP?

    b. What, if anything, do you think your Model Teachers are learning as a result of LPP?

    c. Have you witnessed any changes in your teachers' practices?

        i. If so, which practices?

        ii. Do you think these changes are impacting students? If so, in what way(s)? Can you give an example?

    d. Have you implemented school-wide changes as a result of LPP? If so, what are they?

    e. Have you encountered any challenges in implementing school-wide changes? Would you describe these?

    f. How do you define "success" for LPP participants? Do you feel that your school is progressing toward that definition?

14. We are interested to know about any future plans for your career.

    a. Has LPP impacted your feelings about your job? If so, in what way?

    b. Do you want to continue being a Partner School Principal in LPP?

15. Do you want your school to be in LPP again next year?

16. Is there anything else you think we should know?

IV. Year 2 – Partner Teacher

HOPES FOR LPP
[Only ask if this is the first time we have interviewed this person]
1. Let's begin by talking about your involvement in LPP. What led you to be a part of your school's LPP team?
    a. Did a school leader such as a principal or assistant principal ask you to participate, or did you volunteer to be a part of LPP?
    b. What were you hoping to get out of LPP?
    c. *For returning schools only:* Were you involved in LPP last year? *[only ask if we do not already know the answer]*

ROLES AND RELATIONSHIPS
17. We are interested in your experience as a Model Teacher. Could you describe your role as a Model Teacher in LPP?
    a. What have you found to be most successful in the way you have approached your role? Would you provide an example?
    b. Have you encountered any challenges in your role? If so, what challenges have you encountered?
    c. Looking back on the year, is there anything you would change about the role of Model Teacher in LPP? If so, what would you change?

18. We are also interested in the roles others play in LPP. Can you describe how you interact with your Facilitator?
    a. In what ways does your Facilitator support your LPP team?
    b. In what ways does your Facilitator support your triad or cohort?
    c. Looking back on the year, is there anything you would change about the role of the Facilitator in LPP? If so, what would you change?

19. What role does your principal play in your school's LPP work?
    a. In what ways is your LPP team supported by your principal?
    b. Looking back on all you have experienced this year, are there ways you think the role of the principal in LPP should be changed? How so?

20. Now, let's talk a bit about the way you interact with people in the other schools in your triad/cohort. Would you describe how you worked with the LPP teams from the [other] partner schools?
    a. What is going well in your collaboration with the [other] partner schools?
    b. Do you reach out to other schools in your cohort/triad for guidance or advice during or between site visits? Could you provide an example?
    c. Did you engage in interschool visitations outside of the regular site visits at any point this year? If yes, what did these involve?

     d.   What was challenging about collaborating with the teams from other schools? What would you change about the LPP process and/or structure to address those challenges?

21. *[For partner MTs only]* How do you collaborate with the LPP teams from the host school?
     a.   What is going well in your collaboration with the host school?
     b.   Is there anything that you wish was different? How would you like it to be changed?

INQUIRY/COL PROCESS AND INTERSCHOOL COLLABORATION

22. We are also interested in the inquiry process you are engaging in through LPP. By "inquiry process" I am referring to the work you are doing towards your LPP goal or focus area. But before we dive into what your school is doing right now, had teachers in your school engaged in some sort of inquiry process prior to LPP? What was that inquiry process like?
     a.   What are the main differences between the inquiry process you are doing now with your LPP team and the inquiry process your school used before?

23. Has your Facilitator or principal talked to you about the Cycles of Learning? [If yes, ask questions below]
     a.   How is the Cycles of Learning work going?
          i.   What has been most useful about it?
         ii.   What has been challenging?
       iii.   What changes would you make to the process to address those challenges?
     b.   Do you use the Cycles of Learning documentation tool? *[show tool]*
          i.   When do you use it?
         ii.   How do you use it?
     c.   *[If not answered in previous questions/if answer is not already known]* If your school engages in inquiry in a way that deviates from the suggested guidelines laid out by LPP, can you describe this alternative process?
          i.   How is this process going?
         ii.   Are there any challenges? How would you address them?

24. Now, let's talk a bit about the specific work your LPP team is doing. What is your school's current goal or focus area?
     a.   *[If we do not already know answer]* How did you decide on that focus/goal?
     b.   Is it connected to what other schools are working on in your triad/cohort? In what ways?
     c.   How do you work towards this goal in site visits?
     d.   What do you see as the purpose of site visits?
     e.   How do you work towards your school goal <u>between</u> site visits?

25. Now that we have talked about your school's LPP goal, we are interested to know if you are measuring progress towards this goal? If so, how?
    a. Do you discuss the data with your LPP team? If so, when? What are these conversations like?
    b. What have you learned, if anything, from analyzing data? Did you make changes based on the data?
    c. Have you experienced any challenges in collecting or analyzing data? What were they?

RESULTS AND REFLECTIONS

26. Reflecting on your year in LPP, what do you see as the results of LPP? *[Note: Adjust if any of the questions below were answered above]*
    a. Have you changed any of your practices? If so, which practices?
    b. Have other teachers at your school changed their practices as a result of LPP? If so, in what way?
    c. Have there been school-wide changes? If so, what are they?
    d. Do you see changes in your students? Can you describe these changes?
    e. What do you consider to be your triad/cohort's greatest Learning Partners success so far?

27. Aside from thinking about results, we are interested in your more general end-of-year reflections on LPP.
    a. Have you personally experienced any professional growth as a result of LPP participation? In what way?
    b. Has LPP impacted your feelings about your job? If so, in what way?
    c. Would you like to be a LPP Model Teacher again next year?
    d. Overall, what do you see as the greatest success of your school's engagement in LPP?
    e. Looking back, is there anything you wish were different about LPP that we have not already discussed? If so, what would you change?
    f. *[If school will be in LPP next year]* Do you know if your school plans to approach LPP differently next year? If so, how?
    g. Is there anything else you think we should know?

Appendix B: Codebook

1.0 District [DOE central; district messaging]
2.0 Program evolution [reference to program change overtime; reactions to LPP Plus]
2.1 Flex Struc [discussion of flexibility & structure—too much, too little, how it's working]
2.2 Matching [references to issues of matching; host/partner assignments]
2.3 Challenges [obstacles – listing each one that comes up, as well as some that I observed in fieldwork; these are mix of challenges and reasons for challenges]

- Logistics
- Contrived collegiality
- Tensions
- Reluctance to change [e.g. when describing others]
- Desire to maintain privacy
- Symbolic change
- Host/partner
- Lack of focus / lack of common focus
- Time
- Challenges with data
- Lack of clarity from program
- Lack of support from program [e.g. when asking about more support from Facilitators]
- Challenges with spreading beyond LPP team
- Challenge of leaving classroom or school
- Compliance [e.g. believing document is for compliance purposes]
- Challenge of admin/teacher alignment

2.4 Program roles [when role /responsibilities is described/referenced]

- Team [including how it is composed]
- Model/Master positions [mainly teachers]
- Host/partner
- Principal / AP
- Facilitator

2.5 Interschool Collaboration

- School similarities
- School differences
- Common focus / lack of focus
- Between site visits

2.6 Reason for joining [what they hoped to get out of program]
3.0 Dispositions & norms [mindsets; reflective]

- Learning stance

3.1 Common objectives [collective responsibility, common problems/objectives/shared vision, common language, internal accountability]
3.2 Collaborative structures/new work arrangements

- Admin & teachers side-by-side
- Teachers outside of grade/content area

3.3 Distributed leadership [reference to how leadership is spread across team, school, network, reference to or evidence of empowering teachers, spreading leadership]

3.4 Trust & Relationships
- Trust in peers [including, value of still being a teacher while trying to influence others]

3.5 Focus, accountability & prioritization [sustaining focus; accountability for maintaining focus and prioritizing the LPP work

4.0 Sources of ideas *[for school changes, for inquiry, for adaptations]*
- External standards (of practice; e.g. CCLS, curriculum; anchor texts, CBOs)
- ISC
- Facilitator
- Peer observation [within school or across network]

4.2 Critical dialogue
- Acknowledging uncertainty
- Discuss challenges/failures/talking openly about challenges
- Challenge prior notions/ "unlearning"
- Critical feedback exchanged
- Make tacit explicit
- Receptivity to feedback
- Focused

4.3 Inquiry & Data [experimenting, learning by doing, learning from mistakes, action learning, scientific methods; Cycles of Learning, low inference observations, "improvement science"]
- Needs assessments
- District accountability measures
- Problems of practice
- Technology / Google Docs
- Documentation
- Narrowing focus/problem/scope

4.4 Tool and protocol use [for making low-inference observations, for using external evaluation criteria, National School Reform protocols, rubrics, etc.]
- Provided by program [e.g. LPP-adapted improvement science tools]

4.5 Facilitator [as learning process support]

4.6 Pacing [Slow process of change; developmental approach; sustained focus]

4.7 Coherence [fitting in with school goals/initiatives; lack of coherence]

4.8 Collaboration Type – within school
- Storytelling & scanning
- Aid & assistance
- Sharing
- Joint work

4.9 Disseminating knowledge [beyond LPP teams]
- Content or grade teams
- PD
- Newsletter
- Storing knowledge (in network, Katz & Earl)

5.0 Leadership development [influencing peers, leadership skill development, teachers, principals, empowerment]
- Skill development
- Career advancement / promotion

5.1 Job satisfaction [Mentions of job satisfaction & dissatisfaction, enjoying the job more, retention]
- Recognition
- Sustaining
- Way to stay in classroom and still be a school leader
- Less lonely

5.2 Changes in school practice [including structural changes]
- Teaming/collaboration
- Peer observations
- Data use
- Distributed leadership
- Consistency [across classrooms/cites]
- PD systems

5.3 Changes in educator thinking
- Self-knowledge [better understanding strengths, areas of challenge]
- New understanding/change mind [mental models]
- Focus on students
- Belief in educator agency
- Views of collegiality/collaboration
- Greater focus
- School-wide perspective
- Belief in data use
- Openness to try new things

5.4 Changes in classroom practice
- Individual-basis
- Ad hoc

5.5 Student outcomes [behavior, achievement, learning]

5.6 Pre-LPP Conditions [reference to school state prior to LPP]

6.0 Collaboration Type – Across network
- Storytelling & scanning
- Aid & assistance
- Sharing
- Joint work

6.1 Suggestions for program [explicit suggestions for program]

Structural Codes (Descriptors)
- **New/returning**
- **Grade band**
- **Role: Principal, teacher, coach** [for interviews]
- **Host/partner**
- **Triad/larger network**
- **Research year**

The tables below present information on the content of each school's inquiry process. They include schools for which at least one interview transcript was coded. When possible, information was taken directly from schools' CoL Documentation Tools. If that information was unavailable (because the schools are from the 2014-2015 sample, before the CoL was introduced, or because schools did not complete documentation), then information is based on interview responses. For four host schools and one partner school, there was not enough data to determine all information about the content of the schools' work.

P.S. 13, P.S. 14, P.S. 15

P.S. 13, P.S. 14, and P.S. 15 made up an elementary school triad in 2014-2015. The triad's initial LFA was "supporting teacher leadership and student social-emotional (SEL) development."

	P.S. 13 (host)	P.S. 14 (partner)	P.S. 15 (partner)
Years in LPP	2	2	3
Years in research sample	1 (2014-2015)	1 (2014-2015)	1 (2014-2015)
Year-long goal	Unknown	Improve teacher teams	Improve school culture
Evidence used to create goal	Unknown	Quality Review, Learning Environment Survey	Quality Review; lesson observations
Major changes made through LPP	Refined SEL practices and extended them to non-SEL classes	Established new teacher team structures, including common expectations for grade teams and cross-grade teacher committees	Implemented new social-emotional learning curriculum; redefined school values; implemented a new PBIS system
Evidence used to assess changes	Unknown	Observations of team meetings	Lesson observations

P.S. 16

P.S. 16 was a host school in the research sample in 2014-2015 and 2016-2017, although it participated in LPP for three years. In 2014-2015, is worked with two partner schools, not in the analytic sample, under the LFA, "Supporting students language acquisition." In 2016-2017 it worked with two different partner schools, also not in the analytic sample, under the LFA, "Dual language instruction."

	P.S. 16 (host)
Years in LPP	3
Years in research sample	2 (2014-2015; 2016-2017)
Year-long goal	To improve mathematics instruction
Evidence used to create goal	State test scores in mathematics
Major changes made through LPP	P.S. 16 focused more on supporting partner schools (that are not in the analytic sample) than on implementing new changes. It supported four partner schools with response to intervention protocols, establishing a vocabulary program, setting up dual language systems, and implementing "Math Talks." During that time, P.S. 16 also implemented a new literacy intervention program and refined Math Talks with its teachers.
Evidence used to assess changes	Lesson observations, math assessment results

P.S. 10, P.S.11, P.S.12
P.S. 10, P.S. 11, and P.S. 12 made up an elementary and middle school triad in 2014-2015. The triad's initial LFA was "School culture."

	P.S. 10 (host)	P.S. 11 (partner)	P.S. 12 (partner)
Years in LPP	1	3	2
Years in research sample	1 (2014-2015)	1 (2014-2015)	1 (2014-2015)
Year-long goal	"To increase student responsibility in student-led conferences; to codify best practices; to build capacity for critical thinking in instruction"	To improve student-led conferences	To improve school's culture through the implementation of consistent practices
Evidence used to create goal	Unknown	Unknown	Quality Review, observations
Major changes made through LPP	Codified and refined its process for student-led parent-teacher conferences; began an inquiry team to explore ways to promote critical thinking	Refined student-led parent-teacher conferences	Implemented school-wide instructional practices, including common routines for the first 15 minutes of every lesson, checks for understanding, and the gradual release of responsibility model
Evidence used to assess changes	Unknown	Student reflections; student SMART goals; observations	Lesson observations

P.S. 26
P.S. 26 was a host school for a LP plus network of eight schools in 2015-2016 (the partner schools are not in the analytic sample). The network divided itself into subgroups by grade band and subject area, with all groups broadly working on the LFA of "Differentiation strategies in reading and math."

	P.S. 26 (host)
Years in LPP	3
Years in research sample	1 (2015-2016)
Year-long goal	To improve mathematics outcomes and to support partner schools in dual language instruction.
Evidence used to create goal	State Test scores
Major changes made through LPP	The P.S. 26 LPP team primarily supported its partner schools in 2015-2016. Participants from P.S. 26 reported refining their overall practice and learning occasional new strategies for differentiation in math lessons, but we did not gather evidence of their implementing any one new practice across their school.
Evidence used to assess goal	Mathematics benchmark assessments

P.S. 23, P.S. 24
P.S. 23 was a host school that worked with the partner school, P.S. 24, in a District 75 triad in 2015-2016 and 2016-2017. The third school in the triad changed between the two years (neither of those partner schools are in the analytic sample). In 2015-2016, the triad worked under the LFA, "Using assessment in instruction," and in 2016-2017, under the LFA of "Goal setting and tracking data/refining assessment to support rigorous instruction."

	P.S. 23 (host)	P.S. 24 (partner)
Years in LPP	2	3
Years in research sample	2 (2015-2016, 2016-2017)	2 (2015-2016, 2016-2017)
Year-long goal (2016-2017)	"For cluster teachers to use students' IEP goals and data to drive instruction."	"By June 2017, 80% of standardized assessment students will increase Fountas and Pinnell reading levels."
Evidence used to create goal	"Our problem and goal are based on the School's Needs Assessment. We analyzed data based on formal and informal observation reports, Comprehensive Education Plan (2014-2015), and School Needs Assessment Survey."	"Students did not make adequate growth in their reading levels during the 2015-2016 school year as evidenced by MOSL. Students did not make adequate growth on the 2015-2016 ELA exam as evidenced by MOSL."
Major changes made through LPP	Provided PD to cluster teachers and began holding them to common instructional expectations that aligned with expectations for core subject teachers.	In 2015-2016, implemented new, electronic data tracking systems, developed PD series for teachers on unit planning and IEP writing and monitoring. In 2016-2017, implemented explicit instruction practices, with a focus on reading instruction.
Evidence used to assess changes	Lesson observations	In 2015-2016, used PLOP rubric scores to assess quality of IEPs, in 2016-2017, used student growth on Fountas and Pinnel assessments.

P.S. 34, P.S. 38

P.S. 34 was a host school for a LP plus network of seven schools in 2015-2016 and 2016-2017. P.S. 38 was a partner school in the plus network for both years, and it was in a triad with P.S. 34 in 2014-2015 (but we did not research the school that year). None of the other partner schools are in the analytic sample. In 2015-2016, the network divided itself into three subgroups of two partner school teams each supported by host Model Teachers, and in 2016-2017, the network divided itself into "pods" by LFAs including, lesson planning, interdisciplinary instruction, and social-emotional learning.

	P.S. 34 (host)	P.S. 38 (partner)
Years in LPP	3	3
Years in research sample	2 (2015-2016; 2016-2017)	2 (2015-2016; 2016-2017)
Year-long goal (2016-2017)	Unknown	"Through active involvement and participation in teacher-led PDs, LPP Pods and teacher teams, we will see an improvement in teacher pedagogy (evaluation scores on the Danielson Rubric, implementation of new practices) as well as student engagement."
Evidence used to develop goal	Unknown	"The administrators from last year identified indicators in the Danielson framework that the teachers in our school score low on, such as indicator 1e on planning. Based on exit surveys from last year, teachers seemed to be dissatisfied with the work of their grade teams overall and the lack of direction in the teams."
Major changes made through LPP	In 2015-2016, participants primarily supported partner schools and did not implement any major changes at their school based on their work with LPP. In 2016-2017, P.S. 34 teachers may have implemented changes based on the pod work, but we did not collect enough data to determine.	In 2015-2016, implemented grade teams, content teams, and teacher led-professional development series. In 2016-2017, designed school-wide PD based on strategies they learned in the interschool pod work.
Evidence used to assess changes	Unknown	Attendance at workshops, teacher and student surveys, verbal reflections on workshops

P.S. 20, P.S. 21

P.S. 20 is an International high school and was a host school that worked with the partner school, P.S. 21, in a triad of schools from the International Network in 2015-2016 and 2016-2017 (although we only researched them in 2015-2016). In 2015-2016, the triad's LFA was to "Implement restorative justice practices."

	P.S. 20 (host)	P.S. 21 (partner)
Years in LPP	2	3
Years in research sample	1 (2015-2016)	1 (2015-2016)
Year-long goal	"Students and teachers will integrate the community principles [an aspect of RJ] into classrooms"	"To implement talking circles schoolwide that build and sustain community; teach college, career and life skills; and develop student voice"
Evidence used to develop goal	"Classroom observations that demonstrate classes do not have explicit connection to community principles"	Records of "disciplinary issues due to student conflicts"
Major changes made through LPP	Incorporated community principles into curriculum maps; created a bank of practices for integrating principles into instruction	Refined and expanded student-led circles, implemented the use of artifacts in circles, trained student "circle keepers," and implemented practices that would allow for greater student voice during circles
Evidence used to assess changes	Teacher survey, lesson observations	Student reflections, teacher reflections, and classroom observations

P.S. 8

P.S. 8 is a transfer high school and it was a partner school in LPP for 3 years, although it was only part of the research sample in the fall of 2014 and in 2016-2017. In its final year, it was part of a quad that worked under the LFA of, "student empowerment." None of the other schools in the quad are in the analytic sample.

	P.S. 8 (partner)
Years in LPP	3
Years in research sample	1.5 (fall of 2014-2015; 2016-2017)
Year-long goal	"We want to develop students' ability to effectively communicate with each other in classes. We will determine a metric as part of our lesson study process."
Evidenced used to develop goal	"We looked at our learning environment survey from last year and we looked at our 2015-16 Quality Review. We also used a protocol to engage in discussions and brainstorming sessions."
Major changes made through LPP	Implemented a rubric that students used to rate their collaboration skills at the end of each lesson; implemented the explicit teaching of collaboration skills and the incorporation of collaborative activities into lessons
Evidence used to assess changes	Peer observations of lessons; aggregated data from student-graded rubrics